

**Subject: Solid Waste Master Plan**

**File Number: ACS2024-PWD-SWS-0004**

**Report to Environment and Climate Change Committee on 18 June 2024  
and Council 26 June 2024**

**Submitted on June 7, 2024 by Shelley McDonald, Director, Solid  
Waste Services, Public Works Department**

**Contact Person: Nichole Hoover-Bienasz, Program Manager, Long Term Planning,  
Solid Waste Services, Public Works Department**

**613-580-2424 x25145 / [Nichole.Bienasz@ottawa.ca](mailto:Nichole.Bienasz@ottawa.ca)**

**Ward: Citywide**

**Objet : Plan directeur de la gestion des déchets solides**

**Numéro de dossier : ACS2024-PWD-SWS-0004**

**Rapport présenté au Comité de l'environnement du changement climatique**

**Rapport soumis le 18 juin 2024**

**et au Conseil le 26 juin 2024**

**Soumis le 7 juin 2024 par Shelley McDonald, directrice, Services des déchets  
solides, Direction générale des travaux publics**

**Personne ressource : Nichole Hoover-Bienasz, gestionnaire de programme,  
Services des déchets solides, Direction générale des travaux publics**

**613-580-2424, poste 25145 / [Nichole.Bienasz@ottawa.ca](mailto:Nichole.Bienasz@ottawa.ca)**

**Quartier : À l'échelle de la ville**

## **REPORT RECOMMENDATION**

That the Environment and Climate Change Committee recommend that Council:

1. Approve the Solid Waste Master Plan, including actions and initiatives to support Ottawa's future waste management system, as outlined in this report and attached as Supporting Document 1;

2. Direct staff to immediately begin the planning and implementation for Action Suites scheduled for Year 1 of the Solid Waste Master Plan, as detailed in this report, with an update on implementation progress to be provided 12 months post-implementation; and,
3. Receive the What We Learned Report, attached as Supporting Document 2.

## **RECOMMANDATION DU RAPPORT**

Que le Comité de l'environnement et du changement climatique recommande que le Conseil municipal :

1. approuve le Plan directeur de la gestion des déchets solides, dont les actions et les initiatives destinées à promouvoir le système de gestion des déchets projeté d'Ottawa, selon les modalités exposées dans leurs grandes lignes dans ce rapport et reproduites dans la pièce justificative 1 ci-jointe;
2. demande au personnel de commencer immédiatement à planifier et à mettre en œuvre les suites d'actions programmées pour l'année 1 du Plan directeur de la gestion des déchets solides, selon les modalités précisées dans ce rapport, en déposant un compte rendu sur les progrès de la mise en œuvre 12 mois après la mise en œuvre;
3. prenne connaissance du rapport sur « Ce que nous avons appris » reproduit dans la pièce justificative 2 ci-jointe.

## **EXECUTIVE SUMMARY**

The purpose of this report is to seek Council's approval of the City's new Solid Waste Master Plan (SWMP). This report presents Council with the recommended SWMP Actions and approach for implementation of Actions as detailed in two decision tables, and presents an overview of what was learned through Engagement Series 3 – the third engagement series conducted with stakeholders to support developing the SWMP – and provides an overview of the funding structure for the SWMP. Alongside this report, Council will consider the Solid Waste Long Range Financial Plan which provides an overview of how the City could fund Solid Waste Services over the next 30 years.

The SWMP provides the framework for how the City will manage and divert waste over the next 30 years while ensuring responsibilities for waste management services can be met in a sustainable way. The SWMP was built to be flexible and fluid and will be able to adapt to current and future waste management priorities across the province, country, and the world, all while meeting its core guiding

principles and goals.

In 2019, [Council approved](#) the development of a Solid Waste Master Plan which will provide a framework and direction for waste management over the short (0-5 years), medium (5-10 years), and long (10+ years) term. Staff have used a Council-approved phased approach for developing the Solid Waste Master Plan, with each phase being based on a solid foundation of research, data, best practices, extensive engagement with the public and stakeholders as well as regular legislative touch points with Council during each Phase. As with other Master Plans, it guides but does not commit future Councils and each annual budget process, and will be refreshed every 5 years.

In 2020, Council received the Phase 1 [legislative report](#). Following [Engagement Series 1](#), which included gaining input for development of the SWMP vision statement, guiding principles and goals, staff worked with the technical consultant to determine Ottawa's future waste needs, options to address those needs, and an evaluation tool to determine which options would be best suited to address those needs based on a triple bottom line evaluation process.

In 2021, Council approved the Phase 2 [legislative report](#), including the SWMP's vision statement, guiding principles and goals and received the above noted deliverables for information. Staff then completed the triple bottom line evaluation of the options, generating Actions to be considered for inclusion in the SWMP, and conducted [Engagement Series 2](#).

In 2023, Ottawa City Council received the [Draft SWMP](#), which presented [50 Actions](#) categorized under 25 Action Suites for consideration. Each Action Suite works towards achieving one of five Objectives of the SWMP, and supports the Council-approved SWMP [vision statement, goals and guiding principles](#). Following receipt, staff completed Engagement Series 3, details of which can be found in Supporting Document 2 appended to this report.

The purpose of Engagement Series 3 was to obtain feedback on and gauge general support for the Solid Waste Master Plan and to explain how previous engagement has been incorporated. The series also obtained feedback on which areas of the SWMP resonate the most with residents and which Actions may be easier/harder to participate in. Engagement Series 3 (ES3) took place from February 6, 2024 to March 7, 2024 and received engagement from over 520 participants, through surveys, in-person open-houses, virtual information sessions,

focus groups, emails, and comment submissions via [Engage Ottawa](#). Overall, feedback reaffirmed what was shared in earlier engagement series and what is reflected in the draft SWMP. Participants:

- Generally supported actions in the plan;
- Agreed that the waste management hierarchy should be prioritized (reduce, reuse, recycle, recovery of energy and waste, residuals management);
- Are concerned about how much waste is produced by the community and the impact excess waste has on the landfill;
- Are concerned around some of the barriers for resident participation in various actions and stressed the importance of behaviour change for the success of the SWMP initiatives;
- Are aware that a solution needs to be found to address Trail Waste Facility Landfill life capacity, whether through landfill expansion or new technologies;
- Emphasized the importance of ongoing engagement with residents following SWMP completion and working with community partners to implement the Actions was also frequently mentioned;
- Were satisfied with how their feedback was incorporated in the SWMP, and most said they would participate in future engagement opportunities; and,
- Were interested in learning more about the recommended actions and how they were prioritized for implementation.

The SWMP took this input into account in 3 key ways:

- More details were added to explain the intent of some of the Action Suites and how they were prioritized in the SWMP's planning and implementation timeline;
- Summary documents were added to help explain the more technical and complex concepts in the plan, including summaries of the financial analysis and GHG analysis; and,
- Frequently heard barriers to resident participation were documented, as well as considerations and suggestions to overcome those barriers, which

will be used to inform implementation planning for relevant Action Suites.

Stakeholder engagement will continue to be crucial throughout the implementation of SWMP Actions and will be sought on an as-needed basis.

The SWMP report being tabled remains largely unchanged from the [Draft SWMP](#), other than the additions outlined above as a result of ES3. Staff have however included two decision tables to outline what will commence should Council approve the SWMP, and when Council would expect to receive another update on the SWMP.

The decision tables provided with the SWMP will show which Action Suites:

- Have already commenced planning and implementation following prior Council approval, such as actions within the Multi-Residential Diversion Action Suite and the Firm Garbage Item Limit.
- Will commence planning and implementation in Year 1 following Council's approval of the SWMP, including waste avoidance and reduction Action Suites that were highly prioritized during public engagement.
- Will commence planning in Year 1 following Council's approval of the SWMP, but where implementation will not commence until Year 2 onwards.
- Will be brought back for approval prior to their implementation, including those Action Suites where strategies have not been fully scoped and any decisions concerning new technologies following feasibility study and business case development.

As stated above, implementation of some of the Action Suites will commence in Year 1, should Council approve the Solid Waste Master Plan. Table 1 below shows these Action Suites and a high-level overview of the work that will be conducted on each.

*Table 1: Action Suites to be Planned and Implemented in Year 1*

<b>Action Suite</b>	<b>Year 1</b>
Promotion and Education to support Plan Implementation	Planning and implementation of all actions in this Action Suite will begin, including the development of a Behavioural Management Strategy.
Enhanced Education and Enforcement of Source Separation	Specifically, implementation of the 3-garbage item limit begins, as approved by Council in 2023.
Supporting Additional Diversion in Multi-residential Buildings	Planning and implementing of “Making Green Bin a Prerequisite to Receive City Waste Management Services” will continue, an action within this suite that was approved for advancement in 2023.
Waste Avoidance, Reuse and Reduction Initiatives	Implementation for some of actions within this suite could commence within Year 1, such as Sharing Space/Swaps/ Library/Repair Cafes as well as supporting and initiating a range of community reuse events.

Action Suite	Year 1
Food Waste Reduction Strategy and Reduction Education Initiatives	Implementation likely to commence in Year 1 as this Action Suite was highly prioritized during engagement and has a significant reduction potential.
Ban IC&I Waste from the Trail Waste Facility Landfill	Planning will commence to implement ban on January 1, 2025.
Waste Diversion in Parks and Public Spaces	Action Suite recommended to begin implementing in line with feedback from stakeholder engagement. Work will involve developing a Citywide broad-scale, comprehensive waste diversion program, with recycling and/or organics bins, in parks and public spaces across the city, using lessons learned from the Pilot project.

Examples of Actions that, if approved, will be planned and implemented in Year 1 include:

- The expansion of **Repair Café** offerings, which would have events hosted all across the City of Ottawa, supported, and funded by the City of Ottawa.
- An enhanced **Textile Waste Diversion** strategy to promote different options for diversion, enhance promotion and education, allow more convenient placement of donation bins around the City (subject to regulatory requirements pertaining to public health and safety, property maintenance, and nuisance control), exploring new methods to enhance diversion and reuse/recycling, and more methods for tracking program performance.
- An increase in **Waste Diversion in Parks** as a broad-scale,

comprehensive program is developed and implemented using lessons learned from the Pilot project currently underway. Advancing this Action aligns with feedback learned through Councillor and community engagement and could result in approximately 1,025 tonnes of organic and recyclable material diverted from landfill on an annual basis.

As outlined below, these Actions will require staffing resources to support planning and implementation. Furthermore, Council will receive an update on planning, implementation, and Action performance/progress reports in Year 2 through a SWMP annual update report. Further details on Actions and their anticipated outcomes, resource requirements and anticipated timelines for implementation and reporting back to Council can be found within the Solid Waste Master Plan appended to this report as Supporting Document 1.

Some Action Suites are recommended for *planning* in Year 1, although their implementation may not start until Year 2 onwards, following updates and required approvals from Council. Table 2 below provides an overview of these Action Suites.

