



Date: December 12, 2022

To: Mayor and Council

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RE: Winter Maintenance Levels of Service Policy Update

Report No.: IED 2022- 06

RECOMMENDATION

That **COUNCIL APPROVE** the updated Roads Level of Service Policy and Winter Operational Plan.

BACKGROUND

Ontario Reg. 239/02 Minimum Maintenance Standards for Municipal Highways (MMS) provides a standard of care for municipalities to ensure public safety and provide a due diligence defense for personal injury claims. Most municipalities utilize the MMS to develop maintenance standards and ensure that appropriate winter maintenance practices are developed and implemented to meet the Common Law test of reasonableness.

In 2018, several amendments were made to the MMS. The most significant changes were the inclusion of winter maintenance standards for sidewalks and the ability for municipalities to declare a "significant winter event" in the rare circumstance where extreme weather conditions prevent the municipality from meeting the MMS.

A roads level of service policy allows municipalities to identify what it will do to meet public expectations and how they will respond to a winter event taking into account variable resources and budget. Council endorsed the Town's current roads levels of service policy in 2005 (Appendix A). Since that time, there have been significant changes in regulations, technology, and service level expectations. Administration in Infrastructure and Engineering has updated the policy to reflect current operations and standards (Appendix B).

In addition to a level of service policy, Environment Canada requires the municipality to have a Salt Management Plan. This document is essentially a Winter Operational Plan,

which outlines how the Town meets the winter maintenance obligations specified in its Roads Level of Service Policy. The Town's current Salt Management Plan was approved in conjunction with its Roads Level of Service Policy in 2005. An updated Winter Operational Plan has been attached as Appendix C.

DISCUSSION

Due to increased liability, limited resources, and budget constraints, most municipalities are unwilling to commit to higher service levels than those specified by the Province. Administration believes it is essential for the Town to have realistic, practical, and attainable road maintenance services. To become more efficient with Town resources and to minimize risk and liability, Council should consider the following changes to Kingsville's winter maintenance operations:

1) Sidewalks and Multi-use Pathways

Over the last several years, administration has seen increasing demand for the development and improvement of active transportation facilities across Kingsville. During the Comprehensive Transportation Master Planning process, stakeholders encouraged consideration of a multi-modal transportation network to improve connectivity, increase efficiency and promote sustainability in Kingsville. This has led to the inclusion of multi-use transportation facilities in recent capital works projects. Prior to 2020, the Town's active transportation network consisted of 44 kilometers of sidewalks and multi-use pathways. This does not include the following newly constructed facilities:

- The 1 kilometer extension of the multi-use pathway on the west side of Jasperson Dr.
- The addition of 1.5 kilometers of sidewalk on the east side of Jasperson Dr.
- 1.8 kilometers of new multi-use pathway on the south side of Road 2 E with another 3.7 kilometers slated for construction in the near future.
- 500 meters of asphalt pathway in Lakeside Park.
- Approximately 4.5 kilometers of newly constructed sidewalks in developments such as Sun Valley, Queens Valley, Woodridge Estates, and Royal Oak on the Creek.

The standards for snow accumulation specified by the MMS are to “reduce the snow to a depth of less than or equal to 8 cm (3.15 in) within 48 hours and to provide a minimum sidewalk width of 1 meter.” However, over the last several years there has been a demand for a higher level of service than what has been established in the MMS. Limited resources, competing interests, and growth are making it difficult to meet expectations. As such, administration is recommending the following tiered system, with

different set levels of service. Staff resources would not be dispatched until these thresholds are met.

Route	Infrastructure	Level of Service
Primary	In boulevard multi-use pathways, sidewalks in commercial areas, and sidewalks around schools.	The Town will dispatch resources after the winter event has ended and snow accumulation is less than or equal to four 4 cm (1.57 in) in depth.
Secondary	Sidewalks in sub-divisions and other low traffic areas.	The Town will adhere to the MMS, and dispatch resources to reduce the snow to a depth of less than or equal to 8 cm (3.15 in) with 48 hours
Tertiary	Unpaved pathways and paved pathways in remote locations requiring abnormal levels of service.	These sidewalks will receive no winter maintenance and will receive temporary signage to inform the public.

*Route maps are included within the attached Winter Operational Plan.

Significant staff resources are committed to cleaning snow on low-traffic sidewalks infrequently used in the winter. Targeting high traffic areas around businesses and other facilities would be a more efficient use of Town resources and allow for a higher level of service in those areas.

Area municipalities, with higher staffing levels, have already modified operations with respect to sidewalk snow removal. Should the Council want improved service levels on secondary sidewalks, above what is specified in the policy, there are a few options:

Option 1: Increase staff resources and equipment

Given the rapid expansion of pedestrian facilities, and the need to have qualified drivers available for roadways, more staff and equipment would be needed to maintain current service levels on secondary sidewalks. Adding staff and purchasing equipment would result in additional expenses funded through taxation.

Option 2: Outsource secondary sidewalks

Administration could draft a Request for Proposal and seek out qualified local contractors for winter sidewalk maintenance. A breakdown of estimated costs can be found in the financial section of this report. Contracting out services would also impact taxation. This option has not been implemented in municipalities across Essex County.

