

# **Walkways – Preliminary Report to Active Transportation and Sustainability Committee**

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Roads, Stormwater and Fleet



# Agenda

- Background
- Walkway Inventory
- Winter Maintenance
- Capital and Operating Costs
- Questions

# Background

**INVESTIGATION OF MAINTENANCE OF PEDESTRIAN WALKWAYS** That staff in the Operations Department investigate the current interconnected walkway system in the City to address resident safety and accessibility concerns, and the feasibility of facilitating both the summer and winter maintenance to increase pedestrian year-round access and report back to Accessibility Advisory Committee. (21-G-104)

Currently, the City does not provide winter maintenance to pedestrian walkways. The currently policy reads:

## **Council Policy - WALKWAY WINTER MAINTENANCE**

That in light of the high cost to provide winter maintenance services on pedestrian walkways, the limited resources available and the practical difficulties involved in undertaking the work, The City of Barrie will continue its practice to not provide winter maintenance services for pedestrian walkways.  
(98-G-72)

# Walkway Inventory

- 98 street to street walkways
- 20 street to school walkways
- 120 walkways leading to parks, green space, other private property, etc. Some of these walkways often do not have a paved receiving surface (ex. walkways leading into Ardagh bluffs green space).

# Walkway Access

- Walkways have not been designed/constructed with allowance for winter maintenance
- Most are narrow (2.7m) and have fixed bollards at either end with no street access for snow removal equipment



Measuring tape shows width of sidewalk plow

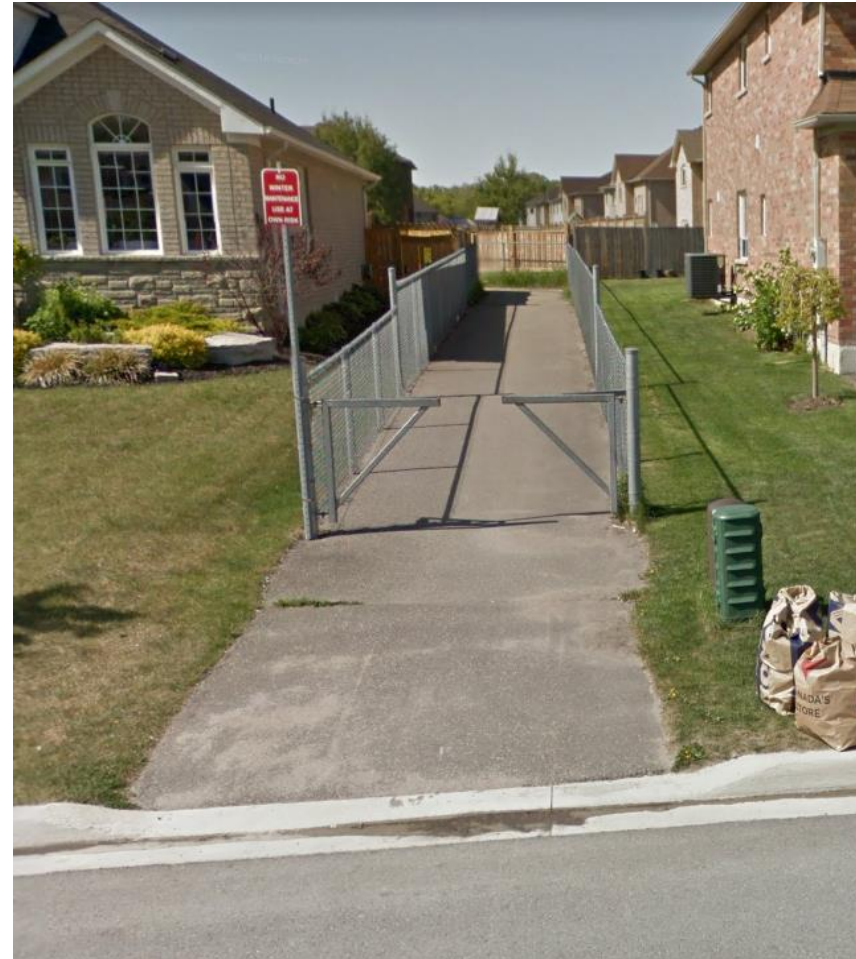


# Walkway Access

From this 



To this 



## Cost to Maintain All Street-to-Street Walkways in Winter

- Staff completed a high-level costing of requirements to maintain all street-to-street pedestrian walkways in the winter
- Estimates include costs for upgrading access and egress, along with on-going operations and maintenance

# All Street-to-Street Walkways - Preliminary Work Cost

- Upgrade access/egress to all walkways for winter maintenance

Preparation Work for 98 Street to Street Walkways			
Work Required	QTY	Unit Rate	Cost
Curb Cuts	95	\$ 1,000.00	\$ 95,000.00
Bollard Removal/Reinstate	84	\$ 500.00	\$ 42,000.00
Gate Installations	128	\$ 5,000.00	\$ 640,000.00
Replacement Signage	196	\$ 230.00	\$ 45,080.00
Apron Installation	196	\$ 1,000.00	\$ 196,000.00
No Parking Signs	270	\$ 230.00	\$ 62,100.00
			\$ 1,080,180.00

The unit prices do not include design, inspection, or contract management.



# All Street-to-Street Walkways – Additional Costs Requiring Further Investigation/Costing

- Additional costs to be determined
  - Community mailbox relocations (29)
  - Utility conflicts
  - Tree removals and pruning
  - Waste receptacle relocations
  - Project management (design, contract admin, inspection, etc.)
  - Work within walkways not yet identified
  - Overall budget for this phase of the project is likely to exceed \$1,000,000.

## All Street-to-Street Walkways – Operational Resources

- 8 Staff = \$617,000 + other staff costs
- Sweeping/Snow Clearing Equipment = \$800,000 to \$1,000,000 + operating cost for fuel and maintenance
- Trucks for hauling sweepings and water supply = \$400,000 + operating for fuel and maintenance
- Snow removal to create snow storage space (estimate \$100,000)
- Stand alone contracted snow plowing = \$600,000+ annually

# All Street-to-Street Walkways - High Level Total Cost Summary

<b>Capital Costs</b>	
Upgrades	\$1,000,000
Equipment	\$1,400,000
Utility Relocate/Other	\$1000,000
<b>Total Capital</b>	<b>3,400,000</b>

<b>Annual Operating</b>	
Staff Costs	\$617,000
Other Operating	\$65,000
Equipment Operating Costs	\$40,000
Additional Snow Removal	\$100,000
<b>Total Annual Operating</b>	<b>\$822,000</b>

# Snow Clearing Challenges

- Limited snow storage within narrow walkways
- Potential of damage to private fences and shrubs from snow loading
- Walkways are designed for pedestrian traffic, not heavy equipment. Over time, walkway surfaces will degrade and will require replacement.
- Many walkways already require surface replacement, however sufficient budget does not exist.
- Noise complaints

# Snow Clearing



**Adjacent private fence likely to be damaged by snow load. Also note leaves and debris from the prior Fall season.**



**Curb cut and bollard removal required. Snow storage will be an issue with immediately adjacent driveway.**



# Spring Cleanup and Summer Maintenance

- Sand placed during the winter will need to be collected and removed
- Included in the sand will be other debris (leaves, litter)
- Will require a sidewalk sweeper, mini-dump truck and staff
- Will need to increase trimming frequency to maintain full width for winter maintenance
- Currently, walkways are trimmed and cleaned once per year





# Spring & Summer Maintenance



# Thank you!

## QUESTIONS?