*Table 2: Action Suites to be Planned in Year 1, Implemented in Year 2 Onwards*

<b>Action Suite</b>	<b>Year 1</b>
Bulky Waste Diversion Strategy	This will involve developing a strategy to review bulky waste that will focus on decreasing waste generation and maximizing diversion of bulky waste, including mattresses, from the landfill. The strategy will look at various approaches to managing this waste and the potential end markets for the material collected.
Municipal Hazardous Solid Waste Strategy	A strategy will be developed that goes beyond exploring expanding the current mobile depot collection events, taking into account customer convenience and accessibility.



Action Suite	Year 1
Waste Diversion Initiatives and Strategies at City Facilities	Action Suite recommended to begin planning in Year 1 due to relatively high diversion potential of actions and feedback from public engagement. A phased approach is recommended to implement the Action Suite due to the number of facilities involved.
Yellow Bag Program for Small Businesses Review	In Year 1, a review of the Yellow Bag program for small businesses will be undertaken, including eligibility requirements and impacts on Individual Producer Responsibility (IPR) for the recycling portion of the program.

An example of an Action to be planned in Year 1, but that will require further Council consideration before staff can implement is the development of a strategy for **Municipal Hazardous Solid Waste**. Municipal hazardous waste, also referred to as Hazardous and Special Products (HSP), is now the responsibility of Producers under the Province of Ontario's new Individual Producer Responsibility (IPR) recycling legislation. This Action includes developing a strategy focused on decreasing HSP generation and maximizing the diversion of HSP from landfill. The strategy will be informed by Provincial direction while also incorporating feedback from engagement regarding appropriate and most effective services. Members of Council will receive a report to consider how the City of Ottawa will manage and limit hazardous waste, including the funding required for events to safely collect, transport and dispose of waste, in Year 2.

In addition, planning for several individual Actions has already commenced and will continue during Year 1.

Three Actions are currently being planned as directed by Council through previous staff reports, with implementation to begin in the short (0-5 year) term:

- Trail Waste Facility Landfill Expansion ([ACS2023-PWD-SWS-0006](#))
- Separate Leaf and Yard Waste Collection ([ACS2023-PWD-SWS-0004](#))

- Use of Private Landfills ([ACS2023-PWD-SWS-0004](#))

Solid Waste Services staff have also advanced work on the following Actions given the business need to find options/solutions for these Actions prior to critical processing contracts expiring, as deferral until the SWMP's approval would have put the City in jeopardy of contract gaps and risk operational activities.

- Anaerobic Digestion (for processing the City's organics post-2030)
- Landfill Gas Management Strategy

The business cases and recommendations for these two Actions will be tabled in Q1 2025 for Council's consideration.

Furthermore, during the tabling of the Draft SWMP in December 2023, staff were directed to advance the feasibility study and business case for the following Actions ([Motion NO 2023-08-06](#)):

- Mixed Waste Processing and Waste-to-Energy Incineration

The feasibility study and recommendation will be presented to members of Council in Q2 2025 for consideration.

Should Council approve the Solid Waste Master Plan and the corresponding Action Suites, staff will report back to Council following Year 1 of the SWMP to report on the progress of Action Suites initiated immediately upon Council-approval and to provide an overview of Year 2 Actions. Action Suites approved through the SWMP with planning and implementation scheduled post-Year 1 will be completed in accordance with the decision tables shown above.

There are a total of 50 actions included in the SWMP, each of which have a corresponding performance measure. Staff will provide progress reports to Council on actions on an annual basis and consult with City departments as actions overlap with other Services Areas. Collaboration with other City teams will continue to be critical to the success of this SWMP. Following the tabling of the SWMP, Solid Waste Services will coordinate a roadshow for leadership teams across the City to present what was approved by Council and explain where each department will be leaned on and leveraged through planning and implementation. Over the 30-year term of the SWMP, actions are estimated to:

- Reduce waste to landfill by ~31,000 tonnes and divert almost a million

tonnes of waste away from landfill.

- Extend the life of the Trail Waste Facility Landfill by 14 years.
- Reduce ~9,000 tonnes of CO<sub>2</sub>e annually through reducing waste operations and generating renewable energy. This is the equivalent of removing approximately 2,750 passenger vehicles each year.

Specific actions, including the introduction of a new technology for managing and processing waste, could generate renewable energy, increase revenues to help offset costs, reduce pressure on Ottawa's waste system and lessen GHG emissions.

In terms of costs, the City will see an increase for waste management services. This is a result of multiple factors, including but not limited to:

- Ottawa requires increased funding to better align with the costs to manage waste actions and activities; currently Ottawa charges some of the lowest costs for waste management when compared to similar Cities. A large portion of the increase is needed to continue to deliver solid waste services and remain compliant with regulatory requirements, and increase will bring us in line with comparable municipalities.
- Overall cost increase will be due to the increased cost of living, increased resourcing costs including fleet, fuel and staffing.
- The need to more sufficiently fund the Solid Waste reserve fund.

Explicit details on the funding model supporting the SWMP can be found in the Solid Waste Long Range Financial Plan legislative report, accompanying the SWMP.

## **RÉSUMÉ**

L'objectif de ce rapport consiste à demander au Conseil municipal d'approuver le Plan directeur de la gestion des déchets solides (PDGDS). Dans ce rapport, nous présentons au Conseil municipal les actions et l'approche recommandées dans le cadre du PDGDS pour la mise en œuvre des actions selon les modalités précisées dans les deux tableaux de décisions, et nous donnons une vue d'ensemble de ce que nous avons appris dans la série de consultations 3, soit la troisième série de consultations menée auprès des intervenants pour permettre d'élaborer le PDGDS; nous donnons aussi une vue d'ensemble de la structure de financement du PDGDS. De concert avec ce rapport, le Conseil se penchera sur le Plan financier à long terme de la gestion des

déchets solides, qui donne une vue d'ensemble des moyens grâce auxquels la Ville pourrait financer les Services des déchets solides dans les 30 prochaines années.

Le PDGDS constitue la structure-cadre des moyens grâce auxquels la Ville gèrera et réacheminera les déchets dans les 30 prochaines années, tout en veillant à s'acquitter durablement des responsabilités dans les services de gestion des déchets. Le PDGDS a été établi pour être souple et fluide et pourra s'adapter aux priorités actuelles et projetées dans la gestion des déchets dans l'ensemble de la province, du pays et du monde entier, tout en respectant les principes directeurs et les objectifs essentiels.

En 2019, le [Conseil municipal a approuvé](#) l'élaboration du Plan directeur de la gestion des déchets solides, qui définira la structure-cadre et l'orientation de la gestion des déchets à court (moins de 5 ans), à moyen (de 5 à 10 ans) et à long (plus de 10 ans) termes. Le personnel a fait appel à une approche par phases approuvée par le Conseil municipal pour élaborer le Plan directeur de la gestion des déchets solides; chaque phase est fondée sur un socle solide de travaux de recherche, de données, de règles de l'art, de vastes consultations auprès du public et des intervenants ainsi que de points de contact législatifs à intervalles réguliers avec le Conseil municipal durant chaque phase. Comme dans les autres plans directeurs, le PDGDS se veut un guide, qui n'engage toutefois pas les prochains conseils municipaux ni chaque processus annuel de budgétisation et sera réactualisé tous les cinq ans.

En 2020, le Conseil municipal a pris connaissance du [rapport législatif](#) sur la phase 1. Dans la foulée de la [série de consultations 1](#), qui a permis de recueillir les avis pour la déclaration de la vision, les principes-cadres et les objectifs du PDGDS, le personnel a travaillé en collaboration avec l'expert-conseil technique pour déterminer les besoins projetés d'Ottawa dans la gestion des déchets, les options permettant de répondre à ces besoins et un outil d'évaluation pour connaître les options les mieux adaptées à ces besoins d'après un processus d'évaluation selon le principe du triple résultat.

En 2021, le Conseil municipal a approuvé le [rapport législatif](#) de la phase 2, dont la déclaration de la vision, les principes-cadres et les objectifs du PDGDS, et a pris connaissance, pour information, des documents évoqués ci-dessus. Le personnel a ensuite mené l'évaluation des options selon le principe du triple résultat, ce qui a donné lieu aux actions qu'on peut inclure dans le PDGDS, pour ensuite mener la [série de consultations 2](#).

En 2023, le Conseil municipal d'Ottawa a pris connaissance de la [version provisoire du PDGDS](#), qui comportait [50 actions](#) catégorisées dans 25 suites d'actions pour étude. Chaque suite d'actions vise à réaliser l'un des cinq objectifs du PDGDS et à promouvoir [la déclaration de la vision, les objectifs et les principes-cadres](#) du PDGDS approuvés par le Conseil municipal. Par la suite, le personnel a mené la série de consultations 3, dont les détails se trouvent dans la pièce justificative 2 jointe à ce rapport.

L'objectif de la série de consultations 3 consistait à réunir les commentaires sur le Plan directeur de la gestion des déchets solides, à prendre la mesure de l'opinion générale favorable à ce plan et à expliquer comment on a intégré les résultats de la précédente consultation. Cette série a aussi permis de réunir des commentaires sur les passages du PDGDS qui trouvent le plus d'écho auprès des résidents et sur les actions auxquelles il sera sans doute plus facile ou difficile de participer. La série de consultations 3 (SC3), qui s'est déroulée du 6 février au 7 mars 2024, a permis de mobiliser plus de 520 participants dans des sondages, des séances portes ouvertes en présentiel, des séances d'information en virtuel, des groupes de discussion, des courriels et des mémoires de commentaires sur la plateforme [Participons Ottawa](#). Dans l'ensemble, les commentaires sont venus reconfirmer ce qui avait été exprimé dans la précédente série de consultations et ce dont fait état la version provisoire du PDGDS. Les participants :

- sont généralement favorables aux actions du Plan;
- sont d'accord pour prioriser la hiérarchie de la gestion des déchets (réduire, réutiliser, recycler, récupérer et gérer les déchets résiduels);
- s'inquiètent du volume de déchets produits par la collectivité et de l'impact des déchets excédentaires sur la décharge contrôlée;
- sont préoccupés par certains obstacles qui se dressent contre la participation des résidents aux différentes actions et insistent sur l'importance de changer les comportements pour mener à bien les initiatives du PDGDS;
- savent qu'il faut apporter une solution aux problèmes de la capacité de la décharge contrôlée du chemin Trail pendant sa durée utile, qu'il s'agisse d'agrandir cette décharge ou de faire appel aux technologies nouvelles;

- insistent sur l'importance de continuer de consulter les résidents lorsqu'on aura établi la version définitive du PDGDS et mentionnent souvent qu'il faut travailler en collaboration avec les partenaires communautaires pour mettre en œuvre les actions du Plan;
- sont satisfaits de l'intégration de leurs commentaires dans le PDGDS et affirment pour la plupart qu'ils participeraient aux prochaines consultations;
- souhaitent en savoir plus sur les actions recommandées et sur les priorités qui leur sont attribuées pour la mise en œuvre.

