



Subject: Snow Clearing Road Shoulder Discussion
To: Infrastructure and operations Committee
Date Prepared: June 2025
Related Motions: C25(79)
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Approved by: Jesse Hulsman - Director of Infrastructure and Operations

Summary

On February 26, 2025, Council passed motion C25(79) directing Staff to look into issues and costs related to plowing the shoulders of roads within 1.6km of schools to facilitate walking during winter months, due to the new Regional Centre for Education (RCE) rules around bussing.

Staff have identified a number of issues that would cause concern, including the need to create a new priority standard with no knowledge on any future changes RCE's might make, accessibility, pedestrian best practices, contractual implications, climate risk, and other complaints which would be exacerbated by this change.

Given the number of challenges and issues identified as part of their review, Staff are of the opinion that this should not be explored further.

Financial Impact Statement

N/A

Recommendation

It is recommended there be no changes to the Winter Snow Clearing Standards related to shoulders of roads to address the interest in expanding walkable infrastructure within 1.6km of schools.

Recommended Motion

N/A

Background

On February 26, 2025, Council passed the following motion:

C25(79) Moved that Council direct staff to look into issues and additional costs for the plowing of shoulders of roads within 1.6 kms of school due to the new rules for children walking to school before the next snow plowing season.

This motion originated from comments last winter wanting snow to be pushed back beyond the travel portion of the road, enabling residents to walk along the shoulder. Staff have received some resident and councilors complaints over the years around the clearance of shoulders and have provided the standards and best practice as reasons for remaining with the current clearing methods.

Discussion

Conceptual Scope and Cost

Staffs understanding of the request is to provide a walkable portion of the shoulder within 1.6km of any school on roads maintained and cleared by the Municipality during the winter season. Based on a conversation with Chignecto-Central Regional Centre for Education (CCRCE) bus staff, there are approximately 30 streets which could see full or partial service by being within the required distance (list provided as an attachment). These roads represent 10km. Staff have completed a potential costing based on the current methods employed, current costing, and an estimated number of storms. It is determined that on average, adding this change could see a rise in snow clearing spending of between \$85,000 and \$110,000 (before tax) for roads alone. There is potential that clearing of shoulders may impact areas where they transition from shoulders to a hard surface. This pricing is subject to a number of external and internal factors that could see the estimated cost rise or fall. Predicting this costing is difficult and raises other concerns.

Municipal Standards

The Municipality has a fairly comprehensive set of snow clearing standards that was last brought to Council in July 2024 for updates. These standards form the basis of our contractual obligations with our contractors and residents, and are based on best practices and knowledge gained through managing the snow clearing contract. Any changes that have been brought forward in the past are well thought out and reasoned approaches to better utilize our contract and its obligations; while ensuring we are utilizing the contract in a fiscally responsible manner.

For roads, there are standards listed for Priority 1 and 2 (P1 & P2) roads, with P2 roads being further broken out into the various sections of roads contractors may meet while conducting

clearing. The finished condition of the road confirms whether the contractor has met performance objectives. P1 roads are cleared to the edge of pavement and P2 roads are 2m centerline bare and snow covered within 24hrs from the end of storm respectively. These standards are set to ensure they are achievable, provide general access to the communities in a timely manner, and ensure routes for emergency vehicles to travel should they be needed.

Currently, neither finished conditions set for P1 or P2 roads are beyond the edge of pavement. Altering this would result in an additional priority for roads, with finished conditions and timelines being different from those previously established. Defining this criterion based on an arbitrary number would result in some roads seeing three different levels of service depending on the location in relation to the walking route of nearby school(s).

The standards are used to determine whether the contractor has met the obligations of our contract. They are defensible standards that Staff can easily relate to when dealing with complaints and questions from our residents.

Accessibility

Section 127(3) of the Motor Vehicle Act provides a statement with respect to walking in the absence of sidewalks. It states “where sidewalks are not provided, any pedestrian walking along and upon the highway shall, when practicable, walk only on the left side of the roadway or its shoulder facing traffic which may approach from the opposite direction.” In order to comply with this statement, the shoulders would need to be cleared back on both sides of the road.

To ensure enough space was available for all method of travel, snow would need to be pushed back the entire width of the shoulder, resulting in a significant loss of snow storage and the use of our ditches to pile and store snow. The Municipality does not clear snow for residential driveways, nor does it have a standard that requires driveways to be maintained during winter months, other than snow is not to be stored or pushed into the road. This would result in an uneven clearing along the proposed walk path, and cause pedestrians to move intermittently into the roadway to avoid these issues.

