

The Regional Municipality of York

Committee of the Whole
Transportation Services
June 16, 2022

Report of the Commissioner of Public Works

Winter Maintenance of Sidewalks Adjacent to Regional Roads

1. Recommendations

1. Councils of local municipalities confirm their positions regarding the Region assuming winter maintenance of sidewalks adjacent to Regional roads, given the Regional tax levy implication.
2. Regional staff work with local municipal staff on opportunities to improve coordination of winter maintenance of sidewalks adjacent to Regional roads for the 2022/23 winter season.
3. The Region investigate ownership and maintenance of separated cycling lanes as part of the 2022 Transportation Master Plan Focus Area and report to Council in 2023.
4. The Regional Clerk forward a copy of this report to the local municipalities and request confirmation of their position by September 30, 2022.

2. Summary

On March 3, 2022, Council directed staff to undertake a review regarding York Region assuming winter maintenance, including snow clearing on sidewalks adjacent to Regional roads, and provide a preliminary report for Committee of the Whole on June 16, 2022.

This report provides background and analysis of implications should the Region assume winter maintenance of sidewalks adjacent to Regional roads.

Key Points:

- In accordance with the *Municipal Act*, winter maintenance of sidewalks adjacent to Regional roads is currently a local municipal responsibility unless a municipality agrees otherwise
- Winter maintenance can be challenging where there is limited space to store snow between the Regional road and sidewalk

- Ongoing coordination between Regional staff and local municipal partners ensured storm response alignment prior to and during the January 17, 2022, significant weather event
- Following recent discussions with local public works staff, consensus is winter maintenance of sidewalks generally works well
- To assist local municipalities, funding of \$1.5 million annually will be proposed to be included in the multi-year budget submission to assist in snow removal of 135 km of sidewalk areas along Regional roads that have limited or no snow storage
- Assuming winter maintenance for sidewalks would impact the Regional tax levy and local operations
- Concerns relating to ownership and maintenance of separated cycling lanes along Regional roads are being addressed in 2023 through the 2022 Transportation Master Plan focus area “Review the Role and Function of Regional Corridors”

3. Background

Winter maintenance of sidewalks adjacent to Regional roads is currently a local municipal responsibility

As outlined in the *Municipal Act*, construction and all maintenance of sidewalks is a local municipal responsibility unless a municipality agrees otherwise. Following creation of the Region in 1971, ownership and all maintenance of sidewalks adjacent to Regional roads has been under the jurisdiction of local municipalities. Each municipality collects development charges to fund construction of sidewalks and uses local tax levy to pay for ongoing upkeep, including winter maintenance.

Each local municipality develops its own winter maintenance service plan to meet community needs. While service plans in all municipalities are designed to meet minimum maintenance standards legislated by the Province, local service plans are designed to prioritize sidewalks that connect their highest pedestrian uses, including schools, community centres and libraries.

Sidewalks adjacent to Regional roads comprise about 17% of all sidewalks within the Region. The total length of sidewalks adjacent to Regional roads varies by municipality (Table 1). There are significantly more sidewalks in the three southern, more urbanized municipalities.

Winter maintenance is challenging where there is limited space to store snow between the Regional road and sidewalk

Winter maintenance of sidewalks is more challenging where limited space exists between the Regional road and the sidewalk. Most Regional roads have sufficient space behind the curb between the road and sidewalk to store snow plowed from the road and the sidewalk.

In more constrained urban locations, there may be limited or no space between the road and sidewalk to store snow. For these locations, coordination between the Region and local municipalities of road and sidewalk snowplowing becomes important. In these cases, it can be difficult to keep a sidewalk passable, as Regional roads are plowed more frequently than sidewalks. This affects only 3.4% (134 kilometres) of sidewalks in the Region. Total sidewalk length, length along Regional roads and length with limited storage area adjacent to Regional roads for each local municipality are shown in Table 1.

Table 1
Sidewalk Lengths by Local Municipality

Local Municipality	Total Sidewalk Length (km)	Sidewalk Length along Regional Roads (km)	Sidewalk Length (Urban) along Regional Roads with Limited Snow Storage Area (km)
Vaughan	1,107	207	45.0
Markham	1,097	188	35.0
Richmond Hill	700	118	16.6
Newmarket	364	31	8.7
Aurora	249	60	6.5
Whitchurch-Stouffville	130	7	0.5
East Gwillimbury	119	22	10.5
Georgina	118	32	7.5
King	83	17	4.1
Total	3,967	682	134.4

Note: Data received from local municipalities as of April 2022

Regional roads are wider and carry greater volumes of traffic at higher rates of speed than most local municipal roads. Winter maintenance along Regional roads can, at times, involve continual snowplow passes, especially during and until a heavy snow event has ended. This can have an impact when snow is plowed onto sidewalks adjacent to Regional roads and there is limited or no snow storage. Some municipalities endeavour to have their sidewalk snowplows do multiple passes along these areas, as resources permit. During heavy snow events, Regional and local municipal resources are usually fully allocated, and sidewalk clearing may be delayed. This can be amplified when large windrows of snow are pushed onto the sidewalk when clearing the road.