Dans le PDGDS, nous avons tenu compte de ces commentaires en faisant appel à trois grands moyens :

- nous avons ajouté d'autres détails pour expliquer l'intention de certaines suites d'actions et les priorités qui leur ont été attribuées dans le calendrier de planification et de mise en œuvre du PDGDS;
- nous avons ajouté des documents de synthèse pour permettre d'expliquer les concepts plus techniques et complexes du plan, dont les synthèses de l'analyse financière et de l'analyse des GES;
- nous avons fait état des obstacles qui se dressent contre la participation des résidents et dont il a été souvent question, ainsi que des considérations et des suggestions permettant de surmonter ces obstacles, dont nous nous inspirerons pour éclairer la planification de la mise en œuvre des suites d'actions correspondantes.

Il continuera d'être essentiel de consulter les intervenants pendant toute la durée de la mise en œuvre des actions du PDGDS. Nous verrons à consulter les intervenants dans les cas nécessaires.

Le rapport déposé sur le PDGDS n'a essentiellement pas changé depuis la [version provisoire du PDGDS](#), à l'exception des éléments ajoutés et exposés ci-dessus dans la foulée de la SC3. Le personnel a toutefois intégré deux tableaux de décisions pour décrire dans leurs grandes lignes ce qu'il lancera si le Conseil municipal approuve le PDGDS et pour préciser à quel moment le Conseil pourrait s'attendre de recevoir une nouvelle mise à jour du PDGDS.

Les tableaux de décisions reproduites dans le PDGDS indiquent les suites d'actions :

- qu'on a déjà commencé à planifier et à mettre en œuvre dans la foulée de la précédente approbation du Conseil municipal, par exemple les actions de la suite d'actions relatives au réacheminement des déchets dans les immeubles à logements multiples et la limite ferme pour le nombre d'articles à déposer sur le bord de la rue;
- que l'on commencera à planifier et à mettre en œuvre dans l'année 1 lorsque le Conseil municipal aura approuvé le PDGDS, dont les suites d'actions relatives à l'évitement et à la réduction des déchets, auxquelles on a attribué des priorités absolues durant la consultation publique;
- que l'on commencera à planifier dans l'année 1 lorsque le Conseil municipal aura approuvé le PDGDS, dans les cas où la mise en œuvre ne sera toutefois pas lancée avant l'année 2;
- qui seront redéposées pour approbation avant d'être mises en œuvre, dont les suites d'actions dans lesquelles les stratégies n'ont pas été parfaitement périmétrées, ainsi que les décisions portant sur les technologies nouvelles suivant l'élaboration de l'étude de faisabilité et de l'analyse de rentabilité.

Comme nous le mentionnons ci-dessus, nous commencerons à mettre en œuvre certaines suites d'actions dans l'année 1, si le Conseil municipal approuve le Plan directeur de la gestion des déchets solides. Le tableau 1 ci-après fait état de ces suites d'actions et donne une vue d'ensemble des travaux qui seront consacrés à chacune de ces suites.

*Tableau 1 : Suite d'actions à planifier et à mettre en œuvre dans l'année 1*

<b>Suites d'actions</b>	<b>Année 1</b>
La promotion et l'information pour assurer la mise en œuvre du Plan	On commencera à planifier et à mettre en œuvre toutes les actions de cette suite d'actions, notamment en mettant au point la Stratégie de gestion des changements de comportement.

<b>Suites d'actions</b>	<b>Année 1</b>
L'amélioration de l'information et de l'application de la séparation des déchets à la source	On commencera essentiellement à mettre en œuvre la limite de trois articles à jeter, selon les modalités approuvées par le Conseil municipal en 2023.
Les mesures permettant de réacheminer plus de déchets dans les immeubles à logements multiples	On continuera de planifier et de mettre en œuvre « [l]'action qui consiste à faire du bac vert une condition préalable pour avoir droit aux services de gestion des déchets de la Ville »; il s'agit d'une action de cette suite dont on a approuvé l'avancement en 2023.
Les initiatives d'évitement, de réduction et de réutilisation des déchets	On pourrait commencer à mettre en œuvre, dans l'année 1, certaines actions de cette suite, par exemple le « [p]artage des locaux/échanges/partage de la Bibliothèque/café-réparation », en plus de promouvoir et de lancer un ensemble d'événements consacrés à la réutilisation des matières dans la collectivité.
La Stratégie de réduction des déchets alimentaires et les initiatives à caractère éducatif pour la réduction	On commencera probablement à mettre en œuvre dans l'année 1 cette suite d'actions, qui était très prioritaire pendant la consultation et qui offre un important potentiel de réduction des déchets.
L'interdiction des déchets industriels, commerciaux et institutionnels (ICI) dans la	On commencera à planifier cette suite d'actions pour appliquer cette interdiction le 1 <sup>er</sup> janvier 2025.



Suites d'actions	Année 1
décharge contrôlée du chemin Trail	
Le réacheminement des déchets dans les parcs et dans les lieux publics	On a recommandé de commencer à mettre en œuvre cette suite d'actions conformément aux commentaires recueillis dans la consultation des intervenants. Les travaux consisteront à mettre au point, à l'échelle de la Ville, un programme complet de réacheminement des déchets, en prévoyant des bacs de recyclage et de collecte des matières organiques dans les parcs et les lieux publics sur tout le territoire de la Ville, en s'inspirant des leçons apprises dans le cadre du projet pilote.

Voici des exemples d'actions qui, si elles sont approuvées, seront planifiées et mises en œuvre dans l'année 1 :

- l'extension des **cafés-réparation** offerts, ce qui permettrait d'organiser des événements sur tout le territoire de la Ville d'Ottawa, de les promouvoir et de les faire financer par la Ville;
- le rehaussement de la stratégie de **réacheminement des déchets textiles** afin de promouvoir différentes options pour le réacheminement, de rehausser la promotion et l'information, de permettre d'implanter les bacs de dons à des endroits plus pratiques sur tout le territoire de la Ville (sous réserve des exigences réglementaires se rapportant à la santé et à la sécurité du public, à l'entretien des propriétés et à la lutte contre les nuisances), d'explorer de nouvelles méthodes permettant d'améliorer le réacheminement ainsi que la réutilisation et le recyclage, et de mettre au point d'autres méthodes pour suivre le rendement du programme;
- l'accroissement du **réacheminement des déchets dans les parcs** dans le cadre d'un programme complet à grande échelle, élaboré et mis en œuvre en s'inspirant des leçons apprises dans le cadre du projet pilote en cours au moment d'écrire ces lignes. La promotion de cette action cadre avec les commentaires recueillis dans la consultation des conseillers municipaux et

de la collectivité et pourrait aboutir si on réachemine chaque année, au lieu de les enfouir dans la décharge contrôlée, environ 1 025 tonnes de matières organiques et recyclables.

Comme nous l'expliquons ci-après, il faudra consacrer à ces actions des ressources en personnel pour mener la planification et la mise en œuvre. En outre, nous soumettrons au Conseil municipal un compte rendu sur la planification et la mise en œuvre et des rapports sur le rendement et l'avancement des actions dans l'année 2 dans le rapport annuel de mise au point sur le PDGDS. Le lecteur trouvera dans le Plan directeur de la gestion des déchets solides, reproduit dans une annexe de ce rapport (pièce justificative 1), de plus amples renseignements sur les actions et sur les résultats prévus, sur les besoins en ressources et sur les délais projetés pour la mise en œuvre et les comptes rendus à déposer auprès du Conseil municipal.

On recommande de planifier dans l'année 1 certaines suites d'actions, même si on ne pourra sans doute pas en lancer la mise en œuvre avant le début de l'année 2, dans la foulée des comptes rendus et des approbations obligatoires du Conseil municipal. Le tableau 2 ci-après donne une vue d'ensemble de ces suites d'actions.

*Tableau 2 : Suites d'actions à planifier dans l'année 1 et à mettre en œuvre à partir du début de l'année 2*

<b>Suite d'actions</b>	<b>Année 1</b>
La stratégie de réacheminement des déchets encombrants	Il s'agira de mettre au point une stratégie pour revoir la question des déchets encombrants en donnant la priorité à la réduction du volume de déchets produits et en maximisant le réacheminement des déchets encombrants, dont les matelas, au lieu de les enfouir dans la décharge contrôlée. Cette stratégie portera sur différentes approches dans la gestion de ces déchets et sur les débouchés potentiels des matières ramassées.
La Stratégie municipale de la gestion des déchets solides dangereux	Nous mettrons au point une stratégie qui ira plus loin que l'étude de l'extension de la collecte dans les dépôts mobiles actuels, en tenant compte de la praticité et de l'accessibilité pour les clients.

Suite d'actions	Année 1
Les initiatives et les stratégies de réacheminement des déchets dans les établissements de la Ville	On recommande de commencer à planifier cette suite d'actions dès la première année en raison du potentiel de réacheminement relativement élevé des actions et du fait des commentaires recueillis dans la consultation publique. On recommande d'adopter une approche par phases dans la mise en œuvre de cette suite d'actions en raison du nombre d'établissements en cause.
L'Examen du Programme de sacs jaunes pour les petites entreprises	Dans l'année, nous commencerons à examiner le Programme de sacs jaunes pour les petites entreprises, en nous penchant sur les conditions d'admission et en étudiant les impacts des travaux de recyclage du programme de la responsabilité individuelle des producteurs (RIP).

L'élaboration d'une **stratégie pour la gestion des déchets solides dangereux de la municipalité** est l'exemple d'une action à planifier dans l'année 1, mais sur laquelle le Conseil municipal devra toutefois se pencher avant que le personnel puisse la mettre en œuvre. Les déchets dangereux des municipalités, aussi appelés « produits dangereux et spéciaux » (PDS), relèvent désormais de la responsabilité des producteurs en vertu de la nouvelle loi sur le recyclage du gouvernement de l'Ontario selon le principe de la responsabilité individuelle des producteurs (RIP). Cette action consiste à mettre au point une stratégie destinée à réduire la production des PDS et à maximiser le réacheminement de ces PDS au lieu de les enfouir dans la décharge contrôlée. Les directives du gouvernement provincial viendront éclairer cette stratégie, qui tiendra également compte des commentaires recueillis pendant les consultations sur les services appropriés les plus efficaces. Nous soumettrons aux membres du Conseil municipal un rapport qui leur permettra de savoir comment la Ville d'Ottawa gèrera et limitera les déchets dangereux et de connaître le financement à consacrer aux activités pour assurer la sécurité de la collecte, du transport et de l'élimination des déchets dans l'année 2.