Staff recently spoke with an advocate for accessibility, focused on visual impairment and received favorable comments on the current East Hants clearing standards. Changing our standards to include sections of the ROW that we do not own could cause those with sight or mobility issues in maneuvering our roads in ways such as; uneven surfaces, changing surface materials, etc.

Contractual Issues

Our standards form the basis of our contracts and tenders. Altering this level of service in the midst of the contract could cause a number of issues which include;

1. Timeline to complete this additional work
2. Categorizing an additional finished condition
3. Increases liability around damage to driveways/shoulders
4. Salting/sanding additions, with spread and mix added complexity
5. Potential for different equipment needed versus what was used to bid on current contract conditions

The biggest concern from Staff's perspective is the timelines around this potential add and the liability our contractors would be taking on. Currently there are very little, to no complaints around damage to driveways or the shoulders of roads, but that would drastically change if plowing began along the shoulder area. The issue of liability could result in higher costing to offset, and this complexity of shoulder damage increases with respect to the winter service exchange as the Municipality clears road infrastructure that at times is owned by the province.

Climate Risk

Like gravel roads, shoulders are susceptible to the freeze/thaw effect of the early and late parts of the winter season, which would result in being unable to clear those sections while the ground is not yet hard enough to sustain the plowing. Plowing during these periods would cause more damage than what would be reasonably expected during the harder winter months. This damage would remain until the season was complete and any claims/damage reports were collated and discussed with the contractor for review and completion. The inability to continuously maintain the standard makes it difficult to be accessible.

Other Complaints

There have been a number of complaints over the years with respect to snow being pushed into the ditches and causing issues. The shoulder is generally where we store snow as it has a limited impact on the available width of the road, while also allowing the melt to leech into the ditch gradually. Complaints have been noticeably received on Catherine Street, Enfield and Tannery Drive, Elmsdale over the last few years. This was due to snow in the ditch followed by other storm systems (snow, rain, and/or melt) making it difficult for the water to swiftly move through the ditch and culvert system. Ultimately this could result in improperly installed basement/sump pump drains to backflow into the property or for the ditch to be topped resulting in a hazard on the roads we maintain in the winter.

Where this has been identified as an issue for residents in the past, altering the clearing standards to possibly compound this issue further, would appear to be counterproductive to our residents. In order to prevent this, we would need to remove the snow in most events, which is not a cost currently incurred unless we have significant snow fall with more forecasted, or where the snow piles cause issues to sight lines or a risk to injury.

