Urban Snow and Ice Control

Presenter: Keith Smith, Director and Kelly Colbourne, Manager

Department: Public Works

Meeting Date: October 13, 2020



Policy

- The policy establishes winter snow and ice control standards for urban roads and sidewalks
- Primary Routes (Confederation Way)
- Secondary Routes (Paquette Drive)
- Tertiary Routes (Crane Rise)
- Residential Streets
 - This falls under the Winter Maintenance Zone (WMZ)
 Program



Background

- 2014 Pilot program pushed snow on to lawns. Shutdown pilot and completed haul. Snow and Control Policy underwent review which included public engagement.
- 2015/2016 New WMZ program implemented. Council Policy and Administrative Directive approved. Public engagement Spring 2016.
- 2016/2017 Program continued without changes.
- 2017/2018 Introduced Sub-zones. Public engagement completed.
- 2018/2019 Activation triggers were implemented (5cm).

Winter Maintenance Survey Comments Number of Surveys Completed 1007 **Comment Topics:** 32 Positive Remarks about Program or Crew Complaint – Back Alley 10 Complaint – Lack of maintenance, moved vehicle and no maintenance (20-30% pertain 149 to Primary and Secondary) Suggestion – More ticketing 13 Complaint – Quality of Work 5 Complaint – Survey (felt survey was poorly done) 38 Complaint – Sidewalks not cleared (30-40% concerned about neighbor's not clearing – 72 would like more enforcement) Complaint – Ticketing and Towing – cash grab 14 Suggestion – Plow more, don't remove at all 6 Complaint – Windrows (30% want removal 2-3 times with no plowing, 20% want plowing more 394 often for smaller windrows, 10% concerned with streets narrowing)

2020 Survey

Critical about the program

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2020 Survey Question #17: "I am in favour of..."

- Less Plowing
 - Less windrows / more ruts (31% agree / 60% disagree)
- Regular Plowing
 - Clearer streets / more windrows (37% agree / 53% disagree)
- Plowing and Removal as Needed
 - Current WMZ or similar (62% agree / 26% disagree)
- Fining Vehicles parked in WMZ (72% agree / 19% disagree)
- Towing Vehicles parked in WMZ (71% agree / 21% disagree)
- Summary: Many respondents do not want to see less maintenance that would leave their streets rutted and icy; however, windrows remain an issue for most. Majority are in favour of ticketing and towing.

Benchmarking

 Through benchmarking we identified that all municipalities, including ours, were similar in how we prioritize and carry out our operations. We were leading several municipalities with respect to the amount of maintenance we complete on our residential streets.

No Windrows

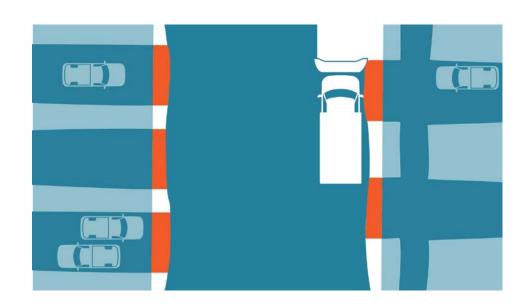


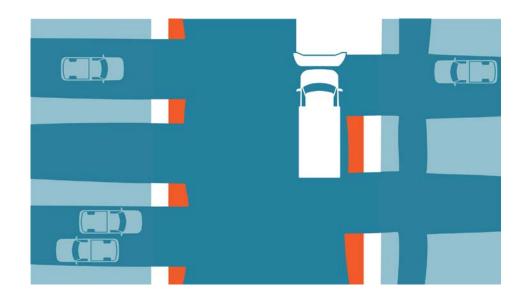
Windrows



2020/2021 Winter Maintenance Zones – Windrow Removal

 Spread the operation over two weeks to allow for plowing and relocating windrows away from driveways as required. Crews would cover two subzones in week 1 and two subzones in week 2.





2020/2021 Winter Maintenance Zones – Windrow Removal

Pros

- Reduction of windrows in front of driveways
- Level of service maintained
- Comparable Cost to existing program

2020/2021 Winter Maintenance Zones – Windrow Removal

Cons

- Clearing driveways will be a new process.
- There could be a time delay between plowing and driveway windrow removal.
- Program has changed frequently in the past causing communication challenges. Implementation will be subject to similar difficulties.
- Concerns with narrowing of streets remains. Complete snow removal may still be required if warranted.

Alternative Option Explored – Enhanced Removal

 More frequent removal. We could start removal at a 3cm snowpack instead of 5cm, leading to more removal per season.

Pros

- Eliminate windrows
- Assist the spring thaw
- Eliminate concerns with narrow streets

Cons

- Higher cost that may not be sustainable in the future
- Streets still subject to ruts and ice. The removal process takes much longer than plowing and will result in longer periods between maintenance. With favourable weather, snow removal takes 4 to 5 weeks.

Alternative Option Explored – Center line only

 Focus plowing a single driving lane in centre of streets, plowing around vehicles.

Pros

- Cost savings would be realized
- Eliminate need for excessive towing
- Smaller windrows as it is only a portion of the street
- Significant increase in speed of operation

Alternative Option Explored – Center line only

Cons

- Decrease in service, parking lanes will be rutted and slippery with windrows.
- Plowing windrows around vehicles, leaving minimal access to vehicles with drivers responsible for clearing.
- Will still require removal, potentially more often.
- May not be an option for some narrow and windy streets resulting in varying levels of service, or no service at all.

Summary

- All of the options contain a certain degree of risk. Based on experience over the years and options available, we will be implementing the driveway windrow removal.
- Two changes residents will see this year
 - Windrows higher than 15 centimetre's will be removed from the front of driveways
 - WMZ's will only be relaxed on statutory holidays

Thank you