En outre, nous avons déjà commencé à planifier plusieurs actions individuelles, ce que nous continuerons de faire dans l'année 1.

Nous planifions actuellement trois actions, conformément aux directives du Conseil municipal dans la foulée des précédents rapports du personnel, et nous commencerons à les mettre en œuvre à court terme (moins de 5 ans) :

- Stratégie des frais d'enfouissement pour la décharge contrôlée du chemin Trail ([ACS2023-PWD-SWS-0006](#));
- Collecte séparée des feuilles et des résidus de jardinage ([ACS2023-PWD-SWS-0004](#));
- Utilisation des décharges privées ([ACS2023-PWD-SWS-0004](#)).

Le personnel des Services des déchets solides a aussi progressé dans les travaux portant sur les actions suivantes, puisqu'il faut apporter des options et des solutions pour ces actions avant la fin des contrats essentiels de traitement, puisque leur report jusqu'à la date de l'approbation du PDGDS donnerait lieu, pour la Ville, à des risques de lacunes dans les contrats et à des activités opérationnelles risquées :

- Digestion anaérobie (pour le traitement des matières organiques de la Ville après 2030);
- Stratégie de gestion des gaz d'enfouissement.

Les analyses de rentabilité et les recommandations de ces deux actions seront déposées au premier trimestre de 2025 pour que le Conseil municipal en prenne connaissance.

En outre, pendant le dépôt de la version provisoire du PDGDS en décembre 2023, on a demandé au personnel de faire avancer l'étude de faisabilité et l'analyse de rentabilité pour les actions suivantes ([motion n° 2023-08-06](#)) :

- Traitement des déchets mixtes;
- Incinération pour la transformation des déchets en énergie.

L'étude de faisabilité et la recommandation seront présentées pour étude aux membres du Conseil municipal au deuxième trimestre de 2025.

Si le Conseil municipal approuve le Plan directeur de la gestion des déchets solides et les suites d'actions correspondantes, le personnel déposera un compte rendu auprès du Conseil municipal suivant l'année 1 du PDGDS pour rendre compte des progrès accomplis dans les suites d'actions lancées dès l'approbation du Conseil et pour donner une vue d'ensemble des actions de l'année 2. Les suites d'actions approuvées dans le PDGDS selon les travaux de planification et de mise en œuvre programmés après l'année 1 seront établies conformément aux tableaux de décisions reproduits ci-dessus.

Le PDGDS comprend un total de 50 actions, qui ont toutes un indicateur de rendement correspondant. Le personnel soumettra chaque année au Conseil municipal des rapports d'avancement sur les actions menées et consultera les directions générales de la Ville lorsque les actions chevaucheront d'autres secteurs d'activité. La collaboration avec les autres équipes de la Ville continuera d'être essentielle au succès de ce PDGDS. Suivant le dépôt du PDGDS, les Services des déchets solides coordonneront une tournée à l'intention des équipes de direction de toute la Ville afin de leur présenter ce qui a été approuvé par le Conseil municipal et de leur expliquer dans quels cas on s'en remettra à chaque direction générale dans la planification et la mise en œuvre. On estime que sur la durée de 30 ans du PDGDS, les actions :

- réduiront les déchets enfouis dans la décharge contrôlée d'environ 31 000 tonnes et permettront de réacheminer près d'un million de tonnes de déchets au lieu de les enfouir;
- prolongeront de 14 ans la durée utile de la décharge contrôlée du chemin Trail;
- réduiront d'environ 9 000 tonnes le volume de CO<sub>2</sub>e chaque année en diminuant les opérations de gestion des déchets et en produisant de l'énergie renouvelable. Il s'agit de l'équivalent annuel d'environ 2 750 voitures particulières qui ne rouleront pas sur la chaussée.

Des actions spécifiques comme le lancement d'une nouvelle technologie pour gérer et traiter les déchets pourraient produire de l'énergie renouvelable, accroître les recettes pour permettre de compenser les coûts, réduire la pression imposée au réseau de gestion des déchets d'Ottawa et amoindrir les émissions de GES.

La Ville constatera une hausse des coûts des services de gestion des déchets. Cette hausse s'explique par différents facteurs, à savoir :

- Ottawa doit accroître le financement consacré pour mieux faire concorder les actions avec les coûts de la gestion de ces actions et activités relatives aux déchets; à l'heure actuelle, Ottawa fait partie des municipalités les moins chères du point de vue de la gestion des déchets par rapport à des villes comparables. Il faut consacrer une part importante de cette hausse des coûts pour continuer d'assurer les services de gestion des déchets solides et de respecter les exigences réglementaires, et une hausse des coûts comptés nous amènera au niveau des municipalités comparables.
- Dans l'ensemble, la hausse des coûts sera attribuable à l'augmentation du coût de la vie, ainsi qu'à l'accroissement des coûts des ressources, dont le parc automobile, le carburant et le personnel.
- Il faudra mieux pourvoir le Fonds de réserve pour la gestion des déchets solides.

Le lecteur trouvera des détails précis sur le modèle de financement du PDGDS dans le rapport législatif du Plan financier à long terme qui accompagne le PDGDS.

## **BACKGROUND**

The City of Ottawa (the City) is Canada's sixth largest city and is called home by over one million residents. Ottawa's boundaries span over 2,800 square kilometers and are made up of district urban, suburban and rural communities. Keeping the City safe and clean requires a collective effort which Solid Waste Services proudly takes part in each and every day.

The City has a highly integrated and complicated waste management system which requires planning, proper management and forward-thinking initiatives to ensure the City is providing safe, efficient and environmentally sound services in this sector. While all three levels of government in Canada have a role to play in waste management, municipalities are the front-line governments responsible for the bulk residential waste collection and management.

The federal government regulates movements of hazardous waste and hazardous recyclable material, identifies best practices and provides funding for projects to reduce waste. At a provincial level, waste regulations and reduction policies are

set, as well as waste programs for residential and industrial, commercial and institutional (IC&I) sector. The provincial government also approves and monitors waste management activities executed by municipalities. Municipal governments are typically responsible for managing the collection, recycling, composting, and disposal of household waste in accordance with the policies and regulations established by the upper levels of government.

The City of Ottawa provides waste management services to the following seven sectors either as a requirement by the Province of Ontario, or due to Council direction:

- 310,700 curbside residential properties
- 2,300 multi-residential properties
- 5,400 waste bins in 1,000 City parks
- 750 on-street waste bins
- 500 City facilities
- 300 schools through the Green Bins in Schools Program
- 300 small businesses and places of worship through the Yellow Bag Program

Though the City of Ottawa has no statutory role to play in the management, collection, processing and disposal of waste from multi-residential properties, City facilities, business, or schools because these sectors are considered IC&I and therefore fall under the province's purview, as well as other elective waste management programs such as parks and public spaces, services are provided as a result of Council direction. Further details on the roles of government as it pertains to waste management can be found in the Solid Waste Master Plan, appended to this report as Supporting Document 1.

According to the City's New Official Plan, Ottawa's population is expected to grow to 1.5 million people by 2053. More people means more waste and the amount of waste the City will need to manage is forecasted to increase by 31 per cent over the next three decades. A long-term plan is needed to prepare for increased population growth in order to decrease the amount of waste requiring management, divert as much waste as possible from landfills, recover maximum

resources and energy from the garbage that is remaining and dispose of residual waste in an environmentally sustainable way – all while keeping waste management efficient and affordable. To address these needs, Solid Waste Services have developed a Solid Waste Master Plan.

### **Developing the Solid Waste Master Plan**

The Solid Waste Master Plan (SWMP) provides the framework for how the City will address trends and key challenges that will impact the City's waste management system, including:

- Population growth
- Landfill life expectancy and a stagnant waste diversion rate
- Environmental protection and the 5Rs (reduce, reuse, recycle, recovery, residuals)
- Climate change mitigation & resiliency
- Community behaviour change
- Adapting to industry and policy trends
- Leveraging innovation & technology
- Addressing funding challenges

The SWMP recognizes that there is no one solution or silver bullet to address ongoing and future challenges; addressing issues will require a multi-pronged approach through a combination of regulation, collection management, technology and behavioural change in the public and in industry. Using industry best practices, expert technical consultants and extensive stakeholder engagement, the following SWMP has been developed and will provide the overall framework, direction, goals and targets for solid waste management, diversion, and reduction over the short-, medium- and long-term horizon.

### **Roadmap**

On July 10, 2019, Ottawa City Council approved the Solid Waste Master Plan Roadmap Report ([ACS2019-PWE-GEN-0007](#)). The Roadmap report put forth the idea of a phased approach for developing the Solid Waste Master Plan; this



approach reflects best practices for developing master plans and incorporates extensive engagement each step of the way. Three phases for developing the SWMP were proposed and approved as detailed below, and included key junctures in each phase seeking Council's approval or receipt of project progress. Additionally, Council will receive annual updates on SWMP progress and performance post-completion of the SWMP, and staff would table future reports to seek approval of specific SWMP Action implementation plans or further funding requirements, as necessary and as detailed later in this report.

In addition to approving the phased approach for the SWMP, Council also approved the 5Rs Waste Management Hierarchy (Reduce, Reuse, Recycle, Recovery, Residuals Management) as a guide for developing the SWMP. The waste management hierarchy is a conceptual framework that ranks the preferred approaches to waste management to generate the minimum amount of waste. It places top priority on reducing or preventing as much waste as possible, followed by recycling, recovery and finally residuals disposal.

Also approved through the Roadmap report was the establishment of a Council Sponsors Group (CSG) for the Solid Waste Master Plan. This CSG provided valuable guidance throughout the 2018 – 2022 Term of Council to ensure staff were well set-up for delivering the first two Phases of the SWMP. A 2022-2026 Term of Council CSG was formed in June 2023 to further support the development of the Solid Waste Master Plan; details on both CSGs and their contributions to the SWMP's development can be found below.

### Phase 1 – Where We Are

Phase 1 of the SWMP documented key baseline information on the City's current Integrated Waste Management System and available mechanisms for municipalities to influence waste reduction and diversion. Extensive research was conducted on international emerging policy, program, and technology trends with a focus on best practices and lessons learned from communities considered leaders in sustainable waste management. Phase 1 included foundational work to help gauge where the City could and wanted to go in the future. A robust Community and Stakeholder Engagement Plan was developed at this Phase to help support the development process, details of which can be found within the legislative report ([ACS2020-PWE-SWS-0001](#)).

Solid Waste Services staff worked with the City's Public Information and Media Relations team to develop a multi-phased engagement approach to be executed,

and applied the City's Equity and Inclusion lens to develop connections with various groups that are at risk for exclusion in order to disseminate information about engagement opportunities and encourage participation.

