



April 14, 2021

To Infrastructure and Environment Committee Chair and Members:

Re: Further Consideration of Reducing Salt Use in our Public Realm

Further to previous work undertaken by Transportation Services in their continued review of salt use on our streets, I was hoping to provide additional background and recommendations to guide their decision making as we move forward. As we know, Road salt has been the cheap "go-to" solution for slippery roads and sidewalks, but the actual costs to the environment and to infrastructure are not reflected in its price. It is vital that the City of Toronto take stronger measures to review and reduce its own salt usage. At the same time, it should take measures to regulate home-owners and private contractors who, due to their heavy-handed approach to salt application account for 40% of the salt use.

It's not actually the salt that melts the ice, but the mixture of salt and water known as brine that prevents ice from forming. Therefore, spraying brine directly provides a more even coating of the pavement and better results, with at least a 30% reduction in salt use. Another approach, pre-wetting—the mixing of rock salt with water before application—helps the salt stick to the pavement (and not bounce off) and also jump-starts the process of brine formation. This can prevent additional runoff into our natural environment.

The city is in the position to be a leader to show and support meaningful changes with salt use on public and private property, and it also has the power to influence, not only homeowners but other property owners such as the school boards, the Building Operators and Manager's Association, the TTC, Metrolinx, the Toronto Parking Authority, and adjacent municipalities. It is with a mass buy-in from all of these groups that meaningful salt reduction can really take root.

Recommendations:

- 1. Request that the City Manager and General Manager, Transportation Services, consider the following actions as it relates to the reduction of salt use:
 - a. Look to adopt a rate of salt application for anti-icing of 7g per square meter, and 50-60grams per square meter for de-icing, based on current best practices.
 - b. Conduct an audit of actual rates of salt application. This audit should include the costs of salt damage to infrastructure.
 - c. Implement industry best practices for sustainable salt management including investing in equipment and training to enable the implementation of brine for all roads sidewalks and paths maintained by the city and prioritize snow removal and clearing over salting
 - d. Coordinate implementation of new standards across large, publicly owned property owners such as the school boards, Building Owners and Managers Associations, the TTC, and the Toronto Parking Authority to also require contractors to be certified in sustainable salt use.
 - e. Seek guidance from the Toronto and Region Conservation Authority, and other environmental agencies and NGOs to map out ecologically-sensitive regions within Toronto.





- f. Coordinate with surrounding municipalities, with shared watersheds to coordinate efforts in urban planning, road development and salt management across the region.
- g. Organize a public awareness campaign to educate homeowners and the general public on correct salt application with a balance between public safety and environmental stewardship, to manage expectations for snow removal.

Thank you,

Councillor Mike Layton Ward 11, University-Rosedale