

THIS MEETING WILL BE WEBCAST ON THE [CITY'S PUBLIC YOUTUBE SITE](#) (CITYWATERLOO) AND MAY BE TELECAST ON PUBLIC TELEVISION



THE CITY OF
Waterloo
COUNCIL MEETING AGENDA
Monday, May 29, 2023
2:00 PM

Mayor McCabe in the Chair

1. **DISCLOSURE OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF**
2. **CLOSED MEETING**

Recommendation:

That Council hold a closed meeting for the purposes of considering the following subject matter:

- a) advice that is subject to solicitor-client privilege, including communications necessary for that purpose (licence agreement);
- b) a matter in respect of which a council, board, committee or other body may hold a closed meeting under another Act (licence agreement);
- c) a trade secret or scientific, technical, commercial, financial or labour relations information, supplied in confidence to the municipality or local board, which, if disclosed, could reasonably be expected to prejudice significantly the competitive position or interfere significantly with the contractual or other negotiations of a person, group of persons, or organization (licence agreement); and,
- d) a position, plan, procedure, criteria or instruction to be applied to any negotiations carried on or to be carried on by or on behalf of the municipality or local board (licence agreement).

COUNCIL MEETING WILL RECESS AND RECONVENE AT 3:00 PM

3. TERRITORIAL ACKNOWLEDGEMENT
4. MOMENT OF REFLECTION
5. DISCLOSURE OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF
6. APPROVAL OF MINUTES

That the previous meeting minutes be approved.

a) **April 24, 2023 – Council Meeting**

Page 5

Recommendation:

That the minutes of the Council meeting held on April 24, 2023 be approved as printed.

7. STAFF REPORTS

a) **Title: City of Waterloo Comprehensive Engineering and Landscape Manual (CELM)**

Page 16

Report No.: IPPW: 2023-018

Prepared By: Kyle Bossie, Emily Brown, Daniella Giovanatto, Jeremy MacCulloch, Michael Stewart

Presentation: Kyle Bossie

Recommendations:

1. That Council approve Staff Report IPPW2023-018
2. That Council approve and authorize staff to publish the CELM as an Integrated Planning and Public Works document.
3. Periodic updates to the CELM made to the satisfaction of the City's Director of Engineering
4. That Council approve the transition of the CELM to a Hyper Text Markup Language (HTML) document on the City of Waterloo's website exclusive of Standard Details.

- b) **Title:** [Laurel Greenway Master Plan](#) **Page 21**
Report No.: IPPW2023-025
Prepared By: Emily Brown

Presentation: Michael Barker, SHIFT Landscape Architecture

Recommendations:

1. That Council approve Staff Report IPPW2023-025.
2. That Council approve the Laurel Greenway Master Plan.

- c) **Title:** [Expanded After Hours Call Centre Recommended Solutions](#) **Page 28**
Report No.: IPPW2023-026
Prepared By: Leslie Hepditch

Recommendations:

1. That Council approve report IPPW2023-026.
2. That Council approve the release of 2023 non-routine funding for the External Call Centre Support project, in the amount of \$100,000, from the 2023 Approved Capital Budget (Ref#281).
3. That Council direct staff to include the Expanded After Hours Call Centre implementation project in the 2024-2026 capital budget, subject to Council approval as part of the capital budget deliberation process.

8. WORKSHOP

- a) **Title:** [Winter Sidewalk Maintenance Review and Potential Service Enhancements Workshop](#) **Page 36**
Report No.: IPPW2023-000
Prepared By: Bob Henderson, Robin Milne, Nicole Papke, Cari Van Niekerk

Introduction: Bob Henderson
Facilitated Workshop: Nicole Papke and Cari Van Niekerk

Recommendation:

1. That Council receives IPPW2023-000 as information and as supporting background for the May 29, 2023 workshop.

9. CONSIDERATION OF NOTICE OF MOTION GIVEN AT PREVIOUS MEETING

None

10. NOTICE OF MOTION

None

11. COMMUNICATIONS AND CORRESPONDENCE

None

12. UNFINISHED BUSINESS

None

13. QUESTIONS

14. NEW BUSINESS

15. ENACTMENT OF BY-LAWS

That the By-laws listed below be read a first, second and third time and finally passed, numbered sequentially commencing with By-law Number 2023-035 and that the Mayor and Clerk be authorized to sign them accordingly.

- a) By-law to confirm all actions and proceedings of Council,
May 29, 2023

16. ADJOURNMENT



A meeting of the Council of The Corporation of the City of Waterloo was held electronically on April 24, 2023 at 2:04 p.m. in the Council Chambers, 100 Regina Street, South, Waterloo, Ontario and streamed live via YouTube.



COUNCIL MEETING MINUTES -

DRAFT

Monday, April 24, 2023

2:04 PM

PRESENT: Mayor Dorothy McCabe, Councillor Sandra Hanmer, Councillor Royce Bodaly, Councillor Hans Roach, Councillor Jen Vasic, Councillor Mary Lou Roe, Councillor Julie Wright

ABSENT: Councillor Diane Freeman

Mayor McCabe in the Chair

1. TERRITORIAL ACKNOWLEDGEMENT

Mayor McCabe opened the meeting with the following Territorial Acknowledgement:

We would like to begin by acknowledging that the land on which we are gathering from today is the land traditionally cared for by the Haudenosaunee, Anishnaabe and Neutral People. We also acknowledge the enduring presence and deep traditional knowledge and philosophies of the Indigenous People with whom we share their land today.

2. MOMENT OF REFLECTION

Mayor McCabe provided Council with moments of reflection.

At the beginning of this Council meeting, we pause to think about the needs of our community. May we show wisdom and compassion in all our decisions.

- a) Eid Mubarak to all who celebrate! On April 21, Muslims around the world came together to celebrate Eid al Fitr, marking the end of the holy month of Ramadan.

Members of the local Muslim community came together in a City of Waterloo space to celebrate Eid al Fitr on April 21. We look forward to

continuing this tradition with our Muslim colleagues, family, friends, and neighbours.

- b)** The first week of May has been recognized as mental health week for more than 70 years. The Canadian Mental Health Association has led these efforts to bring awareness to mental health, challenge societal beliefs and reduce stigma.

We each feel the effects of mental health differently. Together we are learning more about how the many aspects of our identity, including race, ability, class and age, have an impact on our experiences and therefore our mental health. Historical and ongoing impacts of oppression and trauma have a significant cumulative effect on mental health and wellbeing. We must ensure that supports and treatment that take into account the different aspects of identity and acknowledge the harmful effects of discrimination and inequities.

While there is still much work to be done, it is important to acknowledge the work of the many people in our community who work hard to provide compassionate, culturally relevant and trauma-informed mental health services. Today we acknowledge Camino Wellbeing and Mental Health, a newly formed organization that unites existing services to better serve our community.

As Mental Health Week approaches, let's commit to creating a community that prioritizes good mental health for all by stamping out all forms of oppression and ensuring that people have access to the supports and services they need.

3. DISCLOSURE OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF

Mayor McCabe declared a conflict with respect to item 5e) due to a conflict of interest as it relates to place of residence.

4. APPROVAL OF MINUTES

That the previous meeting minutes be approved.

a) March 27, 2023 – Council Meeting

Moved by Councillor Wright, Seconded by Councillor Roach:

That the minutes of the Council meeting held on March 27, 2023 be approved as printed.

Carried Unanimously

5. CONSENT MOTION

Mayor McCabe requested that item 5e) 2023 GIIHA Special Service Levy be removed from the consent motion.

That consent motion items (a) through (d) be approved.

- a) Title: Bylaw to Authorize the Borrowing for Temporary Loans**
Report No.: CORP2023-015
Prepared By: Mary Zubert

Moved by Councillor Hanmer, Seconded by Councillor Roe:

1. That Council approve CORP2023-015.
2. That Council approves the borrowing for temporary loans, if required, not to exceed an aggregate of \$97,540,637 to meet the current expenditures for 2023.
3. That Council adopt the By-law attached as Appendix A to this report for the establishment of borrowing limits.
4. That Council directs staff to report back on amount and terms subsequent to any temporary borrowing required.

Carried Unanimously

- b) Title: 2023 BIIHA Special Service Levy**
Report No.: CORP2023-008
Prepared By: Mary Zubert

Moved by Councillor Hanmer, Seconded by Councillor Roe:

1. That Council approve CORP2023-008.
2. That Council approve the Beechwood II Homes Association ("BIIHA") 2023 municipal budgeted levy of \$89,462 to fund the operating and capital costs of the BIIHA recreation facility and programs; and,
3. That Council adopt the By-law attached as Appendix A to this report for the imposition of a Special Services Levy on the rateable properties prescribed therein.

Carried Unanimously

- c) Title: 2023 BSHA Special Service Levy**
Report No.: CORP2023-021
Prepared By: Mary Zubert

Moved by Councillor Hanmer, Seconded by Councillor Roe:

1. That Council approve CORP2023-21.
2. That Council approve the Beechwood South Homes Association (“BSHA”) 2023 municipal budgeted levy of \$114,950 to fund the operating and capital costs of the BSHA recreation facility and programs; and,
3. That Council adopt the By-law attached as Appendix A to this report for the imposition of a Special Services Levy on the rateable properties prescribed therein.

Carried Unanimously

- d) Title: 2023 BWIHA Special Service Levy**
Report No.: CORP2023-016
Prepared By: Mary Zubert

Moved by Councillor Hanmer, Seconded by Councillor Roe:

1. That Council approve CORP2023-16.
2. That Council approve the Beechwood West #1 Homes Association (“BWIHA”) 2023 municipal budgeted levy of \$116,375 to fund the operating and capital costs of the BWIHA recreation facility and programs; and,
3. That Council adopt the By-law attached as Appendix A to this report for the imposition of a Special Services Levy on the rateable properties prescribed therein.

Carried Unanimously

6. ITEMS REMOVED FROM THE CONSENT MOTION

Mayor McCabe left the Chair.
Councillor Roach in the Chair.

(Time: 2:09 p.m.)
(Time: 2:09 p.m.)

Having previously declared a conflict of interest, Mayor McCabe left the meeting.
(Time: 2:09 p.m.)

- a) **Title:** **2023 GIIHA Special Service Levy**
 Report No.: CORP2023-010
 Prepared By: Mary Zubert

Moved by Councillor Wright, Seconded by Councillor Roe:

1. That Council approve Staff Report CORP2023-010.
2. That Council approve the Glasgow II Homes Association (“GIIHA”) 2023 municipal budgeted levy of \$24,000 to fund the operating and capital costs of the GIIHA recreation facility and programs; and,
3. That Council adopt the By-law attached as Appendix A to this report for the imposition of a Special Services Levy on the rateable properties prescribed therein.

Carried Unanimously

Mayor McCabe having previously declared a pecuniary interest was absent for the taking of the vote.

Mayor McCabe joined the meeting. (Time: 2:11 p.m.)

Councillor Roach left the Chair. (Time: 2:11 p.m.)
Mayor McCabe in the Chair. (Time: 2:11 p.m.)

7. STAFF REPORTS

- a) **Title:** **2020 Community Greenhouse Gas Inventory**
 Report No.: CAO2023-016
 Prepared By: Ena Ristic

Ena Ristic introduced the report and Kyra Chrisholm.

Kyra Chrisholm, Plan Manager, ClimateActionWR gave a presentation showcasing the progress on lowering Greenhouse Gas emissions from 2010 until 2020. She explained the key takeaways from the report, and that there was still progress to be made. She then responded to questions of Council. Ena Ristic also responded to questions of Council. Mary Jane Patterson, Executive Director, Reep Green Solutions and Tova Davidson, Executive Director, Sustainable Waterloo Region also responded to questions of Council.

Moved by Councillor Bodaly, Seconded by Councillor Hanmer:

1. That Council receives CAO 2023-016 summarizing the 2020 Region of Waterloo greenhouse gas inventory as information.

Carried Unanimously

- b) Title: 2023 Sustainability and Climate Change Update Report**
Report No.: CAO2023-013
Prepared By: Ena Ristic

Ena Ristic gave a presentation updating Council on the mitigation and adaptation plans of the corporation and the community. She also highlighted some of the ways the corporation and community were working toward reducing the impacts of climate change. She then responded to questions of Council. Sandy Little, Mark Dykstra, and Ron Ormson also responded to questions of Council.

Moved by Councillor Roe, Seconded by Councillor Vasic:

1. That staff report CAO2023-013 be approved.
2. That Council reaffirms the 2019 climate emergency attached as Appendix D.
3. That staff report back annually on our progress towards our corporate and community greenhouse gas reduction targets.

Carried Unanimously

- c) Title: Harmonized Green Development Standards (GDS): Phase 2, Project Launch**
Report No.: IPPW2023-020
Prepared By: Max Kerrigan

Max Kerrigan introduced the report and Matthew Day.

Matthew Day, WR Community Energy gave a presentation explaining the priority projects of WR Community Energy, with a focus on Green Development Standards. He explained what they've learned so far, and what's next. He then responded to questions of Council. Max Kerrigan and Joel Cotter also responded to questions of Council.

Councillor Bodaly left the meeting.

(Time: 3:22 p.m.)

Councillor Bodaly joined the meeting.

(Time: 3:24 p.m.)

Moved by Councillor Hanmer, Seconded by Councillor Bodaly:

1. That staff report IPPW2023-20, 'Harmonized Green Development Standards (GDS): Phase 2, Project Launch, WR Community Energy', be received for information.

Carried Unanimously

d) Title: 2023 General Tax Levy
Report No.: CORP2023-017
Prepared By: Mary Zubert

Moved by Councillor Vasic, Seconded by Councillor Roach:

1. That Council approve CORP2023-017.
2. That Council adopt the 2023 General Levy By-law attached as Appendix A to this report based on a final municipal levy of \$92,656,663

Carried Unanimously

e) Title: 2023 Business Improvement Area Levy
Report No.: CORP2023-011
Prepared By: Mary Zubert

Paul Hettinga responded to questions of Council.

Moved by Councillor Wright, Seconded by Councillor Vasic:

1. That Council approve Staff Report CORP2023-011.
2. That Council adopt the By-Law attached as Appendix A to this report for imposition of a Special Levy on the rateable properties prescribed within the Uptown Waterloo BIA Area Map Schedule A.
3. That Council approve the Uptown Waterloo BIA 2023 levy of \$709,879 to fund the operating and capital costs of the Board of Management for Uptown Waterloo Business Improvement Area.

Carried Unanimously

f) Title: 2022 Tax Adjustments
Report No.: CORP2023-020
Prepared By: Mary Zubert

Moved by Councillor Bodaly, Seconded by Councillor Roach:

1. That Council receive CORP2023-020 as information.

Carried Unanimously

- g) Title: University Avenue Gateway
Implementation: Authorization for
Signature of Agreements**
Report No.: IPPW2023-023
Prepared By: Ric Martins

Moved by Councillor Roe, Seconded by Councillor Vasic:

1. That report IPPW2023-023 be approved.
2. That the Mayor and Clerk be authorized to sign a contribution agreement between The Corporation of the City of Waterloo and Wilfrid Laurier University for Laurier's new outdoor public gathering and performance space adjacent to University Avenue West as approved in IPPW2022-026, subject to the form and content of the agreement being satisfactory to the City Solicitor.
3. That the Mayor and Clerk be authorized to sign future agreement(s) between the City of Waterloo and the Region of Waterloo to implement enhanced streetscape features and elements contemplated by the University Avenue Gateway Strategy, subject to available funding as released by Council and the form and content of the agreement(s) being satisfactory to the City Solicitor and the Commissioner of Integrated Planning and Public Works.

Carried Unanimously

8. NOTICE OF MOTION

Mayor McCabe left the Chair.
Councillor Roach in the Chair.

(Time: 3:37 p.m.)
(Time: 3:37 p.m.)

- a) Mayor McCabe – Bill 5 Stopping Harassment and Abuse by Local Leaders**

Moved by Councillor Vasic, seconded by Councillor Hanmer:

Request to waive Notice of Motion to consider the following at the April 24, 2023 Meeting of Council.

Carried Unanimously

Moved by Mayor McCabe, seconded by Councillor Vasic:

WHEREAS the Province undertook consultations in 2021 to obtain feedback on how to strengthen municipal codes of conduct; and,

WHEREAS the Associate Minister of Children and Women's Issues at the time was quoted as stating "Our government has been absolutely clear that we will not tolerate workplace harassment or discrimination of any kind"; and,

WHEREAS we were pleased to see the introduction of Bill 260 first in 2021 and then the introduction of Bill 5 – Stopping Harassment and Abuse by Local Leaders Act, 2022 in the Ontario Legislature by MPP Stephen Blais through a Private Members' Bill on August 10, 2022; and,

WHEREAS THE City of Waterloo is committed to providing a workplace free of harassment and discrimination and regularly reviews and reaffirms commitment to corporate policies relating to respectful behaviour, workplace violence, health and safety and is currently updating the Council Code of Conduct; and,

WHEREAS the Respectful Workplace Policy H-002 states the "City of Waterloo is committed to providing and maintaining a psychologically safe workplace that is respectful, inclusive, and where all individuals are valued. The City will not tolerate disrespectful workplace behaviour(s), workplace harassment, including sexual harassment, and/or discrimination from any person in a City workplace."