[Key stakeholder groups](#) were identified by staff to be included in SWMP consultation, in addition to Councillors and residents, to ensure specific sectors had opportunities to contribute to the SWMP's Development. This included:

- **City Champions Group (CCG):** A collective of City staff whose work impacts or is affected by the SWMP. Members support the project by providing input at specific junctures of the plan when their work may be impacted by decisions being made. They are also consulted to ensure the SWMP aligns with their respective departmental objectives and operational requirements.
- **Stakeholder Sounding Board (SSB):** A group consisting of individuals and organizations from across the city who represent a broad range of resident and stakeholder perspectives.

On April 30, 2020, staff provided a Technical Briefing on Phase 1 of the Solid Waste Master Plan on [YouTube](#) for members of Council, media and the public to learn:

- Ottawa's current waste state with regards to waste composition, collection, diversion, processing and landfilling ([Supporting Document 1](#));
- Roles of other levels of government as it pertains to waste management and what's in and out of span of control for the City of Ottawa as a municipality ([Supporting Document 2](#));
- How Ottawa's waste management practices and programs compares to other municipalities ([Supporting Document 3](#));
- Current policies and trends available for exploration within the waste management industry ([Supporting Document 4](#));
- What technologies and approaches are emerging in the waste industry that may be considered for the SWMP ([Supporting Document 5](#)); and,
- Which key stakeholder groups have been identified for engagement alongside Council members and the general public throughout the SWMP's

development ([Supporting Document 6](#)).

Upon completion of the technical briefing for Phase 1, staff immediately started work on Phase 2, beginning with Engagement Series 1 which sought to understand stakeholder's current waste state satisfaction and gain input to develop the SWMP's vision statement, guiding principles, and goals. Details on Engagement Series 1 can be found in the [What We Learned Report](#) appended to the Phase 2 legislative report.

### Phase 2 – Where We Are Going

On July 7, 2021, Ottawa City Council approved the Solid Waste Master Plan Phase 2 report ([ACS2021-PWE-SWS-0003](#)). There were four distinct parts to this Phase, including:

1. The vision statement, guiding principles and goals for the Solid Waste Master Plan;
2. An overview of Ottawa's anticipated long-term waste management needs;
3. The high level long list of options to meet future needs; and,
4. A triple bottom line evaluation tool, considering the social, financial and environmental elements of each option, to be used to evaluate potential options for Ottawa's future waste management needs.

The vision statement, guiding principles and goals were developed through extensive stakeholder consultation, were designed to be reflective of recent and future trends in the waste management industry, and gave consideration to City policies, projects and strategies including the Climate Change Master Plan. Through the Phase 2 report, Council approved the following vision statement, guiding principles and goals for the SWMP:

Vision Statement:

*A Zero Waste Ottawa achieved through progressive, collective and innovative action.*

Guiding Principles:

- **Honouring the 5Rs waste management hierarchy** by prioritizing options that support waste reduction, reuse, recycling and recovery so that

minimal residual waste is sent to landfill.

- **Changing community values** so that residents and stakeholders view waste as a resource, share the responsibility of waste management and play a role in achieving the goals of the Solid Waste Master Plan.
- **Protecting the environment for future generations to come** by mitigating the environmental impacts of managing waste.
- **Leading by example** when managing waste as a corporation by incorporating the 5Rs waste management hierarchy across the City's entire operations.
- **Adopting circular economy principles** to minimize the use of raw materials, recognize waste as a resource, maximize the value of waste and keep products and materials in use, and advocate for industry and other levels of government to take action that supports the transition to this economic model.
- **Embracing innovation** and being open to opportunities to adopt to emerging technologies, policies and industry trends.
- **Keeping waste local** by treating residential waste within the City's boundaries, wherever operationally and economically feasible.
- **Utilizing the triple bottom line** to balance environmental sustainability, City and community desires, and fiscal responsibility.

Goals:

1. Extend the life of the Trail Waste Facility Landfill significantly beyond its existing anticipated end of life to eliminate the need for a new residential landfill.
2. Reduce the amount of waste generated by residents and the City as a corporation.
3. Maximize the reuse of waste generated by residents and the City as a corporation.
4. Maximize the recycling of waste generated by residents and the City as a corporation.

5. Maximize the recovery of materials and energy from the remaining waste stream.
6. Aspire to achieve 100 per cent GHG emission reductions produced by the City's integrated waste management system.
7. Support, influence, and partner with the Industrial, Commercial and Institutional (IC&I) sector, including multi-residential, small businesses, the agriculture sector, and the Construction & Demolition sector, to reduce, reuse and divert waste in the broader community.
8. Maximize participation by enhancing the accessibility, convenience, consistency and affordability of waste management programs and services.
9. Maximize cost containment, revenue generation and the efficient use of waste management resources to help minimize costs to taxpayers.
10. Make sustainable waste management design an essential part of the City's planning process.
11. Collaborate with external stakeholders, including industry and other levels of government, to advance waste management practices.

The vision for a *zero waste* Ottawa is aspirational, a philosophy and a call to action rather than an absolute target. Zero Waste cannot be achieved by a municipality on its own but requires a concerted effort and coordination between all levels of government as well as industry, businesses and consumers. While a true Zero Waste future is not anticipated to happen within the term of the SWMP, the proposed actions are expected to move the City much closer to that goal. The Council-approved vision statement, guiding principles and goals set the strategic framework for the SWMP and allowed staff to advance work specifically pertaining to options analysis, as explained below.

Phase 2 captured the [anticipated future needs](#) for the City's solid waste management system based on an understanding of the gaps, challenges and opportunities in the City's waste management system, as well as long-term projections of future waste tonnages that will need to be managed by the City. A total of 21 needs were identified, which were broken down into seven categories, as explained in [Supporting Document 2](#) of the Phase 2 report.

To meet these future needs, a [high-level list of options](#), including potential policies, programs and technologies, was identified. Options were then evaluated using a

[technical evaluation process](#) that equally considered the social, environmental, and financial aspect of each option, and ensured each option aligned with the SWMP vision statement, guiding principles and goals. The exhaustive evaluation of options narrowed them down to a short list of recommended Actions for engagement and consideration. Staff then completed Engagement Series 2 which sought to seek stakeholder input on the short-listed Actions to better inform the SWMP and help work toward the goal of a Zero Waste Ottawa. Details on Engagement Series 2 can be found in the [What We Learned Report](#) appended to the Draft SWMP legislative report.

### Phase 3 – How We Will Get There

The [Draft Solid Waste Master Plan](#) – also known as Phase 3 – was presented to Council in December 2023. The Draft SWMP provided the recommended framework and actions for how the City will tackle the many waste-related challenges and needs faced by the City and will ensure this core regulated service can be met in a sustainable way over the next 30 years. The recommended Draft SWMP Actions and proposed order of implementation were heavily influenced by stakeholder input, current disposal trends, overall waste composition, and projections of waste volumes if no changes were made.

A total of [50 Actions](#), divided into 25 Action Suites, were identified to meet Ottawa’s future waste management needs. Five Objectives were identified that will help measure how the 50 recommended Actions work towards achieving Ottawa’s Zero Waste vision and capture what needs to be accomplished to achieve the SWMP’s goals:

1. **Maximize the Reduction and Reuse of Waste:** Actions under this Objective are prioritized in the short-term (0-5 years) and are recommended to begin immediately to decrease waste generated in the first place. Managing less waste is cost-effective for taxpayers, prevents the extraction of natural resources and minimizes the amount of waste that needs to be managed at a disposal facility.
2. **Maximize the Recycling of Waste:** Actions under this Objective that have the biggest impact on keeping waste out of the landfill are recommended for prioritizing in the short-term (0-5 years). Diverting more waste not only extends the life of the landfill but decreases GHG emissions and can help generate revenue opportunities to offset the cost of those programs.

3. **Maximize the Recovery of Waste and Energy and the Optimal Management of Remaining Residuals:** There will still be waste that can't be reduced, diverted, or recycled and the City's landfill doesn't have enough space to meet the City's future needs. This Objective includes actions that will be explored and implemented in the short (0-5 years), medium (5-10 years) and long-term (10+ years) to address the immediate and future need to free and expand landfill capacity and extract maximum resources and energy from this remaining waste stream.
4. **Maximize Operational Advancements:** Actions within this Objective support maximizing operational advancements through innovation and new technology to make operations more efficient and less impactful on the environment.
5. **Develop a Zero Waste Culture Across the City:** Getting to Zero Waste will require guiding and supporting the community to change their lifestyles and waste management practices. Actions under this Objective will help residents understand what they can do to work toward Zero Waste, and influence industry and the wider community to reduce, reuse and divert waste.

In order to drive cost and resource efficiencies, Actions that address similar challenges and opportunities were grouped together into Action Suites and actions within those suites are recommended to be implemented simultaneously. Each Action Suite includes a description and list of which actions it includes, as well as planning and implementation timelines, affected sectors and waste streams, anticipated tonnages diverted from landfilling (if applicable), considerations and limitations, and high-level estimates for capital and operating costs. Further details, including costs are explained later in this report.

The proposed Action Suites of the SWMP are strategically designed to be planned and implemented in the short-term (0-5 years), medium-term (5-10 years) and long-term (10+ years) timeframes of the 30-year planning period (2024 to 2053), with regular touchpoints and further approvals required by Council through the term of the SWMP. Combined, they create an opportunity to support behaviour change in the community, significantly reduce the amount of waste going to landfill, divert valuable resources to be recycled and repurposed into new products, and further preserve and expand capacity at the TWFL, providing time for the City to choose, plan and implement its next residual waste disposal

solution.

Most of the short-term Action Suites explained below have the potential to immediately impact the amount of waste going to the landfill and provide lasting benefits over the term of the SWMP including preserved capacity and deferred cost savings due to preserved landfill life. These include Actions within Objectives 1, 2 and 3 as shown below. Many of the medium-term and longer-term actions categorized within Objectives 4 and 5 will require further study, data insights and planning in the short term to better understand their estimated potential but are expected to also reduce the amount of waste requiring disposal when implemented. As a result, system impacts are solely provided for Objectives 1, 2 and 3 at this time. Updated estimates for actions will be included in the 5-year SWMP refresh once more work on the initiatives in Objectives 4 and 5 take place.

Performance measures, which will be used internally by staff to measure the effectiveness and efficiency of individual Action Suites and corresponding actions, will be shared with member of Council as part of annual SWMP updates. These updates will provide Council with opportunities to assess SWMP performance and pivot, if appropriate, to ensure the SWMP is achieving intended outcomes. Data, including increased diversion rates, will be used to evaluate performance measures and will be gathered through waste audits, set-out studies, processing facility and collections operations data, and annual surveys.

Following Council's receipt of the Draft SWMP, staff began the third Solid Waste Master Plan engagement series with residents and stakeholders which took place from February 6, 2024 to March 7, 2024. Learnings from this engagement series are detailed in the Discussion section below, and in the What We Learned Report appended as Supporting Document 2.