Winter maintenance issues for sidewalks adjacent to Regional roads were likely highlighted by an atypical 2021/2022 winter season

The 2021/2022 winter season experienced 80 winter weather events with 30 cm more snow accumulation than during a typical winter, including a significant weather event on January 17, 2022. This was one of the heaviest snowfalls the Region has experienced in several years, with 35 cm during a 12-hour period. Service response can be delayed when snow exceeds a certain depth that is not manageable for sidewalk snowplows, as was faced in this storm. This volume of snow presented challenges for Regional and all local municipal winter maintenance programs.

Ongoing coordination between the Region and local municipalities was highlighted during the largest winter event last season

Successful winter maintenance in a two-tier system requires coordination between the Region and local municipalities. Collaboration is key before, during and after winter maintenance seasons. For this reason, the Region ensures collaboration with local municipalities is continually reviewed and improved. In anticipation of the significant weather event on January 17, 2022, Regional staff proactively communicated with local municipal staff to effectively coordinate storm response.

The Region provides maintenance services out of four districts to manage more than 4,300 lane kilometres of Regional roads. Each year, the Region holds pre-winter meetings with local municipalities to discuss high priority areas, operational responsibilities, and status of key winter maintenance materials, such as salt and sand. Roads and Traffic Operations monitor weather, Road Weather Information Systems, road conditions and make appropriate decisions for winter responses including plowing and snow removal.

Regional winter service levels are driven by compliance with minimum maintenance standards and the Region's winter operations plan. Staff operate 24 hours a day, 7 days a week, and are in contact with local staff before, during and after winter events. Once a winter storm passes, post-storm event clean-up activities, such as slushing, benching and snow removal, are coordinated in key areas.

About 23,000 m³ of snow was removed or relocated Region-wide following January 2022 significant weather event

The Region completed roadway snow plowing on January 18, 2022, following the January 17, 2022, significant weather event, then began snow removal efforts along Regional roads, assisting local municipalities. About 23,000 m³ of snow was removed or relocated, including:

- 80 km of on-street cycling lanes
- 43.5 km of multi-use paths
- 158 km along Regional roads

- 745 intersections where snow was pushed back or cleared
- 26 bridges where sidewalks were impeded with heavy amounts of snow

Snow clean-up mostly took place in the southern portion of the Region where the highest accumulation of snow occurred. Removal took 2.5 weeks to complete Region-wide and was carried out in a coordinated effort between the Region and local municipalities.

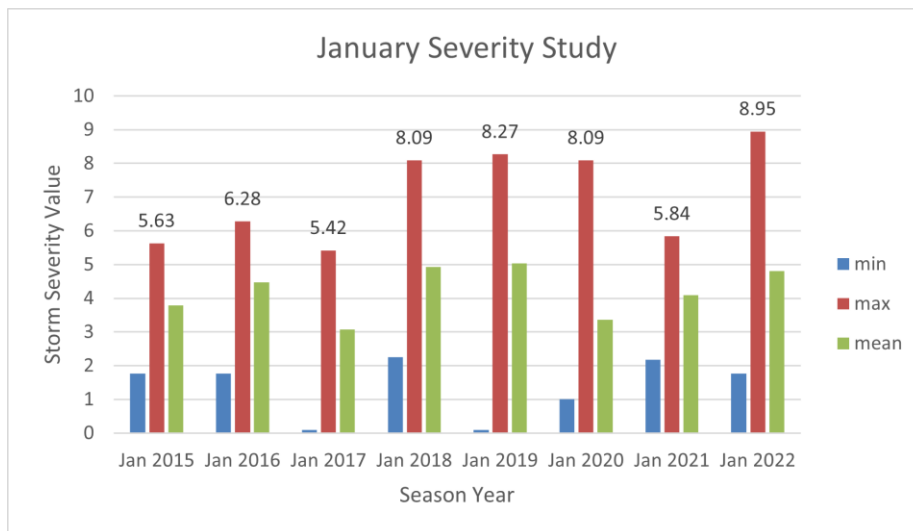
2021/2022 winter season had the most snowfall and fourth highest number of weather events in last eight seasons