NOW THEREFORE BE IT RESOLVED THAT the City of Waterloo endorses Bill 5 – Stopping Harassment and Abuse by Local Leaders Act, 2022 which would require the Code of Conduct for municipal Councillors and members of local boards to include a requirement to comply with workplace violence and harassment policies and permit municipalities to direct the Integrity Commissioner to apply to the court to vacate a member's seat if the Commissioner's Inquiry determines that the member has contravened this requirement; and,

THAT the Council of the Corporation of the City of Waterloo expresses its support for Bill 5 and request the Government of Ontario to approve this legislation as soon as operationally practical and that a copy of this motion be sent to the Premier of Ontario, the Ontario Minister of Municipal Affairs and Housing, the Association of Municipalities of Ontario, local and area Members of Parliament and Members of Provincial Parliament.

Carried Unanimously

Councillor Roach left the Chair.
Mayor McCabe in the Chair.

(Time: 3:42 p.m.)
(Time: 3:42 p.m.)

9. NEW BUSINESS

Councillor Vasic mentioned that some of the litter cleanups in the City had been postponed: the University Downs Neighbourhood, and the neighbours who lived in the Hillside Area.

Councillor Wright mentioned that NoSUP had planned a litter cleanup of Brighton Park which had also been postponed. She also spoke about the GroundUp WR Community Bike Ride with Councillor Vasic, which had taken place on April 23, 2023.

Councillor Roe commended the volunteers for their work on the Earth Day cleanup Waterloo Park on the weekend of. She also gave a shout-out to the St. David's Catholic Secondary School robotics team for making it to the FIRST Robotics Competition World Championship in Houston, Texas.

Councillor Wright also shared that the Kitchener Waterloo Girls Basketball Association Phoenix U13 team won their division title.

10. ENACTMENT OF BY-LAWS

Moved by Councillor Roe, Seconded by Councillor Hanmer:

That the By-laws listed below be read a first, second and third time and finally passed, numbered sequentially commencing with By-law Number 2023-024 and that the Mayor and Clerk be authorized to sign them accordingly.

- a) By-law 2023-024 By-law to Levy a Special Local Municipality Levy on the Rateable Property in the Beechwood II Homes Association Area for the Taxation Year 2023 (CORP2023-008, Council April 24, 2023)
- b) By-law 2023-025 By-law to Levy a Special Local Municipal Levy on the Rateable Property in the Beechwood South Homes Association Area for the Taxation Year 2023 (CORP2023-021, Council April 24, 2023)
- c) By-law 2023-026 By-law to Determine how the BIA Collects Levies from Properties Within its Boundaries (CORP2023-011, Council April 24, 2023)

- d) By-law 2023-027 By-law to Levy a Special Local Municipal Levy on the Rateable Property in the Beechwood West #1 Homes Association Area for the Taxation Year 2023 (CORP2023-016, Council April 24, 2023)
- e) By-law 2023-028 By-law to Provide for the 2023 General Tax Levy and for the Payment of 2023 Property Taxes (CORP2023-017, Council April 24, 2023)
- f) By-law 2023-029 By-law to Levy a Special Local Municipality Levy on the Rateable Property in the Glasgow II Homes Association Area for the Taxation Year 2023 (CORP2023-010, Council April 24, 2023)
- g) By-law 2023-030 By-law to Authorize the Borrowing for Temporary Loans (CORP2023-015, Council April 24, 2023)
- h) By-law 2023-031 By-law to Establish a Climate Action Reserve Fund (CORP2022-049, Council December 12, 2022)
- i) By-law 2023-032 By-law to confirm all actions and proceedings of Council, April 24, 2023

Carried Unanimously

11. ADJOURNMENT

Moved by Councillor Bodaly, Seconded by Councillor Vasic:

That the meeting adjourn.

(Time: 3:47 p.m.)

Carried Unanimously

READ AND APPROVED, May 29, 2023

Mayor

City Clerk



**STAFF REPORT
Engineering Services**

Title: City of Waterloo Comprehensive Engineering and Landscape Manual
Report Number: IPPW 2023-018
Author: Kyle Bossie, Emily Brown, Daniella Giovanatto, Jeremy MacCulloch, Michael Stewart
Council Date: May 29, 2023
File: [File]
Attachments: City of Waterloo Comprehensive Engineering and Landscape Manual (CELM)
Ward No.: 1,2,3,4,5,6,7

Recommendations:

1. That Council approve Staff Report IPPW2023-018.
2. That Council approve and authorize staff to publish the CELM as an Integrated Planning and Public Works policy document.
3. That periodic updates to the CELM be made to the satisfaction of the City's Director of Engineering.
4. That Council approve the transition of the CELM to a Hyper Text Markup Language (HTML) document on the City of Waterloo's website exclusive of Standard Details.

A. Executive Summary

The engineering and construction industry is rapidly evolving. The *Development Engineering Manual (2013)* needed an update to reflect changes in provincial legislation and municipal standards. In order to create a more robust document, capital project standards and the *Landscape Design Process and Requirement Manual for New Subdivision (2008)* were consolidated to form the City of Waterloo Comprehensive Engineering and Landscape Manual ([CELM](#)). The CELM combines the City's Engineering and Landscape design guidelines and standards into the single document. Periodic updates will be completed by the CELM Steering Committee. The manual was prepared entirely by City staff in consultation with industry professionals. It is intended for use by those involved in the engineering, landscape

architecture, and construction industry including land developers, design professionals, contractors and City staff. It will also enable members of the public to have an easy electronic access to the City's engineering and landscape standards. Periodic updates to the manual are proposed to keep the information current and to address further comments as they arise.

The manual will be adapted and converted into HTML format. The CELM Steering Committee will establish a protocol for which updates can be tracked and incorporated to keep the CELM up to date and accessible.

With Council approval, the CELM will be released for use by City staff, industry partners, agencies and interested members of the community.

B. Financial Implications

There are no financial implications with this report.

C. Technology Implications

There are no technological implications with this report.

D. Link to Strategic Plan

(Strategic Objectives: Equity, Inclusion and a Sense of Belonging; Sustainability and the Environment; Safe, Sustainable Transportation; Healthy Community & Resilient Neighbourhoods; Infrastructure Renewal; Economic Growth & Development)

(Guiding Principles: Equity and Inclusion; Sustainability; Fiscal Responsibility; Healthy and Safe Workplace; Effective Engagement; Personal Leadership; Service Excellence)

This report is linked to Safe, Sustainable Transportation and Infrastructure Renewal Objectives in the Strategic Plan and follows the Sustainability and Service Excellence Guiding Principles.

E. Previous Reports on this Topic

IPPW2013-056: Development Engineering Manual



City of Waterloo Comprehensive Engineering and Landscape Manual IPPW 2023-018

Background

The engineering and construction industry is rapidly evolving. The *Development Engineering Manual (2013)* needed an update to reflect changes in provincial legislation and municipal standards. The CELM provides key standards, policies and procedures associated with land development, municipal engineering and landscape architecture. It is intended to be a reference document that details the City's expectation and assist the industry in providing consistent, effective, and high quality technical submissions. Staff are hopeful that it will result in a streamlined review process, fewer resubmissions, and quicker approvals contributing positively to the economic growth of the City.

Industry Consultation

The manual was prepared entirely by City staff in consultation with industry professionals. It is intended for use by those involved in the engineering, landscape architecture and construction industry including land developers, design professionals, contractors, and City staff. It will also enable members of the public to have an easy electronic access to the City's engineering and landscape standards.

The draft CELM was distributed to the following industry associations:

- Professional Engineers of Ontario (PEO local chapter)
- Association of Consulting Engineering Companies of Ontario (ACEC local chapter)
- Ontario Association of Landscape Architects (OALA local chapter)
- Waterloo Region Home Builders Association (WRHBA)
- Conestoga Heavy Construction Association

Review of the manual was also completed by staff from the following City divisions:

- Engineering Services
- Planning
- Transportation Services
- City Utilities
- Parks, Forestry, and Cemetery Services

Periodic updates to the manual are proposed to keep the information current and to address further comments as they arise.

CELM Steering Committee

The CELM Steering Committee was formed to collaboratively address engineering and landscape architecture standards for site plan, subdivision, and capital projects. The purpose of the CELM Steering Committee is to have the responsibility to determine and coordinate any and all updates to the CELM, as required. Final recommendation for all updates to the manual will be issued by the Steering Committee to the satisfaction of the City's Director of Engineering Services.

The current CELM Steering Committee members are:

- Kyle Bossie, P.Eng., PMP, Manager, Engineering Infrastructure
- Emily Brown, OALA, CSLA, Senior Landscape Architect / Public Realm Specialist, Development Engineering
- Daniella Giovanatto, OALA, CSLA, ISA Certified Arborist®, Senior Landscape Architect, Development Engineering
- Jeremy MacCulloch, C.E.T., Engineering Technologist, Development Engineering
- Michael Stewart, P.Eng., Senior Project Engineer, Development Engineering

Document Structure

The CELM can be seen here: [CELM](#). The manual is divided into the following Volumes:

- Volume 1 – Introduction
 - Outlines the purpose and background of the manual and outlines the format of the document and acknowledges those who have provided input.
- Volume 2 – Process
 - Provides an overview of the procedural requirements for Site Plan, Subdivision, and Capital projects in the City of Waterloo.
- Volume 3 – Drawing and Report Requirements
 - Provides the City's expectations for drawings and reports to ensure a level of consistency across submissions to the City.
- Volume 4 – Transportation
 - General requirements for transportation projects including the design and implementation of roads, trails, pathways, sidewalks, and other transportation elements.
- Volume 5 – Underground Servicing, Grading, and Utilities
 - General requirements for design of engineering infrastructure including watermains, sanitary, storm, and grading.
- Volume 6 – Stormwater Management
 - General requirements for design of stormwater management facilities to mitigate the impacts of development to protect the downstream watershed ecosystems and minimize localized flooding.
- Volume 7 – Landscape Architecture
 - General requirements for the design and implementation of site plan landscape works and new subdivision parks and open spaces.

- Standard Drawings
 - Provides City standard detail drawings for roads, servicing, lot grading, accesses, pathways, trails, gates, signage, tree protection, planting, parks, site furniture, and construction.

The CELM is structured by volume, allowing for future expansion and flexibility in the manual's organization. All standard drawings are consolidated into one volume, making it easy for users to access and locate the necessary information. Furthermore, the new manual provides a centralized repository for city departments to update their respective design guidelines and standards, creating a cohesive and consistent approach.

Adaptation of Manual to HTML format

In order to ensure the CELM is as accessible as possible, the Steering Committee will work with the City's Communications team to convert the CELM, historically a PDF/paper-based document, into an online HTML document on the City's website. This will allow the CELM to be user friendly and easily integrated into existing City online infrastructure and integrate hyperlinks across the City's website. The CELM will be in both PDF and HTML format, as the conversion into HTML will not be completed until the final quarter of 2023. Future updates will be in HTML version only.



**STAFF REPORT
Engineering Services**

Title: Laurel Greenway Master Plan
Report Number: IPPW2023-025
Author: Emily Brown, Public Realm Specialist
Council Date: May 29, 2023
File: [File]
Attachments: Laurel Greenway Master Plan
Ward No.: 7 - Uptown

Recommendations:

1. That Council approve Staff Report IPPW2023-025.
2. That Council approve the Laurel Greenway Master Plan.

A. Executive Summary

The Laurel Greenway was identified through the Council-approved Uptown Public Realm Strategy (UPRS) as a priority initiative. In 2020, SHIFT Landscape Architecture was retained by the City of Waterloo to complete a feasibility study and develop the Laurel Greenway Master Plan. While the idea of the Laurel Greenway was previously endorsed, further input and feedback specific to the project was valuable in guiding the process and direction of the Master Plan.

The Laurel Greenway Master Plan ([LGW MP](#)) is a dynamic, long-term guide for future expansion and improvement of the Laurel Greenway, a nearly two kilometre long linear park, running through Uptown Waterloo from Waterloo Park to Weber Street. In anticipation of increased density in Uptown Waterloo, the Laurel Greenway will become a destination that offers valuable parkland and amenities to provide a continuous, playful, and immersive public space for all to access and enjoy.

B. Financial Implications

There are no financial implications with the approval of this report. Projects and initiatives that are identified and recommended as a result of this study, and have a budget impact, will be subject to further approval, as required.

C. Technology Implications

There are no technology implications with this report.

D. Link to Strategic Plan

(Strategic Objectives: Equity, Inclusion and a Sense of Belonging; Sustainability and the Environment; Safe, Sustainable Transportation; Healthy Community & Resilient Neighbourhoods; Infrastructure Renewal; Economic Growth & Development)

(Guiding Principles: Equity and Inclusion; Sustainability; Fiscal Responsibility; Healthy and Safe Workplace; Effective Engagement; Personal Leadership; Service Excellence)

This report is linked to Safe, Sustainable Transportation, Healthy Community & Resilient Neighbourhoods, and Infrastructure Renewal Objectives in the Strategic Plan.

E. Previous Reports on this Topic

IPPW 2022-021 – Waterloo Public Square Improvements

IPPW 2019-054 – Uptown Public Realm Strategy Implementation

IPPW 2019-014 – Uptown Public Realm Strategy: Final Report

IPPW 2018-018 – Waterloo Uptown Public Realm Strategy: Background Report



Laurel Greenway Master Plan IPPW2023-025

Background and Project Process

On March 4, 2019, Council approved the Uptown Public Realm Strategy Report (IPPW 2019-014), to guide future public realm improvements in Uptown Waterloo. To help establish a starting point for implementation, the Strategy identified three priority initiatives that brought together many of the action items identified. These priority initiatives envision the following:

- The Laurel Greenway
- Civic Common
- Willis Way

The Uptown Public Realm Strategy (UPRS) Implementation Project was approved by Council through report IPPW2019-054, which also approved the Laurel Greenway project to commence. SHIFT Landscape Architecture was retained in 2020 to complete the Laurel Greenway Feasibility Study to assess and determine the project's viability.

The Laurel Greenway project started as a feasibility study to assess opportunities and constraints over short, medium, and long term scopes. The project was divided into two phases, Phase One – Problem/Opportunity and Phase Two – Alternative Solutions. Once the feasibility study confirmed the project's viability, the study transitioned into the Laurel Greenway Master Plan ([LGW MP](#)).

The Master Plan is a dynamic, long-term guide for future expansion and improvements of the Laurel Greenway. The Master Plan brought forward a program that is flexible, innovative, in the public interest, built on partnerships, and can be phased over time.

The Master Plan report generally includes:

- Background information
- Project overview, existing conditions, and context
- Master Plan goals, vision, and design elements
- Review of planning tools to facilitate the Greenway project objectives
- Implementation and phasing plans, including catalyst projects
- A project list with descriptions and approximate costs for short-term projects
- Recommendations for next steps forward

Vision for the Laurel Greenway

Responding to the direction of the 2019 Uptown Public Realm Strategy, the Laurel Greenway Master Plan outlines an exciting vision, concept, and approach to establish and create the Laurel Greenway (the Greenway). The Greenway as a nearly two kilometre long linear park running through Uptown Waterloo, from Waterloo Park to Weber Street. The space generally follows the existing Laurel Trail, incorporating existing open space and the path of Laurel Creek.

The concept focuses on creating a continuous Greenway experience and connecting a series of spaces that provide amenities, enhance natural features, and improve function. This Master Plan defines key spaces and establishes a holistic public space that enhance the experience along the entire Laurel Greenway. Design elements are focused on the trail, wayfinding, active transportation, connections, and public gathering spaces throughout.

As a large and complex area of land use, the Laurel Greenway Master Plan considers planning policy as a strategy for implementation. The Plan explores this and looks at how existing and proposed planning tools can be used to achieve the vision over time. Implementation approaches are also provided that explore where, when and why improvements may happen during the development of the Laurel Greenway.

Ultimately, the Laurel Greenway Master Plan sets out an ambitious way forward for this critical piece of the City's public realm. In anticipation of the increased density planned for Uptown Waterloo, the Laurel Greenway will become a destination that offers valuable parkland to provide a continuous, playful, and immersive public space for all to access and enjoy.

Outreach and Engagement with Interested and Affected Parties

Outreach and engagement were critical pieces of the Laurel Greenway Master Plan process from the beginning of the project, building on previous engagement that came from the UPRS. Input from individuals, organizations and groups (listed below) informed design and planning decisions to support a more complete user experience and understanding of what is needed from the public realm.