Now, the Solid Waste Master Plan is being tabled for Council consideration. While no changes have been made to Actions, their planning and implementation timeline, or their ranking of importance, this report provides Council with a fulsome overview of how stakeholder feedback has elevated the Solid Waste Master Plan and its deliverables and will be used to inform Action implementation. This report also includes a decision table to demonstrate to Council how and when Actions will be planned and implemented, and when staff will be reporting back to Council on the SWMP whether it be to seek further approval of Actions or to provide progress updates.



A critical component of the Solid Waste Master Plan and a key to ensuring its success is a robust funding model. The Solid Waste Long-Range Financial Plan being tabled alongside this legislative report thoroughly details how, if approved by Council, the City will fund the Actions in the SWMP, as explained below.

## **DISCUSSION**

The purpose of this report is to present Ottawa's Solid Waste Master Plan for Council's consideration. This legislative report has four key components:

1. The recommended Solid Waste Master Plan Actions to address Ottawa's future waste management needs, key considerations, and anticipated timelines and approaches for the planning and implementation of Actions (as detailed in Supporting Document 1);
2. An overview of the resourcing requirement in order to plan for, implement and execute the Actions of the Solid Waste Master Plan, should they be approved by Council;
3. Details on the recommended Year 1 Actions and Action Suites to be initiated immediately, should Council approve the Solid Waste Master Plan, with the commitment of an implementation progress update to be provided to Council no later than 12-months post-implementation; and,
4. The What We Learned results from Engagement Series 3, the third and final stakeholder engagement series to support the development of the Solid Waste Master Plan (as detailed in Supporting Document 2).

The funding model for the Solid Waste Master Plan is explained within the Solid Waste Long-Range Financial Plan (ACS2024-FCS-FIN-0006), accompanying this report. High-level financial analyses are also outlined below.

The City of Ottawa (City) is faced with an increasing population, changing waste composition and industry and lifestyle trends that are impacting the quantities and composition of waste requiring management. Furthermore, changes in provincial legislation have resulted in changes to revenue generating sources for the City, specifically, the Provincial Transition to Individual Producer Responsibility. The quantity of waste managed by the City is anticipated to grow from about 346,000 tonnes of waste generated in 2023 to 528,200 tonnes in 2053. As is the case today, over the next 30 years, curbside-residential households are expected to continue to generate the largest amount of waste requiring management (70 per cent), followed by multi-

residential households (16 per cent), waste that is disposed of directly at the TWFL (7 per cent), City facilities (6 per cent), waste disposed of in parks and public spaces (0.5 per cent) and hazardous and special waste (0.2 per cent). Specific projections and details can be found within the [Draft SWMP](#). Given the anticipated waste tonnages, Ottawa will need to expand the City's capacity for processing waste and reinforces that the Trail Waste Facility Landfill (TWFL) will not have enough capacity to manage this amount of waste into the future unless SWMP Actions are advanced to support increasing waste reduction and diversion.

To date the SWMP has identified Ottawa's future waste needs, options to address those needs, and objectives to support implementation planning of Actions that will best meet the anticipated needs, all while working towards achieving the vision statement, guiding principles and goals of the SWMP.

Since Council's receipt of the December 2023 [Draft SWMP](#), there has been no fundamental changes made to the Actions, Action Suites, Objectives, or implementation timeline. Rather, staff have used the time between tabling the Draft SWMP and the SWMP appended to this report as Supporting Document 1 to complete the third and final official engagement series for the Solid Waste Master Plan's development – Engagement Series 3.

### **What We Learned from Engagement Series 3**

Engagement Series 3 (ES3) took place from February 6, 2024 to March 7, 2024 and received engagement from approximately 520 participants, through surveys, in-person open-houses, virtual information sessions, focus groups, emails, and comment submissions via [Engage Ottawa](#).

#### Approach to Engaging Equitably

As with all engagement series' to date, Solid Waste Services made a point to make participation possible for Ottawa residents by applying an [Equity Lens](#) to identify key stakeholder groups for engagement. Staff reached out to diverse groups across the City, including but not limited to:

- Persons with disabilities
- Members of the SLGBTQQIA+ groups
- Suburban, rural and urban communities
- Older Adults

- Women
- Youth
- Newcomers

Engagement Series 3 included four in-person public information sessions at accessible locations across the City, two virtual information sessions, and online engagement through the City's online platform [Engage Ottawa](#). To ensure residents had opportunities to provide feedback in their preferred language, the public survey was available in five languages including: English, French, Arabic, Simplified Chinese, Spanish, and supporting material was developed in 10 languages, including: English, French, Arabic, Simplified Chinese, Spanish, Inuktitut, Anishinaabemowin, Farsi, and Turkish. Information sessions with key stakeholders, and focus groups with residents and organizations representing equity-seeking groups were also completed. Furthermore Equity, Diversion and Inclusion focus group sessions were provided to:

- Canadian Council of the Blind
- Ottawa Disability Coalition
- Youth Ottawa

Staff reached out to 22 organizations that have traditionally engaged during the Waste Plan's development, but due to time and availability from the organizations, three were able to participate in focus group sessions. However, many of the 22 organizations re-emphasized that the feedback they had previously shared through Engagement Series 1 and 2 were still valid priorities which were considered in the development of the Waste Plan and will be considered during Action implementation.

Staff also created opportunities to engage for those without internet, email, etc. by generating promotions through newspaper ads, digital bus shelters, and by providing a phone line so residents could complete the survey over the phone. Additionally, staff worked with the Gender and Race Equity, Inclusion, Indigenous Relations and Social Development Community and Social Services to ensure they are communicating engagement opportunities with their networks and used those networks to invite stakeholders to focus groups.

Other key audiences and stakeholder groups that staff targeted for ES3 include:

- Associations, including those representing diverse perspectives and resident interests;

- Businesses, including Business Improvement Associations, coalitions, construction businesses, demolition businesses, for-profit businesses, businesses receiving City services, multi-residential property managers and owners, local boards, and waste service providers;
- Educational Institutions, including universities, colleges, and school boards;
- Environmental groups and non-governmental organizations, including both urban and rural associations and organizations; and,
- Government and waste management associations.

The SWMP's Stakeholder Sounding Board which consists of individuals and organizations from across the City that represent a broad range of resident and stakeholder perspectives, including differing demographics and housing types, was also leveraged for ES3.

#### Purpose and Feedback

Engagement Series 3 had three particular purposes. The first was to inform residents and stakeholders on what the Draft SWMP entailed and to support this, staff developed an Executive Summary and various fact sheets to explain the Draft SWMP. ES3 also illustrated how input from the previous SWMP engagement series' – Engagement Series 1 ([2020](#)) and Engagement Series 2 ([2022](#)) – was integrated in the SWMP's development and obtained feedback on to what extend the Draft SWMP reflected engagement results. The third piece of ES3 gauged general support for the SWMP and provided opportunities for participants to comment on which Actions are more important and least important, and to identify any participation barriers.

#### Quantitative Feedback

- 47.7 per cent of respondents support the Waste Plan recommendations; 24.7 per cent of respondents do not support the Waste Plan recommendations;
- 24.1 per cent of respondents understood the Waste Plan; 36.3 per cent of respondents require further explanation of the Waste Plan;
- 35.8 per cent of respondents are satisfied with how public feedback was incorporated into the Waste Plan; 15.9 per cent of respondents were not satisfied with how public feedback was incorporated into the Waste Plan; and,
- 74 per cent of respondents would engage in the Waste Plan in the future; 7.7 per cent of respondents would not engage in the Waste Plan in the future.

For residents that supported the waste plan, the majority of responses were simply “yes” with no specification as to why they support it. For some that elaborated, their support was due to:

- A strong focus on community behaviour change;
- Emphasis and prioritization of the 5Rs and expanding programs related to the 5Rs; and,
- Composting in Multi-Residential facilities and city facilities.

Common reasons the plan was not supported by participants included:

- Concerns that there was not enough focus on the opportunity for Waste to Energy Incineration;
- Did not support the Council approved 3-Item bag limit;
- Do not support raising taxes; and,
- Do not support a zero-waste focus, or don't support changes to the status quo waste management system.

For participants that identified neutral support, their response was commonly that they supported parts of the waste plan, but not all of it or they were simply “undecided”.

In terms of qualitative feedback, participants generally understood the SWMP, supported Actions and agreed that the waste management hierarchy (reduce, reuse, recycle, recovery of energy and waste, residuals management) should be prioritized. Feedback highlighted that overall, there is concern about how much waste is produced by the community and the impact excess waste has on the landfill. Many participants also raised concern around some of the barriers for resident participation in various Actions and stressed the importance of behaviour change for the success of the SWMP initiatives. There was a keen awareness that a solution needs to be found to address Trail Waste Facility Landfill life capacity, whether through landfill expansion, a new landfill or new technologies. The importance of ongoing engagement with residents following SWMP completion and working with community partners to implement the Actions was also frequently mentioned.

Participants were interested in learning more details about various Actions as well as understanding how the Actions were prioritized. Some participants shared that they felt the Waste Plan is quite technical and further explanation would be helpful for residents to better understand the recommendations and action suites. Overall, through discussions and survey feedback, most participants were satisfied with how their

feedback was incorporated in the SWMP, and most said they would participate in future engagement opportunities.

While participation in ES3 was generally lower than that of earlier engagement series, overall, the feedback received reaffirmed what was learned in earlier series where representative market samples were used. The feedback shared through all engagement series has been instrumental in finalizing the Solid Waste Master Plan being presented through this legislative report.

The SWMP took feedback from ES3 in particular into account in three key ways:

- More details were added to explain the intent of some of the Action Suites and how they were prioritized in the SWMP's planning and implementation timeline;
- Summary documents were added to help explain the more technical and complex concepts in the plan, including summaries of the financial analysis and GHG analysis; and,
- Frequently learned barriers to resident participation were documented, as well as considerations and suggestions to overcome those barriers, which will be used to inform implementation planning for relevant Action Suites.

Solid Waste Services recognizes that although the official SWMP engagement series' have now come to a close, stakeholder feedback and support will continue to be instrumental in making sure SWMP Actions (if approved by Council) are successfully implemented.

Further details of Engagement Series 3, including raw data responses and analysis can be found in Supporting Document 2.

### **Solid Waste Master Plan**

The Solid Waste Master Plan (SWMP) provides the framework for how the City will tackle these challenges and ensure its responsibilities for the critical service that is waste management can be met in a sustainable way over the next 30 years. The SWMP recognizes that there is no one solution or silver bullet to address the ongoing and future challenges. Addressing these issues will require a multi-pronged approach through a combination of regulation, collection management, technology and behavioural change in the public and in industry.

