

Options to Enhance Current Service Delivery

ROADS

P1 Arterial roads **P2** Collector roads **P3** Industrial roads **P4** Residential roads

Expectations		Current State		Option R1			Option R2		
Priority	Hours	Hours	Days	Hours	Days	Increase	Hours	Days	Increase
P1	36	127	5.3	69	2.9	45.7%	36	1.5	71.1%
P2	48	112	4.6	72	3.0	35.7%	48	2.0	57.1%
P3	120	135	5.6	74	3.1	45.2%	38	1.6	71.6%
P4	215	250	10.4	136	5.7	45.6%	71	3.0	71.6%
		Base Budget \$38.6M		Estimated Cost \$65.7M (current state +\$27.1M)			Estimated Cost \$110.3M (current state +\$71.7M)		






ACTIVE PATHWAYS











P1 Inventory adjacent to City facilities, prioritized bike route network
P2 City maintained sidewalks, ramps, shared pathways, parking lots, all season staircases, access to bus stops adjacent to City property, pedestrian bridges
P3 Manually cleared active pathways, breezeways, benches, pedestrian only streets, community sandboxes

Expectations		Current State		Option AP1			Option AP2		
Priority	Hours	Hours	Days*	Hours	Days*	Increase	Hours	Days*	Increase
P1	24	22	1.1	6	0.3	72.2%	6	0.3	72.2%
P2	48	158	7.9	40	2.0	74.7%	40	2.0	74.7%
P3	120	405	20.3	216	10.8	46.7%	100	5.0	75.3%
		Base Budget \$18.5M		Estimated Cost \$33.6M (current state +\$15.1M)			Estimated Cost \$52.9M (current state +\$34.4M)		

**Crews work 20 hours per day, so the number of days to complete a service is divided by 20 hours instead of 24 hours.*


Options for New Service Enhancements

ROADS 	Operating cost estimates based on an average snow event.
BUY 6 DOUBLE-WIDE TRAILER SNOW PLOWS *initial capital expense of \$4.3M  <i>More efficient completion of arterial roads. Operations can be diverted to lower priority roads sooner.</i>	\$1.0M
BLADE RESIDENTIAL ROADS TO BARE PAVEMENT after every snow/ice event \$143.3M <i>Significant windrows can result in concerns (eg. safety, accessibility, visibility, drainage). Bare surfaces can become slippery with extreme cold.</i>	\$143.3M
CLEAR RESIDENTIAL WINDROWS BLOCKING DRIVEWAYS & CURB CUTS in conjunction with residential blading  <i>Clearing outside daytime hours to ensure timely service may result in increased noise complaints.</i>	\$3.0M
WINDROW PICK UP ON RESIDENTIAL STREETS up to 4 times per winter \$47.6M  <i>Vehicles would need to be moved more often. Additional snow piles in cul-de-sacs could raise concerns from residents.</i>	\$47.6M
INCREASE CUL-DE-SAC BLADING to align with residential street blading  <i>Vehicles would need to be moved more often. Additional snow piles in cul-de-sacs could raise concerns from residents.</i>	\$262.0M

ACTIVE PATHWAYS   	Operating cost estimates based on an average freezing rain event.
CLEAR ALL RESIDENTIAL SIDEWALKS within 48 hours of end of snow/ice event \$212.5M  <i>Residents may have concerns about quality, length of time, and use of salt. Clearing outside daytime hours to ensure timely service may result in increased noise complaints.</i>	\$212.5M
CLEAR PUBLIC SQUARES & INTERNAL PAVED PATHWAYS IN PARKS & PLAYGROUNDS within 48 hrs of snow/ice event \$4.3M  <i>Enhanced support for future winter events and recreation (improved public experience)</i>	\$4.3M
CLEAR AREAS AROUND INTERSECTIONS & ALLEY CROSSINGS up to 3 times per season \$56.6M  <i>Cleared areas may collect meltwater in pockets that could freeze and introduce a new safety hazard.</i>	\$56.6M
CLEAR CURRENTLY UNSERVICED BUS STOPS IN FRONT OF PRIVATE PROPERTY within 5 days of snow/ice event within 5 days of end of snow/ice event \$7.8M  <i>Clearing outside daytime hours to ensure timely service may result in increased noise complaints.</i>	\$7.8M
CLEAR SIDEWALKS ADJACENT TO BUS ROUTES IN FRONT OF PRIVATE PROPERTY within 48 hours of snow/ice event \$45.3M <i>Roadside windrows would increase because crews are not currently permitted to stack snow/ice on private property. Clearing outside daytime hours to ensure timely service may result in increased noise complaints.</i>	\$45.3M
INCREASE CURRENTLY MAINTAINED BUS STOP SERVICE from 5 days to 24 hours \$62.2M  <i>Clearing outside daytime hours to ensure timely service may result in increased noise complaints.</i>	\$62.2M
CLEAR SIDEWALKS FOR ALL SENIORS FACILITIES within 24 hrs of snow event \$2.1K  <i>Residents may have concerns about quality, length of time, and use of salt. The City would need to define the criteria of a senior facility to better determine the scope of this option.</i>	\$2.1K per facility
INCREASE SERVICE FOR ALL BIKE PAINTED & SHARED USE PATH BIKE LANES within 24 hrs of snow event \$2.0M <i>Clearing outside daytime hours to ensure timely service may result in increased noise complaints. Could create a hazardous ridge of ice between paths and adjacent road; safety concern for cyclists, vulnerable road users, and vehicles.</i>	\$2.0M
INCREASE CURRENT SIDEWALK INVENTORY SERVICE from 48 hours to 24 hours \$30.6M  <i>Clearing outside daytime hours to ensure timely service may result in increased noise complaints.</i>	\$30.6M
INCREASE PARKING LOT SANDING/PLOWING from 48 hours to 24 hours \$1.6M <i>Clearing outside daytime hours to ensure timely service may result in increased noise complaints.</i>	\$1.6M