- General Public
- Neighbourhood Associations
- Region of Waterloo
- Grand River Transit
- City of Waterloo (representatives from various divisions including Engineering Services, Parks Forestry & Cemetery Services, Active Transportation, Facility Design & Management Services, and Arts & Culture teams)
- Uptown Vision Committee
- Grand River Conservation Authority
- Uptown BIA

Engagement required dialog with interested and affected groups and individuals, formal consultation sessions, and engagement periods throughout the course of the Laurel Greenway Master Plan process. SHIFT Landscape Architecture, in coordination with the City of Waterloo, hosted all sessions.

The project has, at the time of writing, taken place entirely during the COVID-19 pandemic. Some in-person meetings were held with specific groups, but Public Information Centres (PICs) were hosted online through the Engage Waterloo platform, while other consultation was completed through requests for comment at various stages and video calls. The Laurel Greenway Master Plan engagement timeline is outlined below:

- September 2020 – Kick-off site review with city staff
- October 2020 – Uptown Vision Committee site walk
- December 2020 – Region of Waterloo Active Transportation meetings
- January 2021 – Public Information Centre #1 (virtual, narrated video, survey, mapping tool, comment/idea boards)
- April-October 2021 – ongoing work with city staff in various departments (AT, parks, engineering services, A&C)
- June-October 2021 – Region of Waterloo Review
- June 2021 – GRCA Review
- October-November 2021 – Public Information Centre #2 (virtual, narrated video, survey, mapping tool, comment/idea boards)
- 2022 – Finalize the Master Plan

Further detail on outreach and engagement can be found in the Laurel Greenway Master Plan Report. While the idea of the Laurel Greenway was previously endorsed as part of the 2019 UPRS, further input and feedback specific to the project scope was valuable in guiding the process and direction of the Master Plan. Based on public support received during engagement, it is clear that the Laurel Greenway will be a critical public space in Uptown Waterloo.

Waterloo Public Square Shade Structures and Laurel Trail Pedestrian Lighting

The Waterloo Public Square Shade Structure and Laurel Trail Pedestrian Lighting projects were identified as priority projects in the UPRS and Master Plan. These projects were advanced in parallel with the Master Plan in response to strong public demand and to leverage external funding sources. The Waterloo Public Square Shade Structure is currently under construction and the Laurel Trail Pedestrian Lighting will be tendered in May 2023.

Next Steps

The following is a list of overall recommendations that address the overarching direction of the Laurel Greenway Master Plan and potential first steps:

1. Establish the Laurel Greenway Special Provision Area

2. Continue to make developers and private landowners aware of the Master Plan and its ultimate vision
3. Proceed with catalyst projects for detailed design and required studies and investigations
4. Develop a wayfinding program for the Greenway
5. Explore opportunities to integrate hyper-natural planting strategies through Uptown
6. Promote and program the Greenway

An important step to creating and enhancing the Laurel Greenway is to start individual projects. With each project, there is great potential to improve the public realm in anticipation of the increased density in Uptown. Staff are eager to begin implementing the recommendations found within the Master Plan and to proceed with detailed design and implementation of projects.

The general steps outlined below will apply to each project coming out of the Master Plan:

- Find funding and/or include projects within the capital budget
- Hire a consultant to complete any required studies, detailed design, and tender package
- As projects from the Master Plan move forward, staff will continue to have meaningful outreach and engagement with interested and affected parties
- Issue a Request for Tender and hire a contractor for construction

Projects will be advanced and prioritized based on factors such as timing of adjacent work and available funding. Two potential projects for consideration are the Visitor's Information Centre Plaza and trail crossing improvements at Weber Street North or Erb Street West and Caroline Street.

Figure 1: Study Area Map

Figure 1, below, shows the Laurel Greenway boundary.





STAFF REPORT City Utilities

Title: Expanded After Hours Call Centre Recommended Solutions
Report Number: IPPW2023-026
Author: Leslie Hepditch
Council Date: May 29, 2023
File: 220030
Attachments: City of Waterloo Expanded After Hours Call Centre Recommended Solutions Report
Ward No.: ALL

Recommendations:

1. That Council approve report IPPW2023-026.
2. That Council approve the release of 2023 non-routine funding for the External Call Centre Support project, in the amount of \$100,000, from the 2023 Approved Capital Budget (Ref#281).
3. That Council direct staff to include the Expanded After Hours Call Centre implementation project in the 2024-2026 capital budget, subject to Council approval as part of the capital budget deliberation process.

A. Executive Summary

The City of Waterloo staff brought report IPPW2023-004, Expanded After Hours Call Centre Recommended Solutions, to council on January 23, 2023. Council provided feedback on the recommendations and the Steering Committee was asked to return in the second quarter of 2023 to address the following topics:

1. Collaborating with the Digital Service strategy and developing a digital first customer service approach
2. The funding and hiring of a Customer Service manager to oversee the functions of customer service as a whole across the entire corporation
3. Outsourcing an After Hours Answering Service to another vendor through a procurement process
4. Creating one phone number for all customer service inquiries and how those inquiries can be prioritized.

Staff are now bringing forward and implementation plan which encompasses direction on the aforementioned points and funding strategy.

B. Financial Implications

The project implementation has two sets of costs; one-time implementation costs and ongoing costs once the project is fully implemented. Once the program is fully implemented it is estimated that the city will be able to avoid future costs in the magnitude of \$1.2 to 1.6 million per year, while improving customer service delivery.

One-Time Costs

The initial implementation is made up of one time costs of \$126,000 for 2023 and \$526,000 over 2024-2026, for a total of \$652,000 (detailed table is included in the background section). It is recommended that these costs be funded via:

1. 2023 Capital Budget Ref#281 External Call Centre Support – Enforcement Services pilot has \$100,000 in CRF funding. This report includes a recommendation to release this non-routine funding to begin the project. The balance of the funding required in 2023 (\$26,000) will be funded by a contribution from the City Utilities operating budget.
2. One-time capital funding required between 2024 -2026 will be included in the 2024-2026 Proposed Capital Budget to be released in December 2023. This capital funding will be split between Community Services, IPPW and City Utilities. The funding split is governed by the available CRF funding envelopes, with City Utilities share informed by an average of the other contributing programs (COMM & IPPW). The total capital budget request will be \$526,000 (2024 to 2026).

Table 1 – Proposed Funding Solution

One Time Costs	2023	2024	2025	2026	Total
Total One Time Costs	\$ 126,000	\$ 304,000	\$ 176,000	\$ 46,000	\$ 652,000
Funding Status	FUNDED	2024-26 Proposed Capital Budget			

As an interim leadership measure, and allowing full synergy with the Digital Services Strategy, an existing staff member (Band G) will be allocated up to 50% of their time to lead the one-time development activities and work collaboratively with the Communications team for the digital services development needed to integrate customer service requests into existing City systems. To permit allocation of leadership from the existing staff member, up to a 4 year contract (Band K) will be funded from capital as outlined in the one-time funding strategy detailed above.

Ongoing Costs

Ongoing costs for a permanent customer service lead, estimated to be a Band E, with associated operating costs is recommended to be considered during the next 1 year budget cycle for 2027.

The \$30,000 annual savings from the current call centre contract would be netted against costs of \$19,000 for total ongoing operating savings of \$11,000. Total ongoing operating costs will not be materially impacted until 2027 with the deferral of the permanent management position. A detailed table is included in the background section.

No operating funding request will be submitted in the 2024-2026 budget cycle for the ongoing funding piece of the implementation.

C. Technology Implications

To support the recommended solution, technology implications include an IMTS review of the CISCO phone system, additional digital intake forms, an improved service request database, and reporting dashboards to track Customer Service KPIS and service requests by ward. The majority of these technology implications build off existing IMTS processes and skills, and will ultimately free up IMTS staff time to drive continuous improvement once the recommendations are implemented.

D. Link to Strategic Plan

Service Excellence - The recommendations that were depicted in the report will improve the quality of initial interactions for requests provided by the city, and centralize the approach. This will make it easier for constituents and guests to find the answers they need, and requests followed through on. New processes can be created through leveraging existing tools and resources, and some recommendations are seen as alternatives with minimal impact on the corporation, but could have significant change.

Through doing the interviews across the corporation it is evident that staff are committed to achieving the best level of service possible, but struggle with lack of consistency in customer service intake, and no system of record for customer service data management.

E. Equity, Inclusion and a Sense for Belonging

The recommendations provided in this report provide the fundamental building blocks for creating a mature Customer Service Intake strategy at the City of Waterloo. As the City moves forward, it is recommended that the Indigenous Initiatives, Accessibility, Anti-Racism, and Equity (IIARAE) team be an integral member of an implementation committee to ensure that all solutions are free of barriers to customer service.

F. Previous Reports on this Topic

IPPW2023-004 Expanded After Hours Call Centre Recommended Solutions



**Expanded After Hours Call Centre Recommended Solutions
IPPW2023-026**

BACKGROUND

The City of Waterloo received a provincial grant for up to \$228,960 to hire a third party consultant to analyze our automated call in process with a focus on after hours intake, and assess the viability of a centralized customer service strategy and services of a call centre.

Project Goal: The goal of this project is to assess the viability of a centralized and enhanced Customer Intake strategy and determine the impact on the City’s current arrangement. This includes an in-depth analysis with after hours effectiveness being the primary priority and regular hours effectiveness being a secondary priority.

Key Assumptions: Key assumptions that have been carefully considered in our analysis of the City’s Customer Intake strategy include:

- Maintain or improve the quality of care and customer-centred contact to residents and visitors.
- Focus on effective utilization of existing technology and gaps that technology could address.
- Maintain current resourcing levels and maintain or reduce operating costs.
- Consider each division’s Customer Service process to the point where a service request, problem, or feedback has been accepted by the division for action or follow up.
 - Operational processes for each division once a request has been initiated and accepted are out of scope.
- Acknowledging that Recreational Services and Community Programming and Outreach have different “after hours” than City Centre or Waterloo Service Centre.
- Additional out of scope items include the Fire Rescue Emergency Response Customer Service process and internal service requests.

Phase 2: Developing Alternatives

A series of workshops were completed with key participants from across different divisions to examine the following findings and to complete a cost benefit analysis on:

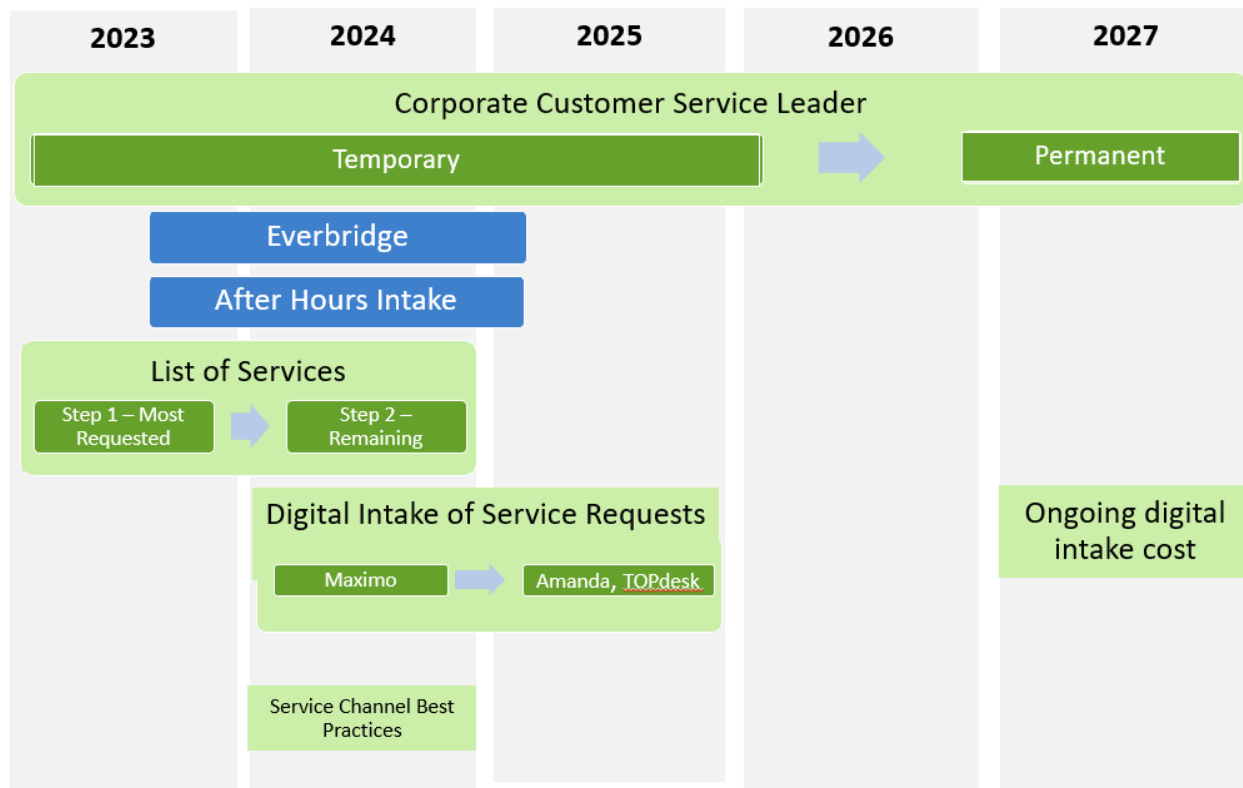
Table 2 – Key Benefit Table

Alternative	Key Benefit
1. Corporate Customer Service Leader (Leadership) New role in the CAO’s office	Leadership for Organizational change
2. Everbridge Deployment (Core Services) Existing solution to automate fulfilling urgent staff needs After Hours.	Increased After Hours effectiveness
3. After Hours Intake of Service Requests (Core Services) Centralize After Hours Customer Service Intake.	Increased After Hours effectiveness
4. List of Services (Core Services) Compile a complete and structured list of services provided to Customers for internal use.	Increased overall effectiveness
5. Digital Intake of Service Requests (Process Improvement) Dramatically increase digital channel utilization.	Increased overall effectiveness and reduce costs
6. Service Channel Best Practices (Core Services) Implement phone, email and social media channel best practices	Increased customer satisfaction

FINDINGS:

- The Steering Committee has identified the opportunities in three discreet categories: 1) Core Services, 2) Process Improvement and 3) Leadership. These categories are assigned above in brackets.
- All six findings were included in a final cost analysis to understand the financial impact on the current customer service intake process. A phased implementation approach with consideration for dependencies between alternatives was developed and the work to be completed for the three categories was reviewed with the ECMT in consideration for available budget and ability of the Corporation to take on this important initiative.

Figure 1 - Implementation Approach

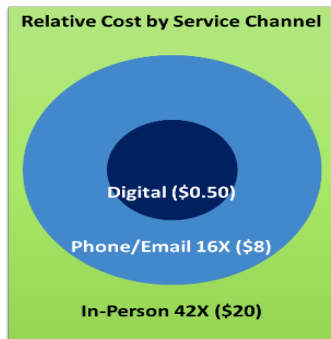


Benefits of Digital intake include:

- More accessible and readily available for customers and residents to reach a CS associate at the City of Waterloo.
- Customers will have the ability to follow up on a request and know the status and when it is closed.
- Staff time will be made more available for assistance with developing and maintaining a catalog of services, scripting, and maintaining customer service procedures. Staff time can be redirected to higher value tasks that align with the City’s service excellence guiding principle. The target utilization of the digital channel is 45% of all service requests by 2026.
- Better reporting statuses on customer service issues
- Available for council to see by ward what issues are requests are occurring.

The below diagram demonstrates the amount of interaction digitally vs. in person costs.

Figure 2 – Cost Comparison



Costs by service channel are reduced greatly with the recommended approach:

- Digital costs 50 cents per interaction
- Phone/email costs 16 times that amount at \$8.00
- In person costs 42 times that amount at \$20.00

It is clear this solution offers the City an opportunity for cost avoidance which would amount to \$1.2 million to \$1.6 million dollars a year once fully implemented (Valency Inc.).

FINANCIAL IMPLICATIONS

The project implementation has two sets of costs; one-time implementation costs and ongoing costs once the project is fully implemented. Once the program is fully implemented it is estimated that the city will be able to avoid future costs in the magnitude of \$1.2 to 1.6 million per year, while improving customer service delivery (Valency Inc.).

The following table details all one-time funding costs by fiscal year. 2023 costs are already funded (as per this report IPPW2023-026) and the 2024-2026 costs will be added to the proposed 2024-2026 capital budget.