A total of 50 options were carried forward as recommended "Actions" to include in the SWMP. Actions that address similar challenges and opportunities were grouped together into Action Suites and Actions within those suites are recommended to be

implemented simultaneously for maximum results and to take advantage of resource efficiencies. This recommended waste management system was developed to achieve the Council-approved SWMP vision statement, goals and objectives of the SWMP and align with the Council-approved guiding principles. It is an integrated system that includes Action Suites that work together, are interconnected and, in some cases, depend on each other for success.

The Action Suites are organized under each SWMP objective below to show which recommendations will work together to achieve each objective. The high-level estimated costs included for each of the Action Suites include estimated funding based on what we know today. As each of the Action Suites are planned, costs may change depending on the specific scope developed for each of the actions and the included initiatives. In particular, costs are expected to change for those Action Suites that require strategy developments and/or feasibility studies prior to planning and implementation. The cost assumptions that were included to estimate funding requirements for each Action Suite are provided within the SWMP, appended as Supporting Document 1.

Full details on each Action Suite can be found within the SWMP, appended to this report as Supporting Document 1. As a reminder, no changes have been made to the Actions, Action Suites, Objectives, or timeline for implementation since Council's 2023 receipt of the [Draft SWMP](#).

### Objective 1– Maximize the Reduction and Reuse of Waste

Reducing and reusing waste helps to prevent the extraction of natural resources and the generation of waste in the first place. Engagement participants frequently mentioned the importance of prioritizing reduction and reuse to protect the environment and help keep waste management costs down. Respondents also encouraged the City to start these initiatives early in the Waste Planning process to align with the SWMP's guiding principles and to keep costs down/defer the requirement for major investments for future waste management and processing. Three Action Suites consisting of a collective nine Actions have been identified to achieve this objective.

In total, the recommended Actions supporting Objective 1 are estimated to reduce landfill disposal by an estimated 2,750 tonnes over the first five years of the SWMP. Over the 30-year term of the SWMP, these recommended Actions are estimated to reduce a total of 31,050 tonnes requiring disposal. In the short term, the reduction actions are not expected to have a significant impact on the life of the TWFL, but the long-term reduction totals may slightly increase landfill life. Most of the estimated waste

reduction in the short-term is through action on reducing textile waste, followed by bulky waste and household construction and demolition waste, as well as a small reduction in household electronic waste. These estimates are based on the actions where City or industry data was readily available to make estimates.

In addition to tonnage decreases, there are foundational benefits to these Actions as they encourage behaviour change – advancing these Actions will set the City up for success for implementing future Actions. There also remains a significant opportunity to target food waste reduction, especially at a time where food insecurity and affordability is top of mind for most residents. Food waste is an emerging area of focus in the industry where little data is available. As the proposed Food Waste Reduction Strategy and Reduction Education Initiatives planning is undertaken in the short term, estimated impacts will be assessed at that time and provided to Council and updated as part of the 5-year SWMP refresh. Additionally, the total short term (Year 1 to 5) costs for the Actions supporting Objective 1 are estimated to be \$4.35 million.

#### Objective 2 – Maximize the Recycling of Waste

Maximizing the recycling of waste by improving existing initiatives and investing in new recycling programs will reduce materials currently going to landfill. Staff learned through public engagement that there is a preference for prioritizing waste diversion early on in the SWMP to delay the need for a new landfill or alternative technology, primarily due to cost. Recycling materials also results in lower lifecycle GHG emissions and creates opportunities to gain revenue to help offset waste management costs. Eight Action Suites, including 17 Actions, have been identified to support this Objective.

The Actions supporting Objective 2 are estimated to divert approximately 85,790 tonnes of additional waste from the landfill over the first five years of the SMWP. Over the 30- year term of the SWMP, these Actions are estimated to divert a total of 970,520 tonnes from landfill. By 2053, the City is anticipated to produce approximately 197,300 tonnes of garbage per year (assuming that SWMP actions are implemented), and therefore the anticipated tonnage savings that could result from implementing all actions supporting Objective 2 are equivalent to an estimated four to five years of additional landfill life. Similar to Objective 1, these estimates are based on Actions where City or industry data was readily available, and the Actions within will encourage resident and community behaviour change by supporting increased use of existing diversion programs and developing strategies to encourage further diversion of waste from the TWFL.



Once the recommended Actions supporting Objective 2 have been implemented, bulky waste and residential C&D waste are expected to account for nearly 28 per cent of the remaining waste going to landfill. Due to the high prevalence of bulky materials and residential C&D in the waste stream, the proposed C&D Waste Strategy for residential waste and Bulky Waste Strategy are intended to identify available potential recycling markets at which time potential diversion and full financial analysis (including revenue/cost offset opportunities) for these actions can be quantified. Staff estimate that the cost of the Objective 2 Action will be approximately \$15 million within the short term (Year 1 to Year 5) period of this SWMP.

### Objective 3: Maximize the Recovery of Waste and Energy and the Optimal Management of Remaining Residuals

While reduction and diversion actions will reduce the amount of waste going to landfill, there will still be waste that cannot be captured under the first two objectives that the City will need to manage. These recommended Actions look at recovering resources and energy in keeping with the SWMP guiding principle to treat waste as a resource. Through Engagement Series 2, staff learned that residents understand the need for future options for waste disposal and support the advancement of feasibility studies as they pertain to alternative technologies for waste management. Additionally, respondents agreed with exploring technologies that align with the City's Energy Evolution Strategy. A total of nine Actions would work towards Objective 3, if approved.

As Council will recall, the Draft SWMP tabled in December 2023 was recommending the City advance a feasibility study for both Waste to Energy (WTE) Incineration and Mixed Waste Processing in the first five years of the SWMP as they have been deemed viable and proven technologies to further reduce the amount of waste requiring landfilling and both create opportunities to either generate energy and/or recover additional materials for recycling. Council approved [Motion NO 2023-08-06](#) to advance the feasibility study and business case for alternative technologies for waste management ahead of the tabling of the SWMP. This is underway and staff will provide Council with recommendations to consider in Q2 2025.

The feasibility study will include further analysis on waste stream compatibility, a business case detailing more refined costs and revenue opportunities, environmental impacts, and community support for these technologies. The feasibility study will also include a market sounding to understand the various

contracting and project delivery models the City can consider, taking into account the lessons learned from other major City infrastructure projects and the ever-evolving market.

Assuming the implementation of all recommended SWMP reduction and diversion actions, WTE Incineration would extend the life of the TWFL beyond the 30-year planning period. WTE Incineration presents some revenue generation opportunities, but the revenues generated are not expected to fully cover the cost of operating such a facility, as evidenced by existing facilities in operation. In terms of GHG emissions, a WTE Incineration facility could be used to generate steam to power a district energy system and offset the use of fossil fuel based natural gas to heat homes and buildings. This could reduce community emissions compared to the City's current approach of landfilling with electricity generation from landfill gas.

Mixed Waste Processing (MWP) facilities are proven technologies that mechanically separate garbage collected by the City into materials that can be diverted and materials that can be landfilled or further processed using alternative waste management technologies. MWP has the potential to divert an additional 30,000 tonnes of organic waste from landfill every year, assuming that the recovered organics are not overly contaminated and can proceed to processing. MWP, by itself, has the potential to expand the life of the TWFL by approximately four years, falling short of achieving the goal of extending the life of the TWFL beyond the term of the SWMP. The increased diversion of recyclables and organics from landfill associated with MWP can help reduce GHG emissions and increase revenues.

Proposed Anerobic Digestion of Organics, Separate Collection of Leaf and Yard Waste and Landfill Gas Management Strategy Actions do not directly result in waste reduction, diversion, or increased landfill life. However, they create significant opportunity for the City to reduce GHG emissions from the waste management system, increase opportunities to lower community carbon emissions through the generation of renewable energy, contributing to the achievement of the goals outlined in the CCMP, and generate new revenue streams that will help offset waste management costs.

The Actions working to achieve this Objective are estimated to cost approximately \$22 million from Year 1 to Year 5. It is important to note that this \$22 million includes the cost of feasibility studies for alternative waste management technologies. The City will have a better understanding of anticipated capital and

operating costs, as well as potential revenue generation, once these feasibility studies are complete. At this time, high-level cost estimates have been projected by the SWMP's technical consultants, however, more accurate estimates will be presented to Council prior to staff seeking direction to implement one or numerous technologies.

#### Objective 4: Maximize Operational Advancements

The first three Objectives include Actions to support the SWMP's goals associated with the direct management of waste and the five levels of the waste management hierarchy. Actions within Objective 4 support maximizing operational advancements through innovation and new technology to make operations more efficient and less impactful on the environment. In discussing the following Actions with participants of Engagement Series 2, stakeholders encouraged early planning for these actions; as a result, planning would be the focus for the first three years with subsequent implementation occurring in line with proven technologies becoming available and appropriate infrastructure in place. If approved, nine Actions will work towards supporting Objective 4.

As these Actions primarily speak to future planning and potential service enhancements, their impacts on waste reduction, diversion and expanded landfill capacity are difficult to predict at this time. Through the planning phase, staff will identify how actions under this objective will support improving customer service, program accessibility, operational efficiency and overall success. The SWMP estimates approximately \$4 million will be required to support these Actions between Year 1 and Year 5.

#### Objective 5: Develop a Zero Waste Culture Across the City

While the SWMP will require the community to change how they view and manage waste in order to be successful, reaching the vision of Zero Waste will also require a significant shift in social norms. As a result of Engagement Series 2 feedback, staff are recommending these Actions be implemented early in the waste planning process to support residents in making changes to how they manage their waste, which is necessary for successful and sustainable future waste management. There are eight Actions identified to support developing a zero waste culture across the City of Ottawa, including a Behaviour Change Management Strategy and several promotion and education Actions.

Similar to Objective 4, Action Suites under this Objective are intended to support community behaviour change and also support various other SWMP Actions in

achieving full success, including waste reuse, reduction and diversion Actions and those Actions that address operational efficiency. The anticipated Year 1 to Year 5 costs for these Actions is \$7 million.

Further information on all proposed Actions can be found in greater detail within the Solid Waste Master Plan appended to this report as Supporting Document 1.

As it pertains to implementation, all Actions are set to be planned and implemented in the short-term (0-5 years), medium-term (5-10 years) and long-term (10+ years) timeframes of the 30-year planning period (2024-2053). Several factors were considered when developing these timelines, including:

- The vision, guiding principles, goals and objectives of the SWMP;
- The 5Rs waste management hierarchy framework;
- Public and stakeholder engagement feedback;
- Potential behaviour change required for success of some of the Action Suites; and,
- Costs associated with implementing each Action Suite and the recommended system as a whole.