Option 3: Consider a snow and ice removal by-law

Neighbouring municipalities like Tecumseh, Essex, and Chatham-Kent have more staff resources but still place an onus on residents to clear snow from sidewalks abutting their properties. With permission from the Town of Essex, I have attached their bylaw for reference (Appendix D). This option places the responsibility of snow removal on property owners and represents the lowest cost solution for the municipality. It is important to note that residents who own properties that abut municipal sidewalks would not become liable for slips and falls on the sidewalk arising from their failure to comply with the by-law. Additionally, staff resources would be required to enforce the By-law.

2) Roads

Like Kingsville's sidewalks, Council should consider a tiered approach to maintaining area roadways. Operationally speaking, most small municipalities provide ubiquitous winter maintenance services across the entire community. They forgo the prioritization methods outlined in the MMS and dispatch all trucks into all areas simultaneously. This has been the historical practice in Kingsville, meaning residents living on higher-class roads receive an above-average standard of service.

Communities in Southwestern Ontario need to move away from the expectation of bare, dry pavement immediately following a winter event, especially in dense urban areas and sub-divisions. Consideration needs to be given to adopting a prioritization method similar to what's specified in the MMS and developing secondary routes on roadways. There are several reasons to consider this approach:

Risk and Liability:

It is more practical and efficient to concentrate resources on high-risk roadways with faster speed limits, more traffic, and increased exposure to adverse weather conditions, such as drifting snow. Local roads have lower speed limits with more frequent driving interruptions when compared to rural and arterial roadways. Injury claims are typically more significant on higher-class roads and result in higher payouts by the Town's insurer.

Environmental Considerations:

Salt and other chloride-based chemicals are generally effective and inexpensive anti-icing agents, but they contribute to the corrosion of vehicles, deterioration of infrastructure, and degradation of the environment. Several studies have shown that salts negatively affect vegetation, harm aquatic life, and deteriorate soil conditions. Creating secondary routes with lower service levels would reduce the frequency of salt application and lower greenhouse gas emissions, resulting in an overall benefit to the environment.

Cost:

There is continued public pressure to keep taxes low while providing high service levels. Unfortunately, a growing network of infrastructure, rising costs, and limited resources

make standardized winter maintenance services unsustainable. The community will need to choose between increasing taxes or accepting a more strategic approach to delivering services in Kingsville.

FINANCIAL CONSIDERATIONS

The following is a breakdown of expenses over the last five years to provide sidewalk winter maintenance in-house verses estimated costs had the service been outsourced.

Year	In-house snow removal (fleet and staff)	Estimated Outsourcing Costs
2017	\$ 8,759.68	\$26,250.00
2018	\$ 17,887.88	\$ 66,562.50
2019	\$ 12,612.81	\$ 56,250.00
2020	\$ 12,669.52	\$ 52,875.00
2021	\$ 10,494.47	\$ 34,800.00

*Costs are based on maintaining 40km of sidewalk.

Outsourcing costs are conservative estimates based on unit rates seen in other municipalities. Rising insurance rates, labour and material costs, and fleet and fuel expenses make outsourcing significantly more expensive.

There are four tractors used to complete sidewalk snow removal in Kingsville. Several of these tractors are used in Parks and Recreation for grass cutting. As such, an annual fleet lifecycle cost of \$2500.00 for one tractor was included as part of the calculation of in-house expenses.

COMMUNICATION STRATEGIES

The recommended changes to the Roads Levels of Service Policy are based on current resources and allow the municipality to continue meeting Provincial guidelines. The updated policy and Winter Operational Plan would be communicated to the public as part of the “Get to know the Plan for Snow” marketing campaign if the changes are endorsed. Public opinion on service level options, such as a Snow and Ice Removal By-law, could be gauged through online surveys and public input sessions as part of this campaign and considered in future budget years.

CONSULTATIONS

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LINK TO STRATEGIC PLAN

Promote the betterment, self-image and attitude of the community.

To promote a safe community.

Effectively manage corporate resources and maximize performance in day-to-day operations.

Link to Council 2021-2022 Priorities

- ☐ COVID-19 and the health and safety of the community
- ☒ Customer Service: Training, Technology, Staff, Review Standards/Level of service
- ☐ Housing: Affordability (lot sizes, developer incentives, second dwellings, density, etc.)
- ☐ Greenhouse: lights & dark sky, odours (site plan compliance, bylaws, other tools)
- ☐ Programming Increase: Youth and Seniors
- ☐ A development plan for Downtown Kingsville / Main Street
- ☐ Financial savings: Schools closings, Migration Hall
- ☐ Economic Development: strengthen tourism/hospitality
- ☐ COVID - economic recovery
- ☐ Communications: Strategy – Policy (social media), Website refresh and other tools, Public engagement

- ☐ Housing: Migrant Worker Housing – Inspections (Building/Fire), regulate, reduce, or increase
- ☐ Committees / Boards: Review and Report
- ☐ Policy Update: Procedural Bylaw
- ☐ Economic Development: diversify the economy, create local jobs, industrial, Cottam
- ☐ Infrastructure (non-Municipal): Union Water expansion & governance
- ☐ Infrastructure (Municipal): Asset Management Plan update, the infrastructure funding deficit
- ☐ No direct link to Council priorities