Table 3 – One Time Costs

One Time Costs	2023	2024	2025	2026	Total
Develop Catalog of Services	\$ 70,000	\$ -	\$ -	\$ -	\$ 70,000
After Hours Intake of Service Requests	\$ 32,000	\$ -	\$ -	\$ -	\$ 32,000
Everbridge Deployment	\$ 6,000	\$ -	\$ -	\$ -	\$ 6,000
Digital Intake of Service Requests (Maximo)	\$ -	\$ 122,000	\$ -	\$ -	\$ 122,000
Service Channel Best Practice	\$ -	\$ 54,000	\$ -	\$ -	\$ 54,000
Develop Catalog of Services (all others)	\$ -	\$ 19,000	\$ -	\$ -	\$ 19,000
Service Channel Best Practice (SLA, KPI, Train)	\$ -	\$ 66,000	\$ -	\$ -	\$ 66,000
Digital Intake of Service Requests (Amanda and Top Desk)	\$ -	\$ -	\$ 132,000	\$ -	\$ 132,000
Backfill for allocated leader (Band K, PT)	\$ 18,000	\$ 43,000	\$ 44,000	\$ 46,000	\$ 151,000
Total One Time Costs	\$ 126,000	\$ 304,000	\$ 176,000	\$ 46,000	\$ 652,000
Funding Status	FUNDED	2024-26 Proposed Capital Budget			

Proposed funding sources:

1. 2023 Capital Budget Ref#281 External Call Centre Support – Enforcement Services pilot has \$100,000 in CRF funding. This report includes a recommendation to release this non-routine funding to begin the project. The balance of the funding required in 2023 (\$26,000) will be funded by a contribution from City Utilities operating budget.
2. One-time capital funding required between 2024 -2026 will be included in the 2024-2026 Proposed Capital Budget to be released in December 2023. This capital funding will be split between Community Services, IPPW and City Utilities. The funding split is governed by the available CRF funding envelopes, with City Utilities share informed by an average of the other contributing programs (COMM & IPPW). The total capital budget request will be \$526,000 (2024 to 2026).

As an interim leadership measure, and allowing full synergy with the Digital Services Strategy, an existing staff member (Band G) will allocated up to 50% of their time to lead the one-time development activities and work collaboratively with the Communications team for the digital services development needed to integrate customer service requests into existing City systems. To permit allocation of leadership from the existing staff member, up to a 4 year contract (Band K) will be funded from capital as outlined in the one-time funding strategy detailed above.

The project lead will work with Procurement to secure a consultant through an RFP process in 2023 to help develop the Catalog of Services and Service Channel Best Practices. The contract will be extended to 2024-2026 contingent on the release of capital funding.

Ongoing Costs

Ongoing implementation costs are listed below and the associated timing on when funds would be required. Ongoing costs are only reflected in the table once as once they are funded that becomes part of the base budget and the cost is not repeated. The \$30,000 annual savings from the current call centre contract would be netted against cost of \$19,000 for total ongoing operating savings of \$11,000. Total ongoing operating costs will not be materially impacted until 2027 with the deferral of the permanent management position and ongoing digital intake costs to maintain documentation used by the call centre.

Table 4 – Ongoing Costs

Ongoing Costs	2023	2024	2025	2026	Total
After Hours Intake Savings (permanently netted with ongoing)	\$ -	-\$ 30,000	\$ -		-\$ 30,000
After Hours Intake	\$ -	\$ 15,000	\$ -		\$ 15,000
Catalog of Services (monitor)	\$ -	\$ 4,000	\$ -		\$ 4,000
Deferred to 2027					
Digital Intake (to be determined based on Communications needs)	\$ -	\$ -	\$ -	\$ -	\$ -
Permanent CS Manager (Level E) + associated operating	\$ -	\$ -	\$ -	\$ -	\$ -
Total Ongoing Costs	\$ -	-\$ 11,000	\$ -	\$ -	-\$ 11,000

Technology Implications

- a. CISCO phone system-
 - Completing a review of external phone numbers.
 - Reviewing roles and responsibilities between IMTS and operational areas.
 - Review CISCO utilization since current auto attendant is complex and inefficient that requires IMTS to update the greetings. There are also too many external phone numbers listed on the City of Waterloo website (40+).
 - b. List of Services - Should be published on an internal portal. This will involve guidance and support from IMTS.
 - c. Digital Intake - Leveraging existing applications to support the Digital Intake of Service Requests is a technically viable, low-cost option that will allow the City to rapidly increase the effectiveness of the digital service channel. This approach minimizes the overall organizational change required to Back Office processes.
- *New Service Request Web Pages* must be designed and developed for digital intake. There are multiple form builder options that should be further evaluated for user experience, cost of development, maintainability, and ease of integration. Tools include GHD Form Builder (supported by Corporate Communications) and TOPdesk external forms, providing seamless integration for services managed via TOPdesk.
 - The *Request Type* will determine where each service request is routed for fulfilment in the Back Office. Integration will be required with Back Office Systems including:
 - Amanda – utilized by Municipal Enforcement, Building Standards and Finance
 - Maximo – utilized by City Utilities, FDMS, Parks, Forestry & Cemetery, Transportation
 - TOPdesk – proposed for any divisions without an existing work order application.
 - An *Email confirmation to the Requester with a tracking number* can be configured in all the impacted Back Office applications.
 - A *Service Request Database*, similar to IMTS databases already in use to consolidate Back Office data for reporting in ArcGIS, will be required. This is anticipated to require service request summary data, along with status updates and resolution details.
 - A *Service Request Inquiry Portal* is required that provides a self-service option for Customers to check on the status of a service request. This could utilize a design similar to the IMTS Phone Number Portal, a mobile-friendly portal.
 - A *Service Request by Ward* dashboard, similar to existing ArcGIS pages designed by Ward will be required.
 - A new *Customer Service KPIs* dashboard, linked to the Service Request Database, will be required that supports the Customer Service Leader in introducing digital channel key performance indicators (KPIs).
 - Based on discussions with IMTS and comparison to enterprise integration projects of similar scale and complexity, the timeline to fully implement is 1 - 2 years.



**STAFF REPORT
Transportation Services**

Title: Winter Sidewalk Maintenance Review and Potential Service Enhancements Workshop
Report Number: IPPW2023-000
Author: Bob Henderson, Robin Milne, Nicole Papke, Cari Van Niekerk
Council Date: May 29, 2023
File: N/A
Attachments: Attachment 'A' – Technical Background
Attachment 'B' – Community Engagement
Attachment 'C' – Illustrations
Attachment 'D' – Priority Zone Mapping
Attachment 'E' – Key MUT School Route Mapping
Ward No.: All Wards

Recommendation:

That Council receives IPPW2023-000 as information and as supporting background for the May 29, 2023 workshop.

A. Executive Summary

At its meeting held February 13, 2023, City council passed the following motion:

“That Council direct staff to review and report back prior to June 2023 on possible sidewalk snow clearing improvements for consideration as part of the 2024-2026 budget process. Considerations to be reviewed will align with the City’s current hybrid model where the city and the adjacent property owner clear snow from sidewalks. The focus will be on a review of sidewalk clearing at key nodes and corridors taking into consideration accessibility needs, proximity and connectivity to public transit, schools, hospitals, health services and other essential facilities in alignment with active transportation and transit routes. An environmental scan of other similar communities and public engagement will inform options along with Regional responsibilities and the current road maintenance agreement. Opportunities for improvement may include snow clearing at intersection corners, along curb faced sidewalks, enhanced compliance, enhanced support and volunteer services and improved communications with a potential phased-in implementation as part of the upcoming 3 year budget process.”

As a result, City staff from Transportation Services; Parks, Forestry & Cemetery Services (PFSC); Municipal Enforcement Services; and Corporate Communications formed a working group to initiate a comprehensive review of the City's winter sidewalk clearing practices. Details of this review are provided in Attachment A – Technical Background. The Corporate Communications team provided close support to the working group and engaged with the public to provide feedback on the City's winter sidewalk clearing practice and met with interested community members, including participants invited through the Grand River Accessibility Advisory Committee and Age-Friendly Waterloo. Details are provided in Attachment B - Community Engagement.

As part of this review, the City's working group identified various challenges with winter sidewalk clearing services including:

- Windrows creating barriers at intersections and bus stops;
- Issues associated with “curb-faced” sidewalk;
- School routes; and
- Ease of reporting, service time, delay in response and incomplete routes

Following a thorough review, staff have identified key conclusions that will enable Council to make informed decisions about any potential adjustments to the current level of winter snow clearing that occurs in Waterloo. Staff have also developed a number of options to address potential service enhancements. Service enhancements can vary in size, timing to implement and cost and as such would have different impacts on future annual property tax rates.

Key Conclusions of the Working Group

The key conclusions of the working group were as follows:

1. The City of Waterloo's current level of winter sidewalk maintenance is consistent with the broader approach taken by most municipalities in Ontario. Current levels of service typically meet or exceed the requirements set by the Province of Ontario.
2. The working group has identified a number of potential options to enhance the current level of service and support based on public input and a review of technical feasibility.
3. Staff would be pleased to explore the details that would be required to implement additional service measures; however, it is noted that those options will involve higher costs, additional resources, increased GHG emissions and may still not provide 100% satisfaction to all sidewalk users.
4. Three formal and detailed optional service models have been evaluated in response to Council's direction, using service triggers and thresholds based on the occurrence of 6, 12 and 18 snow events per winter.
5. Based on future input from Council, the working group could also explore other service levels (in addition to the 3 identified in this report) that build incrementally on the current level of services offered by the City, but at a more targeted scale.

That could be achieved by selecting certain components of the full service options, rather than the full suite of work that has been scoped and priced in this report.

6. The challenges that people with disabilities face in the winter are greater than winter sidewalk maintenance; the City’s Indigenous Initiatives, Anti-Racism, Equity and Accessibility team can support other divisions to pilot access supports for basic needs and opportunities for residents with disabilities to continue to have the choice to be involved in the community throughout winter months.

The following table summarizes three potential comprehensive service models for consideration based on theoretical levels of service and service triggers and resulting estimated property tax increases. In practice, it is likely that all services would be provided on a continuous “as-needed” basis given the dynamic nature of winter weather. Staff would aim to introduce and optimize these additional services over the course of three years. These models have been developed for Council’s consideration, however opportunity remains to explore alternative permutations through the Council workshop.

Table 1 – Potential Service Models

Enhanced Service Options	Option Number	Item	Optional Service Models & Triggers		
			A	B	C
		Snow Events Addressed	6	12	18
		Service Trigger (cm)	8cm	5cm	3cm
Clearing Crosswalks at Intersections	1	Conversion of seasonal staff to full-time	2	3	4
		Operating Staff Conversion Cost	\$100,000	\$150,000	\$200,000
		Articulated Wheel Loader	1	2	3
		Vehicles Capital Acquisition Cost	\$180,000	\$360,000	\$540,000
		Vehicle Annual Operating Cost	\$25,000	\$50,000	\$75,000
		Intersections Cleared	50	100	150
Assisted Services Contract	2	Number of Applicants Approved	100	200	300

Enhanced Service Options	Option Number	Item	Optional Service Models & Triggers		
		Operating Program Cost	\$100,000	\$200,000	\$300,000
Snow-loading 30km of Curb-Faced Sidewalk	3	Operating Snow-blow / Haul Contract	\$270,000	\$540,000	\$810,000
		Operating New Sidewalk Plowing Maintenance	\$114,000	\$114,000	\$114,000
		New Sidewalk Snow Plow Units	2	3	4
		Sidewalk Snow Plow Capital Acquisition Cost	\$500,000	\$750,000	\$1,000,000
		Sidewalk Snow Plow Annual Operating Cost	\$50,000	\$75,000	\$100,000
Prioritizing School-related MUT and MUP	4	Cost of prioritizing service	\$0	\$0	\$0
Additional Service Requirements	5	Fleet mechanics, contracted services, storage	\$180,000	\$180,000	\$180,000
Additional Accessibility Supports	6	Support improved winter accessibility for people with disabilities	\$20,000	\$20,000	\$20,000
Increased By-law Enforcement	7	Contract Officers	3	4	5
		Contract Officer Operating Cost	\$150,000	\$200,000	\$350,000
		Vehicle Rental	3	4	5
		Vehicle Rental Operating Cost (for 4 month period)	\$18,000	\$24,000	\$30,000
Customer service support	8	Sidewalk snow customer service-intake Operating Cost	\$25,000	\$25,000	\$25,000
Clearing Regional Road Sidewalks	9	Service Zone	Priority 1	Priority 1 and 2	Priority 1-4
		Additional Sidewalk (km)	25	35	48
		Operating Cost	\$95,000	\$133,000	\$182,000

Enhanced Service Options	Option Number	Item	Optional Service Models & Triggers		
Technology		Vehicle Tracking systems, Licence Fees, monitoring Operating Cost	\$20,000	\$25,000	\$30,000
		Conversion of seasonal staff to full-time	2	4	6
Snow Shovelling / Salt Dispensing Crew	10	Staff Conversion Operating Cost	\$100,000	\$200,000	\$300,000
		Crew Cab Vehicle	1	2	3
		Vehicle Capital Acquisition Cost	\$150,000	\$300,000	\$450,000
		Vehicle Annual Operating Cost	\$20,000	\$40,000	\$60,000
		Total	\$2,117,000	\$3,386,000	\$4,766,000
Financial Impacts		Total Property Tax Increase (Capital and Operating Cost)	2.3%	3.7%	5.1%
		Total Capital Costs	\$830,000	\$1,410,000	\$1,990,000
		One time Tax Levy - Capital	0.9%	1.5%	2.2%
		Annual Operating Cost	\$1,277,000	\$1,966,000	\$2,766,000
		Tax Increase (excluding one time capital)	1.4%	2.2%	3.0%

*Figures subject to rounding

B. Financial Implications

Winter Sidewalk Potential Service Enhancements costs vary based on the potential service models proposed in Table 1. Annual property tax increase will range between 1.4% - 3.0% plus a one-time capital request to fund additional equipment needs of 0.9% - 2.2%. Any Winter Sidewalk Potential Service Enhancements will be subject to approval as part of the 2024-2026 budget approval process.

A phased implementation is anticipated regardless of the service model option selected, as any implementation will be defined by equipment procurement delays, timing of staffing requirements and other operational needs. Actual tax implications will be derived from the direction from Council in addition to the other broader city-wide budget requests.

C. Technology Implications

D. Link to Strategic Plan

(Strategic Objectives: Equity, Inclusion and a Sense of Belonging; Sustainability and the Environment; Safe, Sustainable Transportation; Healthy Community & Resilient Neighbourhoods; Infrastructure Renewal; Economic Growth & Development)

(Guiding Principles: Equity and Inclusion; Sustainability; Fiscal Responsibility; Healthy and Safe Workplace; Effective Engagement; Personal Leadership; Service Excellence)

E. Previous Reports on this Topic

- IPPW2022-018 Winter Maintenance Update
- COM2020-027 Sidewalk Snow Removal Service Level Considerations
- IPPW2019-064 Winter Control Modernization Review



**Winter Sidewalk Maintenance Review and Potential Service Enhancements
Workshop
IPPW2023-000**

Attachment 'A' – Technical Background Information

1. Background

1.1. Current Sidewalk Clearing Service Delivery Model

On December 14, 2009, City of Waterloo Council enacted the City's Snow and Ice Removal By-law 2009-156 which remains in effect today. This by-law requires owners of private property to remove accumulations of snow and ice from sidewalk(s) immediately adjacent to their property within 24 hours following such accumulation. All remaining sections of sidewalk not fronting a residential or commercial property remain the City's responsibility to clear. This collaborative approach to clearing snow and ice from sidewalks throughout the City is referred to as a "hybrid" or "shared" winter sidewalk clearing model, which is similar to models adopted by other municipalities across the province. The following table summarizes the total amount of sidewalk maintained by residential/commercial property owners and City staff.

Table 2 – Residential/Commercial and City Maintained Sidewalk

	Lane in Kilometres	Percentage
Residential/Commercial Maintained	468	85%
City Maintained	85	15%
Total Sidewalk	553	100%

Of the total 553 lane kilometres of sidewalk, 80 km or 14.5 per cent of that network consists of sidewalk on regional roads. Of the 80 km of sidewalk on regional roads, City of Waterloo is responsible for maintaining and clearing 32 km or 40 per cent of sidewalks on regional roads.

In addition to sidewalks, the City is also responsible for clearing other active transportation areas including multi-use trails (MUT), multi-use paths (MUP), walkways and separated bike lanes. The following table summarizes the inventory of active transportation facilities owned and maintained by City staff.

Table 3 - Active Transportation Routes Maintained by City Staff

	Total Lane in Kilometers	Lane in Kilometers Maintained by City	Percentage City Maintained
Multi-use Paths	46	24	52%
Multi-use Trails	58	31	53%
Recreational Trails	45	9	20%
Walkways	18	15	83%
Total	167	79	47%

In summary, City staff clear snow and ice from a total of 164 kilometers of sidewalk and other related active transportation infrastructure respectively. The remaining infrastructure is to be maintained by the property owner in accordance with the City's Snow and Ice Removal By-law.