The Storm Severity/Impact index is a tool used to indicate the level of winter precipitation (snow and ice) severity and potential impacts to society. The term ‘winter event severity’ refers to the level of effort required to respond to a weather event to achieve the Region’s bare pavement standard. Storm severity is rated from 1 (very minor) to 10 (extreme), and factors considered include:

- Storm type (light, medium or heavy snow and freezing rain)
- Pre- and post-storm temperatures
- Pre- and post-storm wind conditions
- Early storm behaviour

The 2021/2022 winter season had the most snowfall and fourth highest number of weather events in the last eight seasons. The January 17, 2022, storm event had the highest calculated individual event severity value at 9, in the last eight Januarys (Figure 1). In response to this event, specific activities by the Region included declaration of a Significant Weather Event, continuous patrols, plowing, material applications and snow removal where required.

Figure 1
Comparison of January Storm Severity 2015 to 2022



4. Analysis

Current winter sidewalk maintenance generally works well

Following the significant weather event, Regional staff reached out to local public works staff to gain insight on winter maintenance concerns related to sidewalks adjacent to Regional roads. Feedback indicates this is working well within the existing framework.

Several local municipalities have long-term contracts for sidewalk winter maintenance, including sidewalks adjacent to Regional roads. Others use internal resources, such as their own equipment and staff, many who shift from summer seasonal duties, to maintain sidewalks during the winter season.

Local staff indicated there is an opportunity to address ownership and maintenance of separated cycling lanes along Regional roads. This is consistent with consultations undertaken by the Region in 2018 relating to a policy recommendation in the 2016 Transportation Master Plan, noted later in this report.

A comparison of sidewalk winter maintenance practices was undertaken in other regional jurisdictions, including Durham, Halton, Niagara, Peel and Waterloo. In all cases, sidewalk winter maintenance is undertaken by local municipalities.

A winter maintenance program exists for separated cycling lanes along Region's bus rapid transit corridors

A limited number of separated cycling lanes on Regional roads have been constructed as part of bus rapid transit projects in the Cities of Richmond Hill and Vaughan and Town of Newmarket. Separated cycling lanes in Richmond Hill and Newmarket are maintained on behalf of the Region by these municipalities through memorandums of understanding. Winter maintenance of a similar cycle track located in the Vaughan Metropolitan Centre is performed under a Regional contract.

Opportunities may exist for increased Regional involvement in locations with limited snow storage between the road and adjacent sidewalk

The Regional road network continues to evolve. More urban corridors are being created, roads are widened, and sidewalks are close to or directly behind the curb of the road. As noted, during heavy snowstorms managing placement of snow along Regional roads in these areas can be challenging.

Similar to a recent City of Toronto [report](#), a plan could be developed to highlight and initiate snow removal efforts to assist in these areas on an as-needed basis. Opportunities may exist for increased Regional involvement in locations with limited snow storage between the road and sidewalk.

A workshop is planned for summer 2022 for Regional and local staff to determine areas for improvement to service provisions. A plan addressing an enhanced phased approach for snow removal based on weather severity will be developed like actions taken following the January 17, 2022, significant weather event. Following that event, the Region provided snow removal assistance to local municipalities in built up, urban downtown core areas where limited or no snow storage space was available.

Assumption of any winter sidewalk maintenance would impact the Regional tax levy and local operations

Ownership and maintenance of sidewalks is currently not the responsibility of the Region. Local municipalities include capital and operating costs in their development charges and tax levy budgets. Assuming winter sidewalk maintenance will create capital and operating cost pressures for the Region. As operating costs for winter maintenance are funded through tax levy, this would create an additional pressure to the Regional tax levy without providing any new services to residents. Sidewalks adjacent to Regional roads are currently maintained by local municipalities.

Local councils are requested to confirm their position regarding the Region assuming winter maintenance of sidewalks adjacent to Regional roads, given the Regional tax levy implication.

The Region's nine local municipalities each have their own service plan for managing winter sidewalk maintenance. Assumption by the Region of winter sidewalk maintenance adjacent to Regional roads would have different impacts for each municipality, depending on their service plan. It is imperative these impacts are understood by each local municipality before agreeing to any changes in current maintenance responsibilities.