For the purposes of this legislative report, Actions for planning and implementation within Year 1 of the Solid Waste Master Plan are being highlighted to ensure Council's understanding of what will happen immediately following the tabling of this report, should it be approved. As a whole, should Council approve this report, the framework and strategic direction for the City's Solid Waste management system will be set; efforts and resources dedicated to planning for, implementing and executing Actions will be prioritized. Updates will be provided to Council on an annual basis to show progress reports and seek further /approvals, as necessary.

### Year 1 Actions

The following section details Actions and Action Suites that will be planned and/or implemented during Year 1 of the Solid Waste Master Plan, should Council approve this legislative report. It should be noted that planning and implementation on some SWMP Actions is already underway as a result of prior Council-approval or direction.

Prior to the tabling of this legislative report, Ottawa City Council approved the SWMP Action requiring for all multi-residential properties to have a Green Bin program in order to receive City Waste Facilities – *Making Green Bin a prerequisite to receive City Waste Management services* – through the approval of the [2022 Multi-Residential Waste Diversion Strategy](#). Additionally, in 2023,

Council carried [Motion no. 2023-16-06](#) to adjust the City's garbage item set-out limit from six items to three. Both Actions are currently being implemented and will support the City's waste diversion programs and reduce the amount of waste sent to landfill.

Three other Actions are currently being planned as directed by Council through previous staff reports, with implementation to begin in the short (0-5 year) term:

- Trail Waste Facility Landfill Expansion ([ACS2023-PWD-SWS-0006](#))
- Separate Leaf and Yard Waste Collection ([ACS2023-PWD-SWS-0004](#))
- Use of Private Landfills ([ACS2023-PWD-SWS-0004](#))

Solid Waste Services staff have also advanced work on the following Actions given the business need to find options/solutions for these Actions prior to critical processing contracts expiring, as deferral until the SWMP's approval would have put the City in jeopardy of contract gaps and risk operational and compliance activities.

- Anaerobic Digestion of Organic Food Waste
- Landfill Gas Management Strategy

The business cases and recommendations for these two Actions will be tabled in Q1 2025 for Council's consideration.

Furthermore, during the tabling of the Draft SWMP in December 2023, staff were directed to advance the feasibility study and business case for the following Actions ([Motion NO 2023-08-06](#)):

- Mixed Waste Processing and Waste-to-Energy Incineration

The feasibility study, business case and recommendation will be presented to Council in Q2 2025 for consideration.

### Decision Tables

The decision tables provided below present which Action Suites:

- Have already commenced planning and implementation following prior Council approval, such as Actions within the Multi-Residential Diversion Action Suite and the Firm Garbage Item Limit;
- Will commence planning and implementation in Year 1 following Council's approval of the SWMP, including waste avoidance and reduction Action Suites that were highly prioritized during public engagement;
- Will commence planning in Year 1 following Council's approval of the SWMP, but where implementation will not commence until Year 2 onwards; and,

- Will be brought back for approval prior to their implementation, including those Action Suites where strategies have not been fully scoped and any decisions concerning new technologies following feasibility study and business case development.

As stated above, implementation of some of the Action Suites will commence in Year 1, should Council approve the Solid Waste Master Plan. Table 3 below shows these Action Suites and a high-level overview of the work that will be conducted on each within the first year of the SWMP, including planning and implementation, should the SWMP be approved by Council.

*Table 3: Action Suites to be Planned and Implemented in Year 1*

<b>Action Suite</b>	<b>Year 1</b>
Promotion and Education to support Plan Implementation	Planning and implementation of all actions in this Action Suite will begin, including the development of a Behavioural Management Strategy.
Enhanced Education and Enforcement of Source Separation	Specifically, implementation of the 3-garbage item limit begins, as approved by Council in 2023.
Supporting Additional Diversion in Multi-residential Buildings	Planning and implementing of “Making Green Bin a Prerequisite to Receive City Waste Management Services” will continue, an action within this suite that was approved for advancement in 2023.
Waste Avoidance, Reuse and Reduction Initiatives	Implementation for some of actions within this suite could commence within Year 1, such as Sharing Space/Swaps/ Library/Repair Cafes as well as supporting and initiating a range of community reuse events.

Food Waste Reduction Strategy and Reduction Education Initiatives	Implementation likely to commence in Year 1 as this Action Suite was highly prioritized during engagement and has a significant reduction potential.
Ban IC&I Waste from the Trail Waste Facility Landfill	Planning will commence to implement ban on January 1, 2025.
Waste Diversion in Parks and Public Spaces	Action Suite recommended to begin implementing in line with feedback from stakeholder engagement. Work will involve developing a Citywide broad-scale, comprehensive waste diversion program, with recycling and/or organics bins, in parks and public spaces across the city, using lessons learned from the Pilot project.

Examples of Actions that, if approved, will be planned and implemented in Year 1 include:

- The expansion of **Repair Café** offerings, which would have events hosted all across the City of Ottawa, supported, and funded by the City of Ottawa and coordinated by Solid Waste Services.
- An enhanced **Textile Waste Diversion** strategy to promote different options for diversion, allow more convenient placement of donation bins around the City (subject to regulatory requirements pertaining to public health and safety, property maintenance, and nuisance control), and more methods for tracking program performance.
- An increase in **Waste Diversion in Parks** as a broad-scale, comprehensive program is developed using lessons learned from the Pilot project underway. Advancing this Action aligns with feedback learned through Councillor and community engagement, and could result if approximately 1,025 tonnes of organic and recyclable material diverted from landfill on an annual basis.

As outlined below, these Actions will require staffing resources to support planning

and implementation. Furthermore, Council will receive an update on planning, implementation, and Action performance/progress reports in Year 2 through a SWMP annual update report. Further details on Actions and their anticipated outcomes, resource requirements and anticipated timelines for implementation and reporting back to Council can be found within the Solid Waste Master Plan appended to this report as Supporting Document 1.

Some Action Suites highlighted above are scheduled to be planned in Year 1 of the SWMP should it be approved by Council; however, implementation for these Action Suites would not commence until Year 2 or onwards. Further approval would be sought from Council on the implementation plans prior to staff initiating them. Table 4 provides an overview of the Action Suites that would be planned in Year 1 but require further Council consideration before they could be implemented.

*Table 4: Action Suites to be Planned in Year 1, Implemented in Year 2 Onwards*

<b>Action Suite</b>	<b>Year 1</b>
Bulky Waste Diversion Strategy	This will involve developing a strategy to review bulky waste that will focus on decreasing waste generation and maximizing diversion of bulky waste from the landfill. The strategy will look at various approaches to managing this waste and the potential end markets for the material collected.
Municipal Hazardous Solid Waste Strategy	A strategy will be developed that goes beyond exploring expanding the current mobile depot collection events, taking into account customer convenience and accessibility.
Waste Diversion Initiatives and Strategies at City Facilities	Action Suite recommended to begin planning in Year 1 due to relatively high diversion potential of actions and feedback from public engagement. A phased approach is recommended to implement the Action Suite due to the number of facilities involved.



Yellow Bag Program Review	In Year 1, a review of the Yellow Bag program will be undertaken, including eligibility requirements and impacts on Individual Producer Responsibility (IPR) for the recycling portion of the program.

An example of an Action to be planned in Year 1, but that will require further Council consideration before staff can implement is the development of a strategy for **Municipal Hazardous Solid Waste**. Municipal hazardous waste, also referred to as Hazardous and Special Products (HSP), is now the responsibility of Producers under the Province of Ontario's new Individual Producer Responsibility (IPR) recycling legislation. This Action includes developing a strategy for focus on decreasing HSP generation and maximizing the diversion of HSP from landfill. The strategy will be informed by Provincial direction while also incorporating feedback from engagement regarding appropriate and most effective services. Member of Council will receive a report to consider for how the City of Ottawa will manage and limit hazardous waste, including the funding required for events to safely collect, transport, and dispose of waste, in Year 2.

Through the tabling of this report, it is recommended that staff are directed to immediately begin the planning and implementation for Action Suites scheduled for Year 1 of the Solid Waste Master Plan, with an update on implementation progress to be provided 12 months following Council's approval. Planning, implementation and progress reports for all remaining SWMP Actions Suites, if approved, will be provided through annual reporting to Council and on an as needed basis. As a reminder to Council, refreshes to the Solid Waste Master Plan will be done every five years following Council approval to ensure staff are up to date on priorities, industry best practices, and aligned with City strategies and the vision statement, goals and guiding principles of the SWMP.

### **Staffing Requirements to Address Increased Programs**

It is estimated that approximately 17 new FTEs will be required over the next 5 years to support the implementation of the SWMP. These include operational resources required to implement a City-wide parks waste diversion program and resources required to coordinate waste reduction actions, including repair cafés, continue data monitoring,

analysis and reporting, community outreach and education and new program development, implementation, and oversight.

Resourcing requirements will be assessed on an annual basis, and opportunities to reduce net new requirements will be assessed through retirements, attrition, existing temporary positions and operational efficiencies. FTE requests will be included in the annual budget process for Council approval. Funding for each has been factored into the Solid Waste Long Range Financial Plan.

### **Financial Analysis**

The SWMP includes 25 proposed Action Suites (containing 50 Actions) to drive change and work towards meeting the vision statement and goals of the SWMP. Most of these proposed Actions involve providing enhanced services to the community and reducing the climate impact of managing waste, all of which requires funding and resources to support policy and program planning and implementation. However, some Action Suites create new revenue generation opportunities for the City that will help offset costs. In addition, many of the proposed Actions create efficiencies, which will result in cost savings over time.

The Solid Waste Master Plan is being tabled alongside the Solid Waste Long Range Financial Plan (LRFP). The LRFP presents Council with a series of recommendations to sustainably fund both the current unfunded capital plan for Solid Waste Services as well as the recommendations of the SWMP. As was outlined in the [Draft Solid Waste Master Plan \(SWMP\)](#), financial estimates were refined as the Solid Waste LRFP was developed.

Even without implementing the recommended SWMP, the cost of providing solid waste services will go up in the short term. Funding is required to cover regulatory costs for the TWFL, to maintain existing waste services and replenish the Solid Waste capital reserve over the next 10 years, especially given the shift in provincial legislation and the loss of revenue streams formerly contributing to Solid Waste Services reserves. Even without any SWMP actions being implemented:

- Approximately \$185 million of capital expenditures is required over the next 10 years, 63 per cent of which is required to meet regulatory compliance requirements and 37 per cent for asset renewal requirements;
- Approximately \$536 million of investment is required for a new landfill or alternative technology to be opened in 2036, which is required to meet regulatory compliance requirements;

- Approximately \$15 million in annual debt servicing costs is required to support the funding required for a new landfill opening in 2036; and,
- The reserve fund, which is currently in a deficit position of \$25 million, requires balancing and investment to support future capital expenditures.

The recommended SWMP actions will:

- Require approximately \$346 million in new capital investment, 80 per cent of which is to meet regulatory compliance requirements and the remaining 20 per cent being service enhancements