Every year, the City reassigns staff to a winter maintenance program beginning November 1, served by three shifts. These shifts consist of 14, 3 and 5 staff members for the morning, afternoon and midnight shifts respectively. These 22 staff are dedicated to winter control seasonally and assist with other Parks, Forestry and Cemetery Services (PFCS) operations when there is not a need for winter maintenance. There is an additional 19 staff that have a core year-round function outside of winter control in PFCS that can be called in on an as-needed basis to help address sidewalk clearing responsibilities. Historically, it has been very challenging to recruit sufficient number of staff to fully deploy and operate all available winter control vehicles due to challenges recruiting staff to work overtime. The City's current fleet of vehicles for maintaining sidewalk and other active transportation related facilities consists of eight sidewalk plows and eight tractors and trucks to clear MUT/MUP and City facilities. Of the eight sidewalk plows, six operate out of the Waterloo Service Centre and two operate out of Waterloo Park.

Ideally, City crews would prefer to clear snow to minimize the need to come back and service sidewalks, MUT and or MUP more than once. In practice however, staff must commence sidewalk snow clearing activities shortly after a storm begins in an effort to clear all sidewalks within 48 hours, as regulated by the Provincial Minimum Maintenance Standards (MMS). This practice requires staff to return to treated sidewalks often due to additional snow accumulation. This practice also leaves cleared sidewalks vulnerable to being plowed in from road snow plowing operations. Snow storms vary in duration and volume which further exacerbates the challenges for limited sidewalk crews.

When planning to respond to an impending snow storm, supervisory staff attempt to optimize staff numbers by making overtime available or calling in additional staff resources. Depending on the number of staff agreeing to come in, staff are then assigned to various zones and routes throughout the City to clear sidewalks and related active transportation routes. The City's practice is to employ the following priorities when addressing a snow storm:

1. City-core sidewalks;
2. Prioritized crosswalks and school crossings;
3. Sidewalks and facilities;
4. MUT and MUP;
5. Secondary clearing of sidewalks and crosswalks plowed in by snow plows; and
6. Public complaints.

In general, staff focus all available resources to clear sidewalks within a 48 hour period to meet provincial MMS. All remaining snow clearing efforts such as clearing crosswalks, pedestrian refuge islands, etc. are typically addressed manually afterwards. Remaining staff, if available, may be reassigned to manually clear intersection crosswalks and school crossings on a limited priority basis given that this work is labour intensive and slow. Since the volume and type of snow can make manually lifting snow extremely laborious, the City prioritizes locations to be manually addressed. As there are more than 3,000 intersections throughout the City, it is unreasonable to expect that all crosswalks in the City be cleared utilizing the existing City staff complement. A practice to clear windrows at crosswalks city-wide would present extreme logistical and staffing challenges.

On average it takes the City approximately three-to-five days to clear all sidewalks, and related active transportation facilities under its responsibility.

Total annual operating costs associated with the winter sidewalk maintenance program is approximately \$612,000 based on a review of five-year historical cost average. This represents an average annual operational cost of \$3,800 per km. During an average winter, the City uses approximately 5.25 tonnes of salt per kilometre.

On February 13, 2023, Council passed the following resolution as part of the City's 2023 budget deliberations:

"That Council direct staff to review and report back prior to June 2023 on possible sidewalk snow clearing improvements for consideration as part of the 2024-2026 budget process. Considerations to be reviewed will align with the City's current hybrid model where the city and the adjacent property owner clear snow from sidewalks. The focus will be on a review of sidewalk clearing at key nodes and corridors taking into consideration accessibility needs, proximity and connectivity to public transit, schools, hospitals, health services and other essential facilities in alignment with active transportation and transit routes. An environmental scan of other similar communities and public engagement will inform options along with Regional responsibilities and the current road maintenance agreement. Opportunities for improvement may include snow clearing at intersection corners, along curb faced sidewalks, enhanced compliance, enhanced support and volunteer services and improved communications with a potential phased-in implementation as part of the upcoming 3 year budget process."

1.2. Deloitte Winter Control and Modernization Review

In 2019, a review of operations was completed by a consultant team from Deloitte. As a result of the 2019 review, the following recommendations specific to sidewalks/trails operations have been implemented:

1. Departmental sharing, resulting in one new dual position
2. Review of winter shifts, resulting in expanded evening, overnight and weekend shift
3. Trail equipment rotation, resulting in trackless units being rotated between the Service Centre and Waterloo Park to balance hours of use

The remaining two relevant recommendations for sidewalks/trails are ongoing:

1. Enhanced trail equipment, work is ongoing as staff review the options of additional specialized equipment for our wider MUTs versus third party contracting; and
2. Tiered service levels for bike lanes and trails, prioritization with Active Transportation is ongoing.

Evening, overnight and weekend staffing continues to be expanded and adjusted to best meet sidewalk and trail winter maintenance needs. Two contract positions (four month seasonals) were added in 2021/2022. Two additional four month contract positions have been added for the 2022/2023 season to provide salt loading and delivery to trackless operators in the field. This will greatly improve efficiency by reducing the need for those operators to return to the yards to fill up. The winter control operating budget and reserve have been able to absorb these additional expenses on a short-term basis, but permanent, sustainable funding for these four seasonal positions will be requested for Council's consideration as part of the upcoming 2024-2026 three-year budget cycle.

PFCS staff are continuing to work with Active Transportation to define priority routes based on Council's previous direction to focus on high-use pedestrian routes and connections to priority facilities such as schools, health centers, main public transit routes, other public amenities and overall network accessibility.

1.3. Other Collaborative Winter Assisted Program Services

The City of Waterloo offers a fee for service program, through the Home Support Program, for community members who fill the criteria for service. This service/program is funded through Ontario Health. This level of service has been in place for more than 35 years, and the provincial government has established the criteria for service. The fee for service program is a program whereby, staff recruit, coordinate, link and direct snow shovellers to respective clients. In turn, the clients pay the snow shovellers directly for the completed work. The shovellers assist with clearing snow on client's property, which includes the sidewalks driveways and walkways on their properties. In

many cases, the snow shovellers use shovels, or snow removal equipment that is owned and provided by the homeowner. As such the snow shovellers, are covered under the individual home owner's insurance plan.

It is an ongoing and resource intensive process that staff begins in July and completes in October. The current funding is limited to the number of clients served, serving older adults and service to adults with disabilities who qualify for the program/service. Clients pay the contract snow shovellers directly at a rate of approximately \$22 to \$25 per hour. All arrangements are made with the respective home owners and snow shovellers. These snow shovellers are often university students and younger adults.

Approximately 60-70 clients per winter season are matched with the funding for staff resources. The program is usually full before the winter season begins and there is a wait list. There are limitations to this program including the cap on clients and a lack of budget to cover the costs for clients who are not able to afford the hourly rate.

1.4. Sidewalk Clearing - Minimum Maintenance Standard Obligations

Minimum Maintenance Standards (MMS) as outlined in the provincial Municipal Act requires municipalities to clear snow from sidewalks within 48 hours of the end of a snow or ice build up. The MMS also requires municipalities to reduce snow accumulation to less than or equal to eight cm and provide a width of one metre within a 48 hour period following a snow storm. Notwithstanding these regulations, the City aims to clear snow from the full width of sidewalks to a bare concrete condition using a combination of plowing and salting practices.

1.5. Current Gaps in Service and Common Complaints

1.5.1. Windrows

A windrow is generally defined as the unavoidable row of snow created by snow plows when plowing snow from the roadway to the right side of the roadway. The size of the windrow left behind by a snow plow is directly related to the volume of snow that has accumulated on a roadway and number of lanes to be plowed. Despite misconceptions, snow plow operators cannot control the size of a windrow, unless they opt to leave snow on the roadway which would violate MMS regulations, and would expose the City to potential liability.

Common complaints related to windrows generally include blocking pedestrian access to crosswalks at intersections. The windrow at intersections can be a significant barrier to pedestrians, especially for members of the public with accessibility challenges.

1.5.2. Bus Stops

The City is not responsible for removing snow from Grand River Transit (GRT) bus stops. GRT is responsible for clearing snow away from its bus stops and does so by utilizing third party contractor services. Similar to driveways, windrows will create temporary barriers in front of bus stops, blocking access to bus stops owned and operated by GRT. Complaints regarding access to bus stops may arise due to the delay in service clearing windrows from bus stops or when the contractor pushes snow to the side of the bus stop creating other accessibility challenges.

1.5.3. “Curb-faced” Sidewalk

Sidewalks that directly front roadways, known as “curb-faced” sidewalks present snow storage challenges given that no boulevard separates the curb and sidewalk. Having no boulevard space between the roadway and sidewalk leaves snow plow operators little choice but to deposit windrows onto these sidewalks. Members of the public often complain that they have to clear excessive amounts of snow associated with these windrows or complain that they have to clear them a second or third time after additional snow plowing efforts. In these cases, the windrow is often pushed back and forth between the roadway and sidewalk, eventually finding a location partially blocking the sidewalk and or the roadway. Often these windrows can freeze further exacerbating efforts to remove them.

1.5.4. School Routes

City staff often receive complaints from residents regarding school routes not being given sufficient priority by City and or property owners. These concerned citizens often have similar concerns summarized in Sections 1.5.1 and 1.5.3 of this report, but indicate that the issues are much more problematic for school-aged children on school routes.

1.5.5. Service Time, Delay in Response and Incomplete Routes

City staff often receive complaints that sidewalk clearing services are not completed in a timely fashion, or not all. City staff aim to clear sidewalks that the City is responsible for within MMS prescribed timelines. City Municipal Enforcement Services (MES) staff often receive complaints regarding sidewalks not completed by private property owners. Upon receiving a complaint, City MES will assign the complaint to an MES area zone officer. The officer attends at the address noted in the complaint. An inspection is initiated. If the sidewalk is in violation, photographs are taken and a notice of compliance issued. This notice outlines the violation and provides the property owner with 24 hours to bring the sidewalk into compliance. The officer returns to the address in 24 hours and re-inspects. If the sidewalk has not been cleared, the officer contacts our contracted snow clearing service to attend. The owner is then sent a bill with additional administrative fee for the cleanup.

1.6. Reviews, Context, Experience of Neighbouring Municipalities

1.6.1. City of Kitchener

The City of Kitchener has undertaken several reviews of their winter sidewalk maintenance practices. In summary, the City of Kitchener owns 1,202 km of sidewalk of which it plows and maintains 216 km or 17.6 per cent. These sidewalks are usually plowed within a 24 hour period following a snow storm. In an average winter, the City uses approximately 1,134 tonnes of salt (or 5.25 tonnes per kilometre) to service sidewalks.

In addition, sidewalks in the downtown are also maintained by the City. There is approximately 12 km of sidewalk in the downtown area maintained to bare concrete. In an average winter, 177 tonnes of salt or 14.75 tonnes per kilometre is used to service downtown sidewalks.

City of Kitchener staff undertook a comprehensive review in 2019/20 reviewing several winter maintenance pilot programs including a full service winter sidewalk maintenance pilot program and concluded that:

- City-led sidewalk snow clearing options do not significantly increase sidewalk passability in a cost-effective way;
- A City-led winter sidewalk maintenance program would increase the municipal portion of the property tax by 7.8 per cent if implemented on a City-wide basis and 4.6 per cent if implemented on priority routes;
- City-led winter sidewalk maintenance options would increase corporate-based Green House (GHG) emissions significantly; and
- A statistically reliable survey of residents showed that status quo (no changes) to the current practice and no additional tax impact, was the most preferred scenario (54 per cent).

Based on its evaluation results of pilot studies, staff recommended the following winter maintenance practices be adopted:

- Implementation of assisted services for sidewalk snow clearing program; and
- Implementation of a proactive by-law enforcement program as of winter 2020/21 with four officers.

1.6.2. City of Cambridge

The City of Cambridge owns 680 km of sidewalk of which it plows and maintains 152 km or 22 per cent of its sidewalk network. These sidewalks are usually plowed within a 36 hour period following a snow storm, per its City by-law.

In 2023, City of Cambridge staff completed a business case study assessing the feasibility of removing snow from curb-faced sidewalks, which according to City staff presents

significant challenges to both City staff and property owners as the amount of snow on the sidewalk can be significant and often heavy and wet with no room for storage, as its being pushed back and forth between the roadway and sidewalk. The snow often freezes to a point where it is difficult to move and results in chronic constrained icy sidewalk conditions.

In light of this staff assessed the feasibility and received Council approval to add a snow-lift crew to its existing complement of staff to clear 40 km of curb-faced sidewalk (and sidewalks with less than 25 cm boulevards) representing six per cent of its sidewalk network. Equipment and resources needed to support this operation includes one snow lift crew of six people, a snow blower, a skid steer (or tractor or grader), a blocker truck, and three dump trucks. Annual operating costs of a snow lift crew was estimated at \$390,000.

1.6.3. Broader Ontario Municipal Practices

Research into the broader municipal state of practice across the province suggested that the City is generally consistent with other municipal models with the City and residents sharing sidewalk clearing responsibilities. While overall program models are consistent, the level of service provided by each municipality varies. Most municipalities share challenges related to clearing windrows at intersections simply because of the significant number of intersections to address. Most municipal programs clear windrows at intersections on a limited priority basis after sidewalk networks are completed. Clearing windrows at intersections is a slow laborious process, especially if done manually. Most municipalities also recognize that there is significant challenges maintaining curb-faced sidewalks free of snow and ice build up. Similar to windrows, removing or replacing snow on curb-faced sidewalk is a slow laborious process as well but is typically only addressed through various mechanical processes further described and assessed in this report.

2. Potential Solutions to Address Current Gaps in Service

A working group consisting of City staff from Transportation Services; Parks, Forestry and Cemetery Services; and Municipal Enforcement Services met to discuss potential enhancements to address the identified service gaps that were summarized in Section 1.5 Current Gaps in Service and Common Complaints. The following sections summarize potential options and solutions to address each identified gap in service.

2.1. Windrows

The City of Waterloo's current road network consists of 1218 stop controlled intersections, 103 signalized intersection and 21 roundabouts and traffic circles. Based on the City's existing infrastructure, it is estimated that there are more than 3000 crosswalks to clear windrows from. City sidewalk crews currently clear windrows from intersection

crosswalks and school crossings on a limited priority basis after sidewalk networks have been addressed first.

Options reviewed and considered to address pedestrian barriers caused by windrows included:

- Increasing “in-house” City manual snow removal services;
- Retaining third-party manual snow removal services;
- Reassigning sidewalk plows and operators to specifically clear intersections;
- Purchasing new sidewalk plow units and dedicating units to service windrows at intersections;
- Adding intersections to existing sidewalk plow operator routes; and
- Purchasing new Articulating Wheel Loader and dedicating them to remove windrows at intersections.
- Additional snow shovelling / salt dispensing crew

After assessing all options, the City’s working group came to the following conclusions:

- Manually clearing intersections is slow, inefficient and laborious;
- Manually clearing intersections would potentially lead to staff burn-out and injuries;
- Adding intersections windrows to sidewalk plow unit routes would slow down overall service of sidewalks;
- Sidewalk plow units are not necessarily best-suited to clear windrows at crosswalks;
- Articulating Wheel Loader units are nimble and well-suited to clear windrows in tight spaces like intersections; and
- Articulating Wheel Loader units are one-third the cost compared to a sidewalk plow unit.
- Additional snow shovelling / salt dispensing crew(s) consisting of two staff and a crew cab would complete hand shoveling and salt delivery services more efficiently.
- Additional sand boxes located strategically throughout the City would complement existing services provided by the City.

It is estimated that one Articulating Wheel Loader unit would cost approximately \$180,000 and could clear 50 intersections a day (over three shifts). See Attachment ‘C’ for an illustration of an Articulated Wheel Loader.

2.2. Bus Stops

GRT operates more than 3000 bus stops including more than 560 shelters throughout Waterloo Region. City staff from the cities of Waterloo, Cambridge and Kitchener have raised concerns with the Region / GRT regarding clearing windrows and snow at bus stops. The Region and GRT have been requested to consider revisions to its contract

that would consider enhanced service times as well as snow clearing practices such as snow loading services that would mitigate future barriers for pedestrians intending to access bus stops.

2.3. Curb-faced Sidewalk

As previously noted, curb-faced sidewalks are defined as locations without any boulevard separating the sidewalk and roadway leaving no room for the storage of snow. Challenges associated with curb-faced sidewalks can be mitigated by incorporating a winter control service known as “snow loading”. This operation can vary in methodology, magnitude and number of vehicles using a variety of equipment. This service generally involves:

- Lifting or blowing snow into trucks and or crew cabs by means of a sidewalk plow unit(s) modified and equipped with a snow blower, and or a tractor(s) equipped with a snow blower;
- Manually shovelling any remaining snow left behind by the above-noted operations;
- Salting;
- Utilizing blocker trucks to protect road crews working in live lanes of traffic;
- Hauling away snow using truck(s) to an offsite facility; and
- Storing snow at an off-site facility.

