

Winter Maintenance Program:

Current Program, Considerations and Additional Service Options

Education Session - General Committee – April 26, 2023



Introduction/Agenda

- T&W's Current Winter Maintenance Program
 - Service Levels
 - Program Considerations
- Additional Service Options
- Parks Operations Winter Maintenance Program
- Questions and Answer Session



Current Winter Maintenance Program

What We Clear:



5,700
lane km of
roads



1,700
lane km of
priority sidewalks



3,300
bus
stops



105
km of roadside
multi-use trails

mississauga.ca/snow

Approved Service Levels: T&W

Type of Road/Facility	Less than 5 cm of snow	5 to 15 cm of snow	15 to 30 cm of snow	More than 30 cm of snow or back-to-back storms
Major and priority roads, priority sidewalks, bus stops, pedestrian crossings, bike lanes and specific trails	Salted within 12 hours after the end of a snow fall	Plowed and salted within 12 hours after the end of a snow fall	Plowed and salted within 24 hours after the end of a snow fall	Plowed and salted more than 24 hours after the end of a snowfall
Residential and secondary roads	Salted within 24 hours after the end of a snow fall	Plowed and salted within 24 hours after the end of a snow fall	Plowed and salted within 36 hours after the end of a snow fall	Plowed and salted more than 36 hours after the end of a snowfall

About Winter Maintenance Operations

- Timing of snow clearing
- Minimum Maintenance Standards (MMS) vs. Approved Level of Service
- Collaboration with Region of Peel and Parks, Forestry and Environment
- Salt Management Plan

Winter Operations Service Requests

- 2,801 service requests between Nov. 1, 2022 and Mar. 31, 2023
- 41% were related to winter:
 - 27% related to plow damage
 - 27% related to roadway snow clearing
 - 15% related to sidewalk snow clearing
 - 7% related to windrows

Understanding Resident Concerns

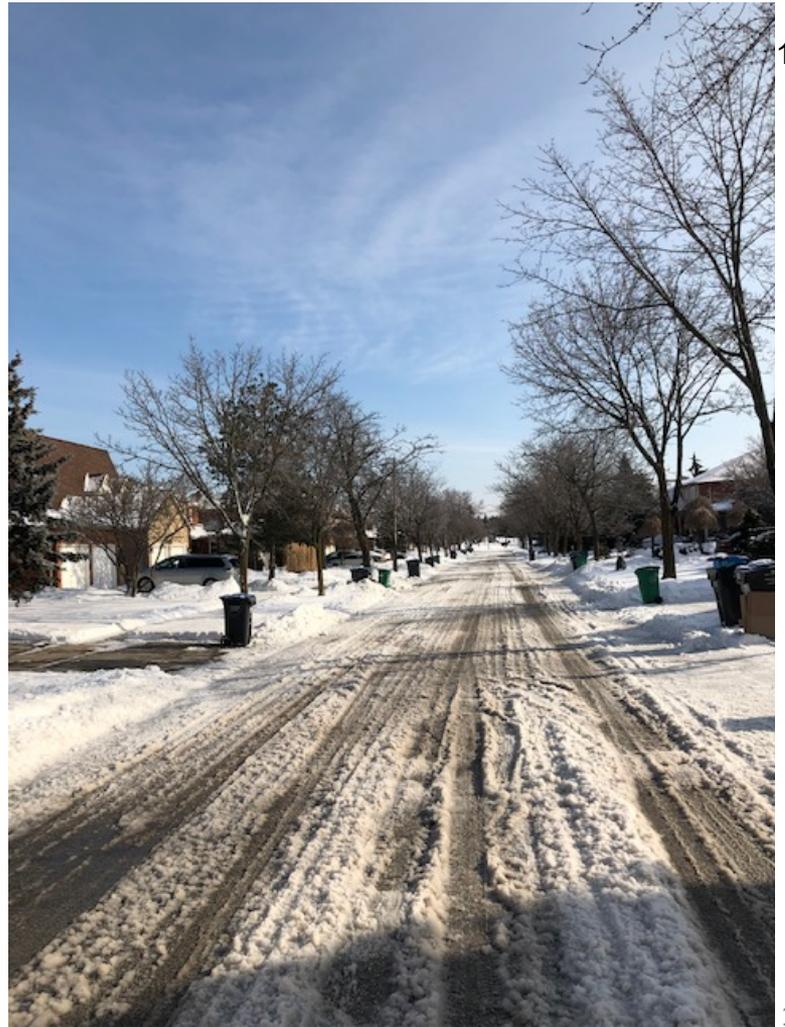
- Expectation of Level of Service vs. Approved Level of Service
- Winter maintenance and parked cars
- Sod damage
- Plowing to minimize windrows
- Bare pavement policy











16.1



Winter Operations Additional Service Options

Additional Service Options

For 2024/2025 Winter Season:

- City-wide Residential Windrow Clearing
- Secondary Sidewalk Clearing
- Enhanced Bike Lane Clearing/Snow Removal

For 2023/2024 Winter Season and Beyond:

- Expanding the Existing Windrow Clearing Program

City-Wide Residential Windrow Clearing

Current State

- 350 eligible applicants
- Cleared within 36 hours of the end of a snow event
- City-wide residential windrow clearing service is not offered

Additional Service Option

- ~ 130,000 residential driveways
- 4 to 6 hours after street plowing
- Minimum 3.0 m wide opening for vehicles
- 223 pieces of additional equipment with specialized plow





City-wide Residential Windrow Clearing Considerations

- Townhomes and homes on cul-de-sacs cannot be serviced
- On-street and lower boulevard parking
- Waste pickup timing
- Residual snow and sidewalk windrows
- Property damage: driveways, sod and encroachments