Each operating cost is estimated as a stand-alone service, and will be re-evaluated as part of a programmed SNIC approach.  Safe Mobility Strategy 

Options for New Service Enhancements

ASSISTED SNOW PROGRAM 		Administration conducted a jurisdictional scan of Canadian cities that provide assisted SNIC programs to residents with limited mobility. These options require feedback from Council prior to further exploration and the development of a potential assisted SNIC program proposal.
PROGRAM TYPE	DESCRIPTION	EXAMPLES
Grant Programs	Municipalities manage a program that provides dedicated funding to groups or community organizations who provide SNIC assistance to residents. Groups must apply for funding annually, usually available on a first-come, first-served basis. Groups are expected to report on their activities as a condition of receiving funds.	<ul style="list-style-type: none"> Community Snow to Go pilot program (City of Edmonton, AB) Snow Angels Community grant program (City of Regina, SK)
Volunteer-based Programs	Municipalities coordinate volunteers to provide SNIC assistance to residents. These programs usually include a volunteer manager, volunteer and client recruitment, screening, and matching services. 2018 changes to the Alberta OH&S Act requires all volunteers to meet similar safety standards as employees which creates extra costs and limits what activities volunteers are permitted to do.	<ul style="list-style-type: none"> Operation Snow Shovel (City of Dundas, ON) Age-Friendly Snow Angels (Thunder Bay, ON)
Volunteer Recognition Program	Some volunteer programs are self-directed recognition programs. Cities recognize nominated residents who informally volunteer to help their neighbours.	<ul style="list-style-type: none"> Both Edmonton and Winnipeg previously offered such programs. Edmonton's Snow Angels program ended in 2018. Snow Angels program (Ottawa, ON)
Contracted, Social Enterprise-based and Referral Programs	These programs may be run by the municipality, in partnership with a third-party non-profit or social enterprise organization, or operated entirely by an organization not affiliated with the municipality. Agreements may be multi-year. Program features may include one or more of the following: <ul style="list-style-type: none"> Municipality provides funding for one or more contracted businesses or organization to develop an assistance program and/or provide shoveling services. Municipal funding could cover the full amount of the service for all residents who apply, or be provided as a subsidy for residents eligible for financial support. The municipality may offer referral services for residents with one or more pre-qualified contractors. 	<ul style="list-style-type: none"> YMCA Senior Snow Removal (partnership with Halifax, NS) Snow Go and Snow Go Assist (Ottawa, ON) Boyle Street Subsidy Program (2019-20, Edmonton, AB) CHATS Snow Removal Program (Vaughan, ON) Home Supports (Edmonton, AB)
Operational Programs	Assisted snow shoveling services are provided to residents in need directly through municipal operations. Residents must apply annually and qualify for these services.	<ul style="list-style-type: none"> City of Toronto City of Winnipeg
Alternatives to Programs with Municipal Involvement	Informal volunteer networks and groups that connect and exchange opportunities via social media and apps. Marketplace-type platforms that connect residents in need of snow clearing with residents who are willing to provide those services in exchange for a fee. This service is not necessarily exclusive to residents who have difficulty shoveling their walkways.	<ul style="list-style-type: none"> Winnipeg Snow Angels Facebook group Nextdoor app (multiple cities) On the Step on demand snow removal (Winnipeg and Brandon, MB, Regina, SK, and Sudbury, ON)