This service can vary in pace depending on the sidewalk environment. In core areas of the City this service can be hindered by infrastructure residing within the sidewalk right-of-way. Such infrastructure may include, but not be limited to, signs, benches, hydro poles, mailboxes, patios, traffic signal control boxes etc. In general it can be expected that this service progresses at a pace of approximately 0.5 km/h to 1.0 km/h depending on the nature of the sidewalk environment.

The working group developed two snow loading options based on available benchmarking sources:

2.3.1. New In-house Snow Loading Crew

- Purchase one sidewalk plow with snow-blower, three dump trucks, one blocker truck; and
- Hire five (5) additional laborers

This operation would present an upfront estimated capital cost of approximately \$1.38 million and annual operating costs of \$175,000 and \$300,000 for equipment and labour costs respectively. On average it would cost the City approximately \$64,000 per snow event based on the City’s average number of snow events exceeding eight cm of snow.

It is estimated that this operation could remove 1.5 km of snow per eight hour shift which would take approximately 20 days to remove snow from 30 km of curb-faced sidewalk in the City.

2.3.2. Tender Snow-blow / Hauling Service

Under this option, a tender would seek the services of one tractor mounted snow blower, five tri-axle dump trucks and one blocker truck to remove snow from the City's 30 km network of curb faced sidewalks during any declared snow event where eight cm of snow or more is anticipated. On average the City has historically seen approximately six snow events per year. It is estimated that these services would cost approximately:

- Snow-blow contractor - \$350 per hour;
- Tri-axle dump-truck - \$105 an hour;
- Blocker truck and driver - \$60 per hour; and
- Total crew cost - \$935 per hour.

City staff estimate that such a crew could clear approximately five km of curb-faced sidewalk per day utilizing an eight hour shift which would translate into clearing 30 km of curb-faced sidewalk in approximately six days. A crew working 12 hours a day could potentially clear all sidewalk in four days. It is estimated that this operation would cost the City approximately \$45,000 per storm or \$270,000 annually, based on six snow events per year. On average it is anticipated that it would take a contractor six days to complete operations after each storm event.

Based on the above two options, City staff recommend that the City consider tendering a snow-blow / hauling services as summarized in Section 2.3.2.

2.4. Snow Plowing Curb-faced Sidewalk

In addition to a snow loading service, there is an opportunity for City staff take over responsibility for servicing curb-faced sidewalks utilizing sidewalk snow plowing services. This would assist residents that are struggling to maintain curb-faced sidewalks. Given that snow-loading service would only be enacted following snow events, it is anticipated that residents would allow for snow to accumulate on curb-faced sidewalks between snow events. As snow accumulates, staff anticipate that residents would likely lower their level of service they currently provide knowing that snow loading crews would eventually service these sidewalks after snow events. Servicing curb-faced sidewalks would also ensure that the City is meeting obligations to maintain sidewalks in accordance with MMS standards. Operating costs to take over this responsibility would be an additional \$3,800 per kilometer or \$114,000 annually to maintain the additional 30 km of curb-faced sidewalk.

2.5. School Route Access

Options to enhance sidewalk clearing practices for school routes would include identifying key school route connections and prioritizing them for sidewalk clearing. City staff opted to include any city-maintained MUT or MUP falling within an 800 m radius of a school as a Priority One service zone, meaning that these key connecting MUT and MUP would be serviced within 12 hours following a snow storm.

2.6. Service Time, Delay in Response and Incomplete Routes

Options to enhance service times, delay in response and incomplete routes would include:

2.6.1. Additional Snow and Ice By-law Enforcement Services

The current service model for the Municipal Enforcement Services Snow and Ice Program consists of three contracted officers hired from mid-November until April. A full time senior officer is re-assigned to train and administer the snow and ice program. Duties of the senior officer include preparation and onboarding of the contracted officers, training, assisting with the organizing of priority service requests, liaising with contracted snow removal providers and the billing requisitions and follow up requests.

Three additional contract officers would provide a continuous proactive response to complement the reactive approach to sidewalk snow clearing complaints. The annual operating cost of this contract position is approximately \$50,000 per officer.

It is also recommended, based on feedback from focus groups, to create a more simplified system for reporting sidewalk snow violations. The preferred method would be having a customer service representative intake and triage these calls.

Increasing the administrative fee that is added to sidewalk clearing bills may be a deterrent to repeat offenders.

Should Administrative Monetary Penalties be applied to the Snow and Ice Removal Bylaw, fines could be issued directly to property owners by mail, rather than having to service personally. This could lead to greater compliance and assist with repeat offenders.

2.6.2. Additional Community Support Pilot Programs

The City's working group reviewed additional models that are currently in use at the City of Cambridge and Kitchener. These models are City-sponsored programs offering snow clearing assistance to members of the community that demonstrate a physical and or financial need for these services. Sponsored service delivery models can certainly vary in terms of size, frequency of service but are generally similar in both Cities. The City of

Cambridge offers “in-house” service to 50 residents whenever the City’s receives over 5cm of snow whereas the City of Kitchener offers a contracted service to 325 residents whenever snow exceeds 2.5cm of accumulation. The service provided includes staff coming to the resident’s home to clear the sidewalk as well as any windrow fronting the driveway using snow-blowers and hand-shovelling services. Upon reviewing these models the working group discussed various levels of service that the City of Waterloo could potentially deliver and eventually agreed upon the following potential assisted service model:

- Contract service
- Service would clear both sidewalk and driveway windrow;
- Resident to receive contract service whenever the City declares a snow event which generally involves snowfalls of eight cm or more;
- Contractor provides snow-blower and shovel services;
- Resident application process;
- City service program limited to 100 residents
- Service subject to future expansion depending on successes / lessons learned.

Staff estimate that this service model would cost this City approximately \$100,000 assuming a \$150 cost per visit, six snow events per year and potential stand-by fees. Staff would have to further develop this program to determine:

- Resident eligibility requirements;
- City administrative resource needs and costs; and
- Potential subsidy programs.

2.6.3. Clearing Regional Roads

Currently the City clears snow from approximately 32 of 80 km of regional roads per the City’s current sidewalk clearing obligations. The remaining 48 km of sidewalk is collectively cleared by residents and commercial businesses. Regional roads are primary arteries through the City and generally carry higher volumes of pedestrian traffic. The City of Cambridge is one of three cities that has a practice of clearing all regional road limits regardless of it being fronted by a resident or commercial property. Clearing an additional 48 km of regional roads in the City of Waterloo would require additional resources to ensure MMS timeline standards are met, and additional funds to account for ongoing operating costs including fuel and salt. Adding this service would also have a direct impact on the environment by way of increased fuel and salt use and associated carbon emissions released into the environment by the service vehicles.

2.6.4. Online Complaint Reporting System

One of the gaps identified by staff is how complaints are received, action prioritized and how the loop is closed in resolving winter control complaints. Currently after hour calls are routed to the Corporate Contact Centre managed by the City of Kitchener under a service agreement. This method of receiving and triaging calls seems to be an effective

method of handling after hour calls. Business hour calls however, are received by the City through many different conduits and to a wide variety of staff. It is proposed that City staff streamline the process of how we receive and triage complaints that are received during business hours. It is believed that this can be accomplished by educating the public and staff on the appropriate reporting channels and maximizing and training staff on the technology that is already available. It is estimated that the cost to develop an online complaint reporting system would be on the order of approximately \$30,000.

2.6.5. Vehicle Tracking Systems

Technology exists that can provide the City the ability to trace vehicle fleet movement. The City currently leverages this technology to realize efficiencies, and to monitor its fleet of winter control vehicles plowing roads to ensure no routes have gone untreated. This technology can certainly be expanded to incorporate PFCS vehicle fleet. It is estimated that the annual operating cost of a vehicle tracking system would be between \$10,000 and 30,000 per year.

3. Potential Enhanced Service Delivery Models

3.1. Prioritized Service Model

This service model would see the City optimize winter control services for sidewalks and related AT routes that the City already maintains by prioritizing areas of the City based on active transportation and pedestrian-related demands. Factors that helped City staff forge service priority zones included the Transportation Master Plan polices and strategies, proximity to key transit corridors, pedestrian volumes, key destinations and attractions within the city, as well as key nodes and corridors defined in the City's Official Plan. This model prioritizes City winter control staff resources into four geographic priority zone and service times. The objective of this model is to strategically enhance winter sidewalk service delivery. The priority zones and proposed service delivery times are summarized below. A map highlighting the priority zones geographically is available in Attachment 'D'.

- Priority Zone One – 12 hour service
- Priority Zone Two – 24 hour service
- Priority Zone Three – 36 hour service
- Priority Zone Four – 48 hour service

In addition to Priority Zones 1-4, staff believe that key MUT routes to schools should be given the priority similar to the Priority One Zone, meaning that key identified MUT routes to school would be aimed to be serviced within a twelve hour period following a snow storm. A map highlighting key MUT to schools is available in Attachment 'E'.

City staff estimated that it takes City crews approximately three-to-five days to clear the City's 164 km of sidewalk and related active transportation infrastructure. While recognizing benefits clearing infrastructure in a more strategic manner, it remained unclear whether the overall time to clear the City's entire sidewalk network would improve. Staff therefore ran analyses to estimate operational resources required to meet overall MMS target of 48 hours. Staff estimate that it would require the following additional resources to meet the 48 hour MMS standard.

- Two new sidewalk snow plows; and
- Additional staff resources to supplement afternoon and night shifts to optimize use of existing complement of sidewalk snow plows.

3.2. Addressing Current Gaps in Service Model

This model would see the introduction of all service improvements identified by staff in Section two - Potential Solutions to Address Gaps in Service. This model would include the following service improvements identified by staff:

- Purchasing two new articulated wheel loader units to clear crosswalks at intersections;
- Contracted assisted service program for residents;
- Contracted snow-blowing hauling service;
- Leveraging new technology.
- Increasing by-law enforcement and adding a customer service representative to intake and triage sidewalk snow complaints via telephone

3.3. Combined Prioritized Service / Addressing Current Gaps in Service Model

This model would essentially incorporate the two service delivery models discussed in Sections 3.1 and 3.2. This model would therefore see the City benefit from prioritizing existing winter sidewalk services by geographic priority zones summarized in Section 3.1. Additionally, residents of Waterloo would also benefit from the City actively addressing current gaps in service by introducing new services summarized in Section 3.2. The size and scope of each of these additional services can certainly vary, and as such have varying impacts to overall capital and annual operating costs. Given that both service models provide positive benefits to the community, staff developed three versions of this model adjusted for potential property tax increases ranging between approximately one and three per cent. Capital and annual operating cost impacts of the three models are discussed in Section four of this report.

4. Capital and Annual Operating Cost Impacts of Proposed Model

4.1. Capital Needs and Cost Impacts

In 2022, IPPW2022-018 Winter Maintenance Update report to Council identified the need for two additional sidewalk plows under recommendation four: “that Council support the recommendation to add two trackless units to the capital budget in 2023 and 2024 as needed for growth and intensification.” These units were required to provide additional snow clearing capabilities for the increase in the number of trails throughout the City. The request for additional equipment was strategically delayed pending the results from the winter maintenance working group recommendations to be presented to Council by mid-2023. At this time, no previous equipment increases have been requested and all requests are being presented in this report.

In order to meet service timelines and to add new services enhancements as identified in previous sections of this report, the City would be required to purchase, at a minimum, the following vehicles:

- Two sidewalk plow units; and
- One articulated wheel loader unit; and
- One crew cab

It is estimated that two sidewalk plows would cost approximately \$500,000, one articulated wheel loader unit \$180,000 and \$150,000 for one crew cab.

4.2. Annual Operating Cost Estimates

Annual operating costs are comprised of a number of items including cost to deliver contracted services (including snow-blowing hauling service and the assisted service for residents). In addition to contract services, other operating cost would include materials required to operate additional vehicles such as fuel and salt, additional staff time and resources. The following service models were developed in consideration of potential property tax increase rates of one to three per cent.

4.3. Potential Service Models Based on Three Level of Service Scenarios

The following table summarizes three potential service models for consideration based on theoretical levels of service and service triggers and resulting estimated property tax increases. In practice, it is likely that all services would be provided on a continuous “as-needed” basis given the dynamic nature of winter weather. Staff would aim to introduce and optimize these additional services over the course of three years. These models have been developed for Council’s consideration, however opportunity remains to explore alternative permutations through the Council workshop.

Table 1 – Optional Service Models

Enhanced Service Options	Option Number	Item	Optional Service Models & Triggers		
			A	B	C
		Snow Events Addressed	6	12	18
		Service Trigger (cm)	8cm	5cm	3cm
Clearing Crosswalks at Intersections	1	Conversion of seasonal staff to full-time	2	3	4
		Operating Staff Conversion Cost	\$100,000	\$150,000	\$200,000
		Articulated Wheel Loader	1	2	3
		Vehicles Capital Acquisition Cost	\$180,000	\$360,000	\$540,000
		Vehicle Annual Operating Cost	\$25,000	\$50,000	\$75,000
		Intersections Cleared	50	100	150
Assisted Services Contract	2	Number of Applicants Approved	100	200	300
		Operating Program Cost	\$100,000	\$200,000	\$300,000
Snow-loading 30km of Curb-Faced Sidewalk	3	Operating Snow-blow / Haul Contract	\$270,000	\$540,000	\$810,000
		Operating New Sidewalk Plowing Maintenance	\$114,000	\$114,000	\$114,000
		New Sidewalk Snow Plow Units	2	3	4
		Sidewalk Snow Plow Capital Acquisition Cost	\$500,000	\$750,000	\$1,000,000
		Sidewalk Snow Plow Annual Operating Cost	\$50,000	\$75,000	\$100,000
Prioritizing School-related MUT and MUP	4	Cost of prioritizing service	\$0	\$0	\$0

Enhanced Service Options	Option Number	Item	Optional Service Models & Triggers		
Additional Service Requirements	5	Fleet mechanics, contracted services, storage	\$180,000	\$180,000	\$180,000
Additional Accessibility Supports	6	Support improved winter accessibility for people with disabilities	\$20,000	\$20,000	\$20,000
Increased By-law Enforcement	7	Contract Officers	3	4	5
		Contract Officer Operating Cost	\$150,000	\$200,000	\$350,000
		Vehicle Rental	3	4	5
		Vehicle Rental Operating Cost (for 4 month period)	\$18,000	\$24,000	\$30,000
Customer service support	8	Sidewalk snow customer service-intake Operating Cost	\$25,000	\$25,000	\$25,000
Clearing Regional Road Sidewalks	9	Service Zone	Priority 1	Priority 1 and 2	Priority 1-4
		Additional Sidewalk (km)	25	35	48
		Operating Cost	\$95,000	\$133,000	\$182,000
Technology		Vehicle Tracking systems, Licence Fees, monitoring Operating Cost	\$20,000	\$25,000	\$30,000
Snow Shovelling / Salt Dispensing Crew	10	Conversion of seasonal staff to full-time	2	4	6
		Staff Conversion Operating Cost	\$100,000	\$200,000	\$300,000
		Crew Cab Vehicle	1	2	3
		Vehicle Capital Acquisition Cost	\$150,000	\$300,000	\$450,000
		Vehicle Annual Operating Cost	\$20,000	\$40,000	\$60,000
Financial Impacts		Total	\$2,117,000	\$3,386,000	\$4,766,000
		Total Property Tax Increase (Capital and Operating Cost)	2.3%	3.7	5.1%

Enhanced Service Options	Option Number	Item	Optional Service Models & Triggers		
		Total Capital Costs	\$830,000	\$1,410,000	\$1,990,000
		One time Tax Levy - Capital	0.9%	1.5%	2.2%
		Annual Operating Cost	\$1,277,000	\$1,966,000	\$2,766,000
		Tax Increase (excluding one time capital)	1.4%	2.2%	3.0%

*Figures subject to rounding

5. Environmental Impacts

5.1. Estimated Increases in Fuel

It is estimated that two additional sidewalk plow units, which would help the City meet MMS timeline targets would increase the City’s sidewalk plow fleet by 25 per cent. It is estimated that the two additional vehicles would not result in an increase in fuel as these vehicles would essentially offset demand on other units.

It is however estimated that the addition of one articulated wheel loader clearing 50 intersections a day would result in an increase of 4,800 litres of fuel used per year.

Should the City adopt a practice to plow an additional 30 km of curb-faced sidewalk, it is anticipated that this would result in an increase in approximately 2,880 litres of fuel per year used by sidewalk plowing units.

Should the City opt to adopt a practice to plow an additional 48 km of regional roads, this would result in an increase in an additional 3,840 litres of fuel used per year.

5.2. Estimated Increase in Salt

Similar to fuel use, it is assumed that the two additional sidewalk snow plows would not result in an increase in salt use as these vehicles would essentially offset demand on other snow plow units.

Should the City adopt a practice to plow an additional 30 km of curb-faced sidewalks, it is anticipated that this would result in an increase in approximately 150 tonnes of salt per year.