Pedestrian Route Best Practices

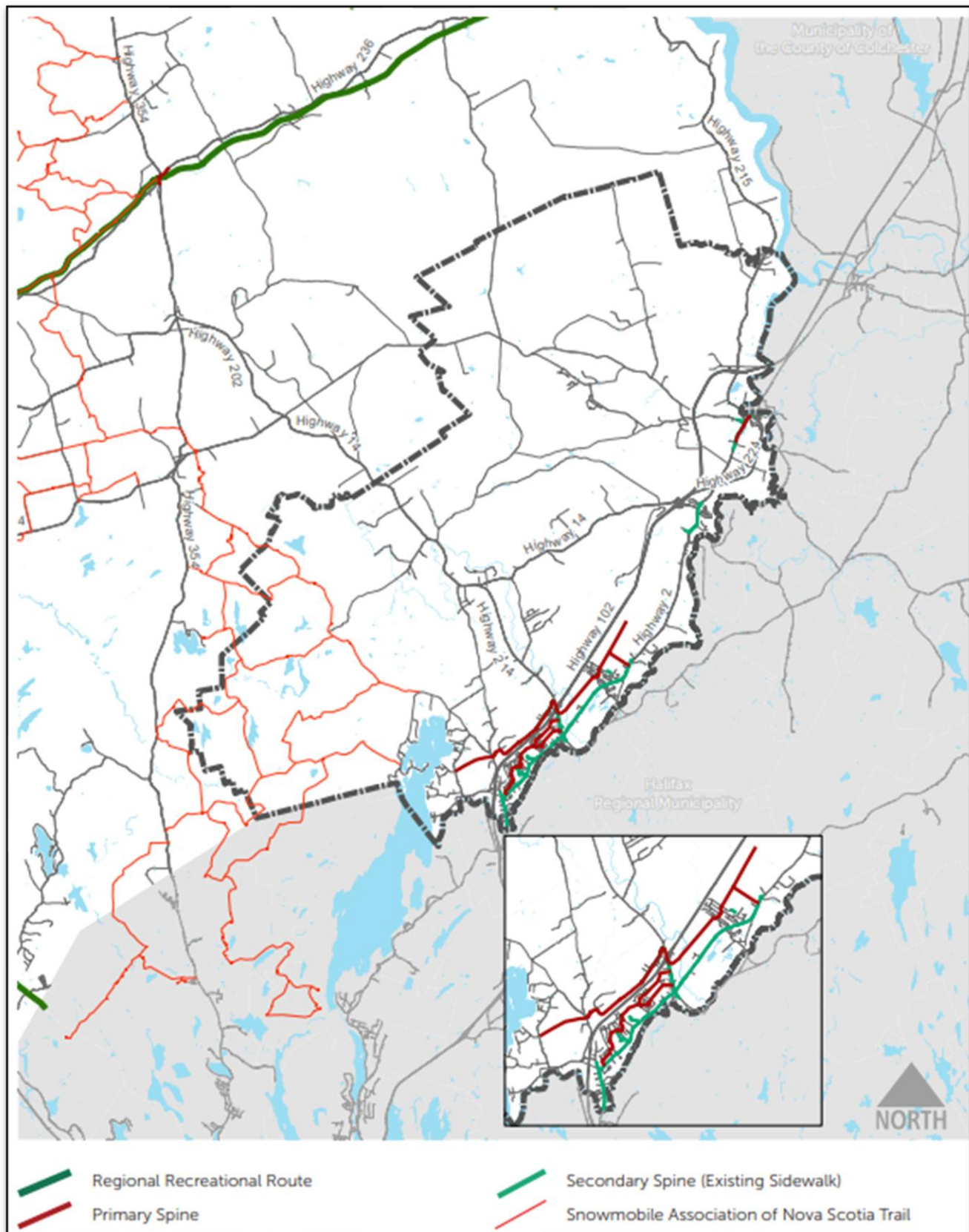
The motion discusses the changes to the school bus system which states children living 1.6km from a school will not generally receive bussing to the school and now are required to find alternative methods to get to and from the site. The issue is that the distance changes depending on school's student age and there is little guarantee that the distance will not change again depending on staffing levels for the school buses, or political pressures from different levels of government.

While the Municipality cannot regulate how and when the RCE adjusts/amends decisions around bussing of students, East Hants can build out the physical environment for pedestrians to move about in the different communities. Best practice for this is to build sidewalks and/or active transportation trails that create clear physical separation from vehicle traffic and can be maintained within a standardized program.

The Municipality published an "East Hants Parks, Open Space and Active Transportation Mater Plan" in November 2017, which is published on the public municipal website. Section 6 covers the topic of Active Transportation. There has been work over the last 8 years where Active Transportation and overall pedestrian routing within new development proposals are accepted based on adherence to this published plan. Evidence of that can be shown in the build out of the Kiln Creek development in Lantz, in negotiations with a business site being developed on Highway 214 that will have long term pedestrian connectivity built in, and is within the plan for a development that will connect to Roulston Drive in Elmsdale, which has both Active Transportation and sidewalk infrastructure built into development agreements that setup connections based on that documented Master Plan.

The next evolution of planning would be to start planning and implementing projects in pre-existing neighborhoods to meet the long-term Master Plan. That infrastructure is what will create the level of service ultimately being sought by residents whom are seeking safe routes of travel in winter months through subdivisions of the more densely populated areas of the Municipality.

Corridor Active Transportation Concept Plan (Section 6.3 of East Hants Parks, Open Space and Active Transportation Mater Plan)



Alternatives

Council may wish to consider and request the alternative provided below.

Expand Pedestrian Specific Infrastructure Networks

The proposed approach would be a cross municipal department collaboration to update the existing Municipal Active Transportation Master Plan using technical criteria to establish a list of priorities of different routes based on factors such as; category of a destination, traffic counts, and technical road characteristics. There would be project estimates for some of the proposed areas within a 5-year plan, along with lists of projects forecasted as longer term. The costing would be based on containing areas of consideration to be within the Urban Service Rate, where no area outside of the Urban Service Rate would be part of the review, unless directed to expand the area and open up debate on fees related to sidewalk infrastructure.

Attachments

East Hants Parks Open Space and Active Transportation Master Plan (November 2017)
Snow Clearing Road Shoulder Road List and Map