Assumption by the Region of winter sidewalk maintenance is a complex risk and ownership issue

Local municipalities manage risk and defense of claims related to winter sidewalk maintenance, pursuant to the provisions of the *Municipal Act*, which assigns responsibility and liability to the local municipalities. If the Region assumed winter maintenance on sidewalks along Regional roads on behalf of local municipalities, agreements with indemnity clauses transferring liability to the Region for winter-related claims on sidewalks would be required. The complexity of this issue could still potentially expose the local municipality to claims, which would require time and legal resources to respond to and resolve.

A liability insurance premium increase would almost certainly be experienced by the Region for the additional winter maintenance service provided to local municipalities. Insurers could be uncomfortable with the added indemnity and jurisdictional confusion of ownership and maintenance responsibilities, even with a well-drafted indemnity clause. This could also mean a potential increased cost to residents without a change or increase in service levels.

By assigning responsibility to the Region, the Region will substantially increase its risk exposure to future legal claims arising out of trip and slip and fall incidents on sidewalks. Assumption of this risk would mean increased legal and risk management costs transferred to the Region.

Ownership and maintenance concerns of separated cycling lanes along Regional roads is a Focus Area in the 2022 Transportation Master Plan

Ownership and maintenance of sidewalks adjacent to Regional roads were discussed between the Region and local municipalities in 2018. The 2016 Transportation Master Plan included a policy recommendation the Region take over ownership and maintenance of sidewalks, separated cycling lanes and streetlighting adjacent to Regional roads. Findings of the 2018 consultation indicated the general maintenance framework works well in the Region, except for separated cycling lanes.

Ownership and maintenance of separated cycling lanes along Regional roads are not defined in the *Municipal Act*. A more consistent approach across the Region is desired. As a result, the 2022 Transportation Master Plan includes a review of ownership and maintenance of separated cycling lanes adjacent to Regional roads as a Focus Area to be addressed in 2023.

5. Financial

Winter maintenance activities are funded through tax levy at both the Regional and local levels. Sidewalks adjacent to Regional roads are currently maintained and tax levy-funded only by local municipalities. Should the Region assume winter maintenance of sidewalks adjacent to Regional roads, risk management, operational and capital budget impacts would be created for services already provided at the local level, and a Regional tax levy increase would be required.

Following the January 17, 2022, significant weather event, costs associated with additional efforts to assist local municipalities with snow removal and clean-up of sidewalks and intersections adjacent to Regional roads were about \$500,000. These costs were managed within the existing winter maintenance budget.

Additional \$1.5 million will be proposed to assist local municipalities with snow removal along sidewalks with limited or no snow storage

To provide sustainable resources necessary to assist local municipalities, an additional \$1.5 million in funds would address snow removal for two to three significant events per winter season. This funding request will be included for consideration in the next multi-year budget submission to help with snow removal along the 135 km of sidewalk areas with limited or no snow storage adjacent to Regional roads.

6. Local Impact

The Region works to ensure collaboration with our local partners is continually reviewed and improved. Following the January 17, 2022, significant weather event, staff reached out to local public works staff regarding sidewalk winter maintenance concerns. Feedback received indicated winter maintenance for sidewalks adjacent to Regional roads is working well within the existing framework. It has been noted there is an opportunity to better address ownership and maintenance of separated cycling lanes along Regional roads.

Improved coordination efforts between the Region and local municipalities will continue with efforts to develop and improve winter sidewalk maintenance, including a workshop planned for summer 2022.

7. Conclusion

The 2021/2022 winter season had the most snowfall and fourth highest number of weather events in the last eight seasons, including the January 17, 2022, significant weather event. Volume of snow accumulation along with extreme temperatures presented challenges for Regional and local municipal winter maintenance programs, including maintenance activities on sidewalks adjacent to Regional roads.

Winter maintenance of sidewalks adjacent to Regional roads is currently a local municipal responsibility. Regional assumption of winter maintenance of sidewalks adjacent to Regional roads would result in an additional pressure to the Regional tax levy with no new service provided to residents.

This report requests councils of the local municipalities confirm their positions regarding the Region assuming winter maintenance of sidewalks adjacent to Regional roads, given the Regional tax levy implication, and consideration of any impacts that may result from a change in the current maintenance responsibilities.

Staff will work with local municipal staff on opportunities to improve coordination efforts for winter maintenance of sidewalks adjacent to Regional roads to prepare for the 2022/2023 winter season, as well as continue to review ownership and maintenance issues of separated cycling lanes as part of the Focus Area identified in the 2022 Transportation Master Plan and report back to Council.

For more information on this report, please contact Joseph Petrunaro, Director of Roads and Traffic Operations at 1-877-464-9675 ext. 75220. Accessible formats or communication supports are available upon request.

Recommended by:



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Approved for Submission:



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