Should the City opt to adopt a practice to plow an additional 48 km of regional roads, this would result in an increase of 240 tonnes of salt per year.

For context an additional 390 tonnes of salt is equivalent to filling 40 tandem trucks with salt.

5.3. Additional Environmental Considerations

Using sidewalk plows to clear snow has additional environmental considerations, including greenhouse gas emissions, salt use and noise pollution. The combustion of fuel releases greenhouse gases. The use of sidewalk plows for snow clearing therefore contributes to the overall carbon footprint of the City. Sidewalk plows require the use of salt, which can contaminate soil, groundwater and surface water, affecting the quality of drinking water and harming aquatic life. Additionally, salt can damage trees, plants, and other vegetation along roads and sidewalks. Sidewalk plows can be quite loud, which can cause noise pollution in residential areas during early morning or late night snow clearing operations.

5.4. Additional Repairs to Sidewalk and Boulevards

The City's current repair and restoration program, for damage caused by equipment during plowing, would need to be expanded.

6. Limitations

6.1. Vehicle Storage

The addition of the proposed complement of equipment is expected to result in increased pressure on or storage capacity at the City's Service Centre. Traditionally winter operation vehicles would be washed down of salt residue and stored inside during the winter months between shifts. The current indoor storage space at the Service Centre is at capacity. Storage of the proposed additional equipment will have to be accommodated strategically in the yard in a location that allows the vehicles to be plugged into block heaters when not in use.

6.2. Snow Storage Facility

The City currently owns and operates a snow storage facility on Frobisher Drive. This facility has been in operation for a number of decades and has a current snow storage capacity of approximately 25,000 m³ of snow. A non-scientific assessment of this facility last winter suggested that the facility operated at approximately 75 per cent capacity. The remaining capacity therefore equates to approximately 6,250 m³ of snow. The City's snow storage facility currently receives most of its snow from City-owned parking lots, LRT and City core snow loading operations.

An analysis was undertaken to better understand the potential capacity impacts on the City's current snow storage facility on Frobisher Drive. Assuming the City receives the

same amount of snow in future years, capacity to manage additional snow loading operations may be limited to approximately 6,250 m³ of snow. The analysis suggests that the City has limited ability to undertake additional snow loading operations that would be associated with the proposed curb-faced sidewalk operations. The analysis yielded the following conclusions:

- A 10 cm snow fall yields 150 m³ of snow to load per km of sidewalk;
 - 1000m of sidewalk x 1.5m sidewalk width x 0.1m snow depth = 150 m³;
 - 1000m of roadway x 3.5m lane width x 0.1m of snow depth = 350 m³
- 30 km per 10 cm snowfall would require removal of 15,000 m³ of snow;
- Six snow storms with average 10 cm snowfall would require 90,000 m³ of snow to storage; and
- The City would exceed current now storage capacity by approximately 83,750 m³.
- This analysis may be underestimating storage needs since current annual snow fall average in Waterloo Region is approximately 150 cm.
 - Should we receive an average of six, 20 cm snow storms, capacity needs would double to 180,000 m³.

In order to address this critical limitation, the City would have to explore options to address its capacity shortfall by considering:

- Requiring the contractor to haul snow somewhere besides Frobisher Drive snow storage facility;
- Not removing and maintaining snow on City-owned parking lots;
- Investing new capital into upgrading the City's existing storage facility;
- Blowing snow to adjacent property where possible;
- Negotiating hauling snow to other City-owned parking lots / facilities;
- Negotiating snow storage with other adjacent municipalities having facilities with spare capacity; and
- Negotiating future snow storage facility currently being contemplated with the region.

Given this significant limitation, there is an opportunity to contract snow loading operation as noted in Section 2.3.2 to include provisions to utilize alternative snow storage options once the Frobisher Drive snow facility has reached capacity. This is an unknown cost at this time and may result in higher costs than currently estimated.

To address this issue in the mid-to-long term, additional funds would be required in the capital budget for the design and upgrade of the existing snow storage facility situated on Frobisher Drive and/or construction of a new facility potentially cost shared with the Region.

7. Financial Impacts

Winter Sidewalk Potential Service Enhancements costs vary based on the potential service models proposed in Table 1. Annual property tax increase will range between 1.4% - 3.0% plus a one-time capital request to fund additional equipment needs of 0.9% - 2.2%. Any Winter Sidewalk Potential Service Enhancements will be subject to approval as part of the 2024-2026 budget approval process.

A phased implementation is anticipated regardless of the service model option selected, as any implementation will be defined by equipment procurement delays, timing of staffing requirements and other operational needs. Actual tax implications will be derived from the direction from Council in addition to the other broader city-wide budget requests.



**Winter Sidewalk Maintenance Review and Potential Service Enhancements
Workshop
IPPW2023-000**

Attachment 'B' – Community Engagement

1. Background

1.1. Previous Community Engagement on Sidewalk Snow Clearing

City staff reviewed community engagement records from recent projects where community feedback was received regarding sidewalk snow clearing. Recent community consultations (including the Transportation Master Plan in 2021, 2023 Budget process and 2023-2026 Strategic Plan) included the identification of several areas of improvement for sidewalk snow clearing, and advocacy for city-wide snow clearing:

- Sidewalks not cleared to their full width, or along the entire path of travel
- Intersections, crosswalks and trail crossings blocked by snow piles from road plowing
- Snow blocking access to pedestrian crossing signal buttons at crossings
- Road plows pushing snow onto curb-faced sidewalks
- Issues with bus stop access (sidewalks not cleared to get to the stop, the stop itself is not cleared, or snow piles block access to the bus at the curb)
- Roads should not be prioritized over sidewalks
- Concerns with using municipal enforcement officers to encourage compliance with by-law
- When sidewalks are not accessible, this disproportionately impacts low income households, people with disabilities, older adults, and anyone using an assistive mobility device
- Individuals should clear their own sidewalk and help others that need assistance

Previous community engagement was summarized and shared on the Engage Waterloo project page for Sidewalk Snow Clearing, noting that it was community advocacy during the 2023 Budget process that lead to Council's motion for this review.

1.2. Community Engagement Plan

Project information and a general survey were shared with the community on Engage Waterloo. Promotion included a media release, City social media channels, digital screens in City facilities and Waterloo Public Libraries, posters in facilities and shared with neighbourhood groups, City E-newsletters (City News, Engage Waterloo Update, Neighbourhoods, Economic Development) as well as the Uptown BIA newsletter. Project information, a link to the survey and an invitation to contact the City working group directly with feedback was emailed to all Committees of Council and advisory groups. Engage Waterloo surveys can not be viewed as statistically reliable or representative, but do offer a wide range feedback and insight for Council consideration.

The City held two focused consultation sessions; one with invited participation from through the Grand River Accessibility Advisory Committee (GRAAC) and contacts within the disabled community, and a second with older adults invited through Age-Friendly Waterloo and contacts. The working group's assumption in focusing engagement on these parties was that opportunities to benefit these impacted groups would benefit everyone.

The previous community advocacy for city-wide sidewalk snow clearing was recognized in the consultation process. Communication about the sidewalk snow clearing engagement was clear that consultation for this review would focus on ways to improve the city's current shared model of sidewalk snow clearing.

Staff view the engagement process as a success, and appreciate the number of people willing to share feedback through the survey, email or in-person. The candour of those sharing personal experiences with winter accessibility challenges is especially appreciated. The working group is satisfied that the level of engagement provided quality feedback to help staff with recommendations and Council make an informed decision.

2. Community Engagement Summary Results

Feedback from the community engagement process was shared with the City working group to assist in the development of the potential service models that will improve the current sidewalk clearing services. While staff were clear during consultation this review would focus on ways to improve the City's current shared model of sidewalk snow clearing, there was continued advocacy from the community through all levels of engagement for city-wide sidewalk snow clearing.

2.1. General Engagement: Public Survey

The online survey was available from April 12, 2023 to May 3, 2023. During the time the survey was open, there were over 3,500 visitors to the Engage Waterloo project pages, and 1159 survey responses were received. The survey asked questions specific to

property owner sidewalk snow clearing, city-maintained sidewalk snow clearing, suggestions for improvements, and acceptable potential tax impacts for improvements.

Quantitative and qualitative summary results were used to inform the potential service model recommendations:

- Survey respondents included people who voluntarily described themselves as people with disabilities (81 people), 2SLGBTQ+ (79 people), an immigrant or refugee (68 people), a member of a racialized group (61 people), a member of an ethnic or cultural group (59 people) and First Nations, Inuit or Métis (8 people)
- Survey respondents included a wide range of ages, including 18% who are 65 and older
- Survey respondents included representation from all wards
- Most responses were from property owners responsible for sidewalk clearing (77%), and the majority of those (75%) cleared sidewalks themselves
- Sidewalk users included recreational use for exercise or walking the dog (49%), primary way to get around the city (27%), occasional use (15%) and mainly to get to public transit (6%)
- A small majority (60%) feel that the current clearing timeline of 24 hours for property owners is reasonable, and this is also a reasonable timeline to follow before enforcement begins
- There should be a shorter enforcement timeline or no warning on subsequent snowfalls for repeat offenders
- The majority (82%) either strongly agree (51%) or agree (31%) that bylaw should focus proactive enforcement in priority sidewalk areas and those connecting to transit
- City-maintenance priorities to address with enhanced service options were ranked by respondents in order of most (1) to least (6) important:
 - Blockages (2.35): make sure curbside cutouts at intersections and crosswalks are cleared and not blocked by street plow piles, and that push buttons to request the signal for crossing can be reached
 - Timeliness (2.73): clearing within 24 hours of snowfall/the same standards as other property owners are required to do
 - Consistency (3.44): clearing to bare sidewalk/the same standards as other property owners are required to do
 - Connectivity (3.70): clearing additional sidewalk kms to link various city-cleared sidewalks, trails, paths and transit stops
 - Accumulation (4.07): clearing city-maintained sidewalks after snowfalls of any/a lower minimum amount, not just following a snow event
 - Sustainability (4.56): meeting a minimum standard of clearing to reduce the environmental impacts of greenhouse gas emissions from equipment and salt use on our groundwater

- The top five priority locations for sidewalk access were:
 - ION and GRT transit stops (850 priority selections)
 - Schools (including post-secondary) (827 priority selections)
 - Hospitals and health services locations (806 priority selections)
 - Sidewalk travel routes along major roadways (689 priority selections)
 - Sidewalks along GRT transit routes (621 priority selections)
- Sidewalks should be prioritized like roads, and clearing should begin during a snow event, not after
- Proactive enforcement is required (and preferred to reporting) when it comes to property-owner sidewalks
- Supports are needed for the elderly people with disabilities to assist with their own snow clearing
- The standards for sidewalk snow clearing should be the same for the city and for property owners, and the city should go above a minimum standard
- Continued advocacy for city-wide sidewalk snow clearing

Slightly more than half of survey responses (58%) strongly agreed or agreed with a tax increase to support winter accessibility. Many noted that the parties most impacted by sidewalk snow clearing (households with lower income, people with disabilities, older adults) would also be the least able to afford the impact of such a tax increase.

The survey asked about specific tax increases for potential service enhancements:

- A potential one per cent tax increase (about \$15 per year for the average household, and \$925,000 for the budget) had 51% of responses definitely support, 26% might support, 20% would not support, and 3% not sure.
- A potential two per cent tax increase (about \$30 per year for the average household, and \$1,850,000 for the budget) had 33% of responses definitely support, 28% might support, 35% would not support, and 4% not sure.
- A potential three per cent tax increase (about \$45 per year for the average household, and \$2,775,000 for the budget) had 29% of responses definitely support, 23% might support, 42% would not support, and 6% not sure.

The full survey report is available on [Engage Waterloo: City of Waterloo sidewalk snow clearing](#).

2.2. Focused Engagement: People With Disabilities and Caregivers

On May 4, 2023, the City hosted a hybrid meeting with invited participation from the Grand River Accessibility Advisory Committee and contacts within the disabled community. Amy Ross, Accessibility Advocate, Nicole Papke, Director Municipal Enforcement Services and Cari Van Niekerk, Manager Corporate Communications engaged this group in discussion with several focus areas which were provided to registrants in advance.

Although the meeting was not well attended, those present were very candid in sharing their lived experience. Topics for discussion included:

- Regular routines and how they are adjusted or change in the winter
- The City's existing services and recommendations for additional support services
- Geographic problem areas where the greatest sidewalk accessibility barriers occur
- Ways to improve two-way communication and reporting for winter sidewalk accessibility

2.2.1. Adjusting Routines in Winter

Staff asked about routines, typical time of day for travelling away from home, what types of activities people travel for, and how routines change in the winter months as a result of poor sidewalk accessibility. The impacts of sidewalk snow clearing to routines included:

- Commitments such as work, school, medical appointments, recreational activities and social events have been affected or cancelled when sidewalks are not accessible
- This happens for extended periods immediately following snowfall, not just during a snow event when attendance challenges are generally understood
- Attendance in any activity can't be guaranteed when sidewalk accessibility is uncertain
- Missing scheduled activities is upsetting for kids and costly for parents
- It was emphasized that registering for activities when attendance can't be guaranteed is a waste of money; not registering for activities over winter leads to increased isolation
- Sidewalks should be accessible at all times of day, every day of the week
- Spontaneous options, such as taxis, for transportation when sidewalks are not accessible cost a lot for everyone but especially folks on fixed income; this can also require dependence on others; or following a strict booking schedule to ensure a MobilityPlus ride – this service has a lengthy application and approval processes; all of these options are also less reliable during snow events
- Pick-up windows for MobilityPlus are a full half an hour; sometimes accessing transportation services requires waiting outside at a designated meeting place, unprotected from the elements
- For basic needs like access to food being stranded at home can require extra efforts; delivery services are expensive, especially on a fixed income, and not all requirements (dietary restrictions, allergies) can be met with confidence through online ordering or easily accessed (specialty shops)

- Detouring off a regular route of travel to get around an inaccessible sidewalk can be distressing for anyone who sticks to routine or requires preparation ahead of time
- Detouring off a regular route of travel is also risky as there could still be barriers to getting to the desired destination but further away from home
- Navigating single lane or multi-lane roadways when sidewalks are blocked is not a safe or reasonable option; drivers frequently pass people using the street too quickly often spraying accumulated snow
- Non-disabled people are not always understanding about events and activities that are missed due to inaccessible sidewalks, especially once streets are clear for cars; fees are a reality for missed appointments

2.2.2. Support Services for Sidewalk Snow Clearing

Staff shared some background information on the [Home Support Services](#) available for older adults and people with disabilities for snow removal, and asked for feedback on the current program, as well as suggestions for snow clearing support services that could be recommended to Council. Discussion on support services for snow clearing included:

- There are significant challenges with the limited number (65-70) of client spots available for snow clearing in the entire City and equally challenging to get enough brokered workers to match with the clients for the entire winter
- The brokered cost is a concern (not all participants realized that clients pay an hourly rate to brokered workers) even though having a lower household income is part of qualifying
 - If it snows five days in a row, residents may be forced to choose between groceries for the week and paying the service to meet their sidewalk clearing obligations
- If even one person in the household is considered physically able to clear snow, the household doesn't qualify; this stipulation is especially challenging for a household with a single caregiver to someone that requires ongoing supervision
- Application processes frequently require demonstration of need, which is both daunting and challenging; sometimes the program is full with clients from previous years
- Expand the service and the criteria so that people who need it can access it, and simplify the application process
 - People who don't navigate disability systems have no idea the amount of paperwork and things that are done repeatedly do in order to be eligible for programs and services
 - An easier application process would also benefit anyone with English as an additional language, and newcomers trying to learn how to access City services

- Consideration for those who are tenants or occupants with responsibility to clear snow from sidewalks as part of their tenancy agreement to be able to access supports
- Could the City connect clients with willing volunteers, instead of brokered workers?
- Even people willing to help may have challenges guaranteeing service
- Find more ways to partner people together: where are the people in need, and can willing volunteers in the neighbourhood take turns working together to assist
- Many people with disabilities live in lower income neighbourhoods, where neighbours may be willing to help but not have the same resources (it is easier for a neighbour with a snowblower to help out clearing sidewalks than one who only has a shovel) so the “just help your neighbour” is harder for some than others, even if they are willing
- Provide funding for on-demand taxi service to support people with disabilities in getting to important engagements when sidewalk accessibility is a concern
 - Make this easy to access, without additional burdens of proving a mobility challenge or the importance of the engagement

2.2.3. Problem Areas for Accessibility

Staff asked about problem areas around the City and the types of properties that are most associated with sidewalk issues in winter. Discussion on problem areas included:

- Challenges with construction sites, unoccupied sites (home for sale, development property, etc.)
- The biggest challenge is the unpredictability of where sidewalk accessibility may be an issue
 - If a property in the neighbourhood is always a problem, it may be possible to avoid, but this only works in a familiar area
 - Corners are almost always a problem, not just because of plows but even those attempting to do their part and clear them have challenges with heavy packed snow left after plowing
 - Disappointing when even corners near City Hall are not cleared, this is another example of jurisdiction standards – City Hall is cleared by a private contractor
 - Suburbs less of an issue for sidewalk clearing than uptown:
 - Are single-owner properties (like in the suburbs) better at clearing than multi-tenant (duplex, triplex, as in uptown) properties because there is a clear responsibility?
 - Suburbs also more likely to have boulevards/places to put snow
 - Unpredictability is challenging for caregivers; if preparation for an outing includes an understanding that progression is from point A to point B, if that

- progression changes it is not always easy to explain why, and upset over the change can bring the outing to an end
- Concerns noted that unpredictability is even a greater challenge for anyone with limited or no vision; they can't easily determine a safe detour if a sidewalk is inaccessible, or see if traffic is approaching
 - Connectivity of sidewalks and bus stops is limited when windrows block the bus stop from the road
 - Frustrating to see only one aspect cleared; people need to be able to access transit!
 - What is the point of prioritizing bus routes for road plowing if people can't access the bus stops?
 - Not all GRT stops are accessible even without snow – there are hundreds of bus stops without concrete landing pads across the Region.
 - “No Winter Maintenance” paths of travel to reduce salt use – often the accessible route (ramp instead of steps) is the one maintained, but this could be challenging if not the usual route of someone who has low or no vision, or someone with an intellectual disability; salt burns the paws of service dogs – people with limited dexterity or mobility cannot brush it off!

2.2.4. Communication and Reporting

Staff asked about experiences with communication and reporting, asking for feedback on our current system and any suggested improvements. Discussion on communication and reporting included:

- The difficulty in knowing who to report an issue to in our multi-tier community (City of Waterloo, City of Kitchener, Region of Waterloo, or Grand River Transit) and when more than one is responsible in an area, the work required to report doubles
- There should be multiple ways to report, not limited to phone, email, and talking to a real person
- The current online reporting system is inaccessible, participants questioned if it could be used with a screen reader
- Reporting is complicated, with too many steps, this is an extra emotional burden and time commitment
- The workload for reporting is placed on people with disabilities; after being physically exhausted from trying to navigate unclear sidewalks there is the additional burden of having to report
- It can take up to 45 minutes to report one block of uncleared sidewalks; remembering all those addresses by the time you return from your destination to report them is difficult
- The volume of auto-response emails generated by reporting multiple addresses is a lot to manage

- Not everyone has the communication ability to call and be understood, or to navigate an online form
- Clearing service times: in an ideal world, sidewalks would be clear within 12 hours.
 - Even the existing 24 hour timeframe is acceptable, if it is dependable
 - The potential 72 hour timeline for reporting, inspection and notice by enforcement staff, and then possibly clearing by contractor if required is not acceptable
- If the snow starts again, the timeframe resets and extends how long sidewalks are unclear and commitments not reachable
- If a sidewalk is reported, a system should be in place to note the timeline for clearing within 24 hours of reporting, and a way to verify accessibility before attempting to go out again (ideally a shared system between cities)
- It seems that it is more effective to report on Twitter; it is easier, allows for photo sharing, it gets immediate attention from city staff as well as other residents who help amplify the message
 - Having winter accessibility championed by the non-disability community helps with frustration, and helps people with disabilities feel they are not alone
- Acknowledgement of a complaint by a person is important, such as on social media, because something is going to be done (similarly this is liked about phone reporting to a person as well)
- There should be systems to monitor for sidewalk accessibility, other than reporting, similar to elevenx parking pucks or crowd sourced data
- City staff from many teams are driving around the city all day (utilities and maintenance, staff going to offices or to meetings/site locations, building inspectors, etc.) Can they all monitor and report sidewalk issues?
- Where winter sidewalk accessibility can't be guaranteed at all times of day (an impossibility even under full city responsibility due to timing of snowfall, ongoing accumulation, etc.) having something to indicate status of sidewalks to help plan a route would be useful
 - The tool could show which sidewalks have been plowed when or which ones are clear, where issues have been reported and where they have been resolved
 - Investigate technology options that can monitor sidewalk conditions to make this information available (without relying on crowd-sourced reporting)

2.2.5. Additional Feedback

Additional comments beyond the discussion topics included:

- Improve the efficiency of road plowing and use the savings to clear more sidewalks

- Improve the efficiency of the current city-maintained sidewalk snow clearing operations (have sidewalk plows continue plowing between city-maintained sections, instead of lifting the plow)
- City-wide sidewalk snow clearing would involve millions of dollars for staff and equipment and there would still be challenges with ongoing snowfall accumulation and not being able to be everywhere at once; it would not guarantee winter sidewalk accessibility
- Could there be a possibility of people with disabilities voluntarily submitting their street or neighbourhood to a (privacy protected) system, to help with city-maintained sidewalk maintenance priority mapping or support service delivery
- Consideration is needed to make sure that priority sidewalk maintenance supports active transportation and transit access for everyone, but additional considerations need to be made to find ways to support those who find it challenging to leave their homes in the winter, so that they can remain involved in the community and not be isolated
- It is challenging to think of protecting anonymity and privacy while coming up with some more custom options to support those community members who are most in need, but this is what breaking down barriers looks like
- Lower turnout at the meeting could be a result of fatigue with the City talking about sidewalks and winter maintenance, and not having solutions to improve winter accessibility
- Kitchener and Waterloo have found some plowing efficiencies when it comes to border streets by working together; keep working with other municipal partners to find solutions that benefit everyone with improved accessibility (example: what does the plow servicing bus stops do between stops?)
- When it comes to the environment and a potential increase in GHG emissions from additional snow removal equipment, making sure sidewalks, trails and transit are accessible through the winter helps keep people out of cars
- There is an opportunity for outside-the-box solutions from our Education City post-secondary students in engineering, systems design and environment disciplines to improve winter accessibility
- This topic needs to place more emphasis on the human rights impacts alongside operational aspects

2.3. Focused Engagement: Older Adults

On May 5, 2023, the City hosted an online meeting with invited attendees from Age-Friendly Waterloo and contacts from the older adult community. Eight people pre-registered and attended the meeting. Pamela Albrecht, Community Outreach Coordinator and Cari Van Niekerk, Manager Corporate Communications attended and lead discussion with several questions provided to the group ahead of time.

Attendance at this meeting was ideal for a focused discussion, allowing all attendees the opportunity to comment and discuss the questions before them. Attendees were very candid and open in sharing responses, providing valuable insight into their lived experience. Topics for discussion included:

- The unique challenges older adults face when it comes to navigating and maintaining winter sidewalks
- The City's current Home Support Services and recommendations for additional support services
- Ways to improve communication and reporting for winter sidewalk accessibility

2.3.1. Challenges Navigating and Maintaining Winter Sidewalks

Staff asked about the challenges older adults face when it comes to winter sidewalks, both as sidewalk users and as property owners responsible for snow removal. Discussion on the challenges older adults face included:

- Older adults often have to plan their route before leaving home, the unknowns about sidewalk accessibility means travel may not be according to plan
- The difficulty in knowing who to report an issue to in our multi-tier community (City of Waterloo, City of Kitchener, Region of Waterloo, or Grand River Transit)
- Priority is snow removal on roads over other forms of transportation that older adults rely on; bus stops are often not cleared for many days
- Walking is an important form of exercise for so many older adults
- Sidewalks that are not cleared to bare pavement are unsafe, falls are more hazardous for older adults
- Solutions that work for older adults will work for all residents (“design for the old and benefit everyone”)
- Worst sidewalks in the neighbourhood should not be the City maintained sidewalks
- Snow left by the plow at the end of the driveway is challenging when it comes to being able to get in/out of the house

2.3.2. Support Services for Sidewalk Snow Clearing

Staff shared some background information on the [Home Support Services](#) available for older adults and adults with disabilities for snow removal, and asked for feedback on the current program, and suggestions on snow clearing support services that could be recommended to Council. Discussion on support services for snow clearing included:

- There is not a lot of awareness about the program; speculation about whether this is on purpose since the program is limited/often full

- The City should raise awareness only if access and clients served can also be increased
- The potential for the City to recruit names of people willing to help out (not brokered workers, but willing volunteers) that residents could access in their neighbourhoods
- Screening is important, older women living alone in particular feel very vulnerable when it comes to potential services
- Home Support Services help older adults to remain in their homes
- While coordination and vetting of assistance (either paid or volunteer) is important, it does not have to be done by the City if there are other entities or organizations that could also screen and help coordinate
- Staff capacity to support an expanded program could be seasonal to meet winter clearing demand
- The ultimate goal should be for the whole city to get their sidewalks plowed

2.3.3. Communication and Reporting

Staff asked about experiences with communication and reporting, asking for feedback on our current system and any suggested improvements. Discussion on communication and reporting included:

- The difficulty in knowing who to report an issue to in our multi-tier community (City of Waterloo, City of Kitchener, Region of Waterloo, or Grand River Transit)
- Reporting by phone and talking to a person is preferred, a 24-hour (seasonal) hotline would be welcome
- There is a problem with neighbours reporting neighbours, neighbours may rely on each other for other things; the neighbour could be great, but does not clear their sidewalk
- Enforcement after a report should include an educational component on the importance of sidewalk snow removal to community accessibility
- Enforcement should include consideration for why a property owner may not have met the standards, determining if property owner is experiencing challenges (with health, with contracted service performance, etc.)
- Enforcement should also include provision of options to assist homeowners meet their snow removal obligations, such as recommended companies or programs to assist

2.3.4. Additional Feedback

Additional comments beyond the discussion topics included:

- The different expectations for property owners versus the City

- Older adults have to pay for a lot of support services to remain in their homes/in the community; sidewalk snow removal is often an additional cost above driveway snow removal
- Even for those seniors contracting a service to help there are challenges
 - Many contractors require at least two centimetres of snow before providing service, but the standard in our bylaw is “bare pavement”
 - During a snow event, contractors become overworked and spread very thin and may not arrive to complete service in time

2.3.4.1. Feedback from Age-Friendly Waterloo Committee Meeting

The Age-Friendly committee also provided feedback on sidewalk snow clearing discussed at their Committee meeting on April 25, 2023:

Communication

- All city staff, regardless of their position, should be keeping an eye out for areas that need clearing as they move around the city and know who to report to for follow up
- Suggestion of a hotline that residents could call to report

Enforcement

- Take an educational approach about why it is important from an accessibility perspective
 - note that it is helpful to people with disabilities (e.g. to get to work);
 - helpful to older people (e.g. who need to get to their mailbox)
- “Positive peer pressure” could be leveraged at the neighbourhood level
 - this was raised in relation to situations where one or two residents on a street generally don’t clear their sidewalks
 - also as a response to what we’ve heard about people not wanting to report their neighbours
- Goal is motivation without being punitive

What should get cleared?

- Identify priority routes using staff knowledge and outreach to the community – e.g. access to transit, schools, hospitals, healthcare locations
- Noted the need for collaboration with the Region, especially related to transit

Support programs for home owners

- Ensure older adults know what programs are available to them; e.g. enhancement of awareness about the program the City offers
- Could neighbour connections be leveraged? Support/promote neighbours watching out for and/or assisting neighbours with snow removal

Other

- Consider using trail clearing equipment to clear sidewalks on the way to clear other trails – clear sidewalks on site-to-site routes; may not end up with a totally fair system, but more sidewalks would get cleared
- Noted that with no one organization responsible for everything within the community, the current approach results in something of a hodge podge (i.e. many entities are responsible), this brings challenges

2.4. Email Feedback Received

Staff invited email feedback as another opportunity to provide feedback. Emails received provided comments on the following themes:

- Concerns over the challenges posed by keeping a curb-facing sidewalk clear
- Support for solutions that address winter clearing for trails and connections, windrows and transit stops
- The users most impacted by lack of sidewalk snow clearing are lower income persons who depend on transit, less able persons and users of mobility devices, students, seniors, parents with strollers
- Solutions that work for people with mobility issues will work for everyone
- Frustrations experienced by students or in the student area with lack of support for snow clearing by landlords
- The City has an aging population that require many supports, including for snow clearing
- Continued advocacy for city-wide sidewalk snow clearing

3. Community Engagement Conclusions

The working group believes the opportunities proposed will address many of the suggestions from the community to improve the current shared model of snow clearing. Enhanced services to clear intersections and crossings, remove snow where there is no boulevard for storage, begin clearing operations earlier, prioritize areas for sidewalk clearing and improve enforcement and reporting will address many issues identified by the community. Improving and expanding winter maintenance so that people can safely use sidewalks, trails and access transit will benefit everyone.

The personal experiences and suggestions from older adults continues to emphasize the importance of home supports in helping these individuals age in place, within our community neighbourhoods. Expanding the current home support service program to allow for more participants would provide needed assistance to older adults and people with disabilities.

People with disabilities face additional barriers during winter beyond the scope of sidewalk snow clearing. These barriers prevent them from accessing essential services, trap them in their homes and isolate them from the rest of the community. The personal

experiences shared regarding their winter experiences should encourage staff beyond the winter sidewalk working group to consider opportunities for specialized support and response to the additional barriers people with disabilities face over the winter.

Attachment 'C' - Illustrations

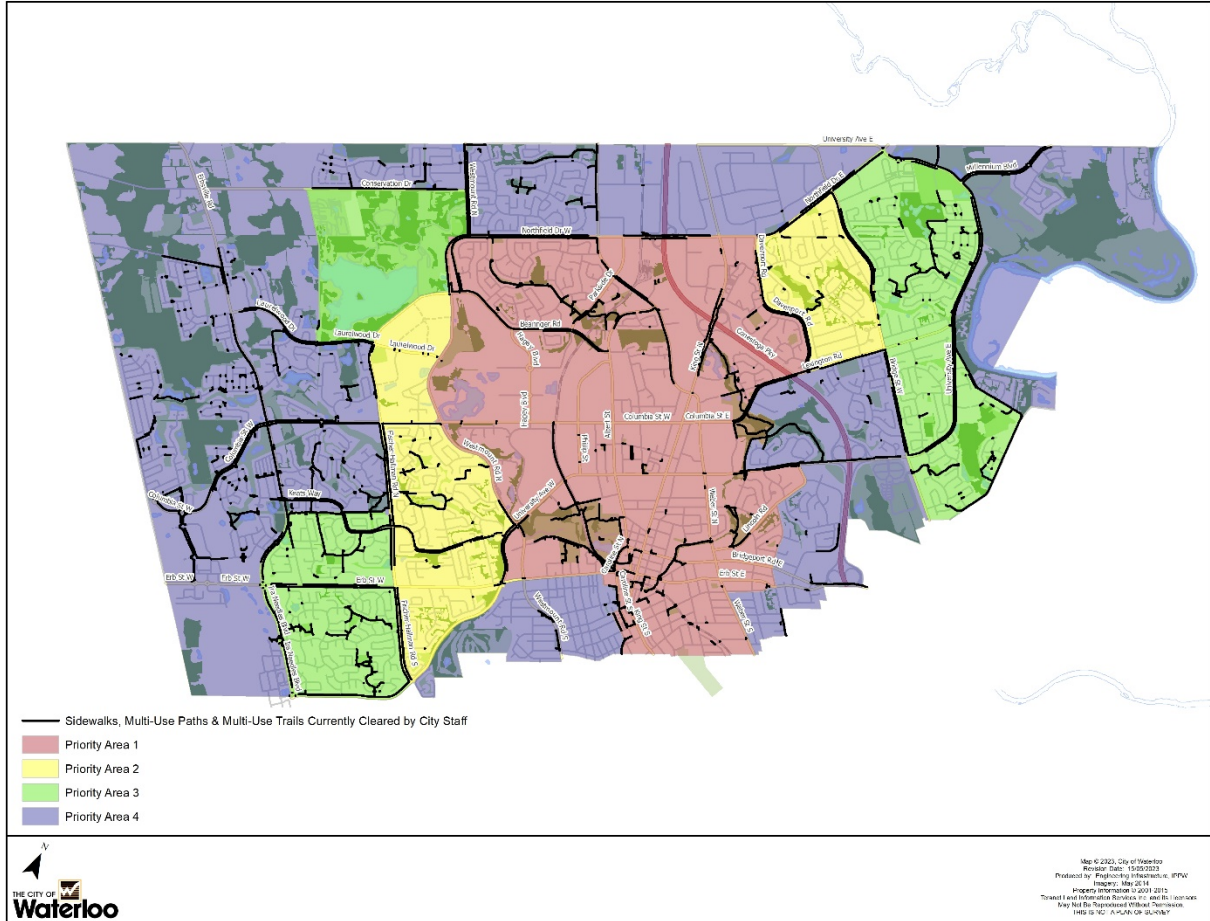
Trackless Sidewalk Snow Plow



Articulated Wheel Loader



Attachment 'D' – Priority Zone Mapping



Attachment 'E' – KEY MUT School Route Mapping

