# WALK TORONTO COMMENTS ON BIKE LANE SNOW CLEARING (2016 PW13.16)

To: Chair Robinson and members of PWIC
From: Walk Toronto – Sidewalk Clearing Committee
Re: Bike Lane Snow Clearing (PW13.16)
Date: May 13, 2016

## RECOMMENDATION

Walk Toronto recommends that members of PWIC support Councillor Ainslie's initiative. We consider especially important section 1 (a):

> *Provide information on the equipment employed to clear/remove snow and ice on bike lanes in comparison with options utilized in other Canadian jurisdictions such as Ottawa.*

**The value for pedestrians in achieving higher winter maintenance standards for narrow bike lanes is that the same solutions can potentially be applied to sidewalks, increasing the number of sidewalks that can be mechanically cleared and improving the quality of the service provided.**

## RESIDUAL LAYER OF SNOW

Most snow plows have a tendency to skim over the road or sidewalk surface, leaving a residual layer of snow that can be up to 3 centimetres thick. If this layer is then subjected to a freeze-thaw cycle, the snow can turn to ice, creating treacherous travel conditions. This problem affects sidewalks and bike lanes to an equal extent. From the road safety perspective, it is crucial that the City of Toronto should develop environmentally acceptable technical solutions to the residual snow layer problem. The goal of winter maintenance for high volume sidewalks and bike lanes is to clear right down to the pavement.

## REDUCTION IN THE USE OF SALT

Transportation Services currently relies on the liberal spreading of salt as a quick fix to the residual snow layer problem. For both sidewalk and bike lane users, this can have several negative consequences:

- Additional quantities of salt eventually end up in Lake Ontario, reducing water quality and posing an environmental hazard to wildlife.
- Salt can degrade rubber, damaging walking shoes and boots as well as bike tires. It also can damage the moving parts of wheelchairs and bicycles
- Excessive salting causes deterioration of sidewalk concrete and road asphalt
- Salt irritates the paws of dogs

If alternatives to salting can be developed for bike lanes, then the same methods can be beneficially applied to sidewalks.

## MECHANICAL SOLUTIONS

We have been in contact with winter operations staff in Ottawa, who state that they sometimes employ mechanical techniques in addition to plowing. Compact snow blowers and rotating brooms have proven effective on the sidewalks of our capital. We believe that Toronto should investigate the adoption of similar technology on our bike lanes and sidewalks. Although Toronto receives less snowfall on an annual basis than Ottawa, our average winter temperatures are higher – meaning that our freeze-thaw cycles are more pronounced. Clearing snow down to the pavement is therefore of crucial importance to Torontonians.

## CONSTRAINED SPACE

The minimum recommended width of a bike lane is 1.5 metres, which is narrower than the average sidewalk. When a mechanical plow clears a strip this narrow, plowed snow (windrows) accumulates at the sides of the bike lane. Should the windrows become too large, it can be difficult for plows to negotiate the bike lane at a later date.

This problem also affects physically constrained sidewalks in the old City of Toronto and East York. They typically lack a boulevard strip – common in the suburbs – where plowed snow can be easily stored. If snow blowing methods are developed for narrow bike lanes, these might be applied to tight sidewalk environments. Presently, there are about 1,100 kilometres of sidewalks that are allegedly too constrained for the City to plow mechanically. The use of snowblowers and compact plows may enable the City of Toronto to mechanically clear sidewalks comprehensively throughout the city – a service that the City of Ottawa already provides to its residents.

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