Benchmarking: Driveway Windrow Clearing

16.1

Municipality	Citywide Windrow Clearing	Limited Windrow Clearing
Mississauga	X	✓
Barrie	X	X
Brampton	X	X
Burlington	X	✓
Hamilton	X	X
London	X	X
Markham	X	✓
Milton	X	✓
Oakville	X	✓
Oshawa	X	✓
Ottawa	X	X
Richmond Hill	✓	N/A
Toronto	✓*	N/A
Vaughan	✓	N/A

Secondary Sidewalk Clearing

Current State

- Clear priority sidewalks only
- Rely on property owners to clear secondary sidewalks
- No By-law requiring property owners to maintain sidewalk

Additional Service Option

- ~ 700km of secondary sidewalks
- 24 to 36 hours after end of winter event
- 45 additional pieces of equipment

Secondary Sidewalk Clearing Considerations

- Sod and property damage
- Lower boulevard and illegally parked vehicles
- Sidewalk windrows
- Increased salt usage
- Minimum Maintenance Standards are not met with current program

Benchmarking – Secondary Sidewalk Clearing 16.1

Municipality	Priority Sidewalk Clearing	Secondary Sidewalk Clearing	Comments
Mississauga	✓	X	No by-law in place
Barrie	✓	✓	
Brampton	✓	X	By-law in place
Burlington	✓	✓	
Hamilton	✓	X	
London	✓	✓	
Markham	✓	✓	
Milton	✓	X	By-law in place
Oakville	✓	✓	
Oshawa	✓	X	By-law in place
Ottawa	✓	✓	
Richmond Hill	✓	✓	
Toronto	✓	✓*	*95% of sidewalk network
Vaughan	✓	✓	

Enhanced Bike Lane Clearing

Current State

- Bike lanes on roadways cleared by plow trucks
- Boulevard bike lanes cleared by sidewalk tractors
- No provision for snow removal on bike lanes.

Additional Service Option

- ~30km of online and planned bike lanes
- 12 to 36 hours after the end of the winter event
- Snow clearing and removal of separated bike lanes
- 10 additional pieces of equipment

Levels of Service Recap – Additional Items

16.1

Type of Road/Facility	Less than 5 cm of snow	5 to 15 cm of snow	15 to 30 cm of snow	More than 30 cm of snow or back-to-back storms
City-wide residential driveway windrow snow clearing	Not Applicable	Cleared 4-6 hours after street has been plowed.		
Secondary sidewalks	Salted within 24 hours after the end of a snow fall	Plowed and salted within 24 hours after the end of a snow fall	Plowed and salted within 36 hours after the end of a snow fall	Plowed and salted more than 36 hours after the end of a snowfall
Enhanced snow removal from bike lanes	Salted within 12 hours after the end of a snow fall	Snow plowed/removed and surface salted within 12 hours after the end of a snow fall	Snow plowed/removed and surface salted within 24 hours after the end of a snow fall	Snow plowed/removed and surface salted more than 24 hours after the end of a snow fall

Existing Windrow Clearing Program – Expanding the Program

- Proposed expansion of existing windrow program
- Service level remains unchanged
- Implemented as interim or continued service

Park Operations Winter Maintenance

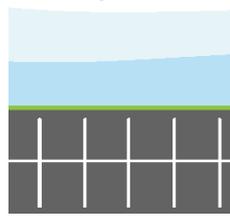
What Is Cleared:



188.5

lane km of
park trails

Represents 71% of the network, recently enhanced in response to increase year-round trail use



173

parking lots

Represents 68% of all parking lots

What Is Not Cleared:

Select Pathways, that are:

- In Natural Areas or Ecologically Sensitive Locations
- Adjacent to City Sidewalks
- Within park locations with Seasonal Amenities Only
- Have Entrance/ Exit Limitations due to Topography

Select Parking Lots, that are:

- Unpaved (aggregate material)
- Adjacent to parks with Seasonal Amenities Only

Current State

Digitized maps of all trails plowed city-wide



Legend

Maintained Trails within Parks



Maintained Areas/Parking Lots



Non Maintained Trails within Parks



School Boundary



Park Boundary



Approved Service Levels

Description	Snowfall Accumulation		
	15cm (6") or less	15cm (6") – 30cm(12")	More than 30cm (12") or successive storms
Community Centre, Arenas, and Library Parking lots, Parkland adjacent to community centres, waterfront parks and downtown parkland. <i>For highly developed locations with high visitation that serve a regional purpose.</i>	Within 12 hours	Within 24 hours	Service levels may be suspended and will be completed as soon attainable
Trails, walkways and school easements. <i>For pathways that serve as a transportation link for local communities and neighbourhoods.</i>	Within 24 hours	Within 36 hours	Service levels may be suspended and will be completed as soon attainable

As previously indicated, subset of parking lots and pathways do not receive winter maintenance (For example. Unpaved and Ecologically sensitive areas)

Benchmarking

Municipality	Service Level for Park Trails	Trigger Accumulation
Mississauga	12-36 hours, accumulation dependent	5 cm
Brampton	24 hours	7.5 cm
Toronto	24 hours	8 cm
Oakville	12-48 hours, priority dependent	5 cm
Vaughan	48 hours	5 cm
Milton	24 hours	5 cm

- Service level is at, or above, the neighbouring municipalities
- Above Minimum Maintenance Standards

MMS for sidewalks: a depth of less than 8 cm of snow within 48 hours from the end of the snowfall, with no requirement to clear to bare pavement.

Thank you.

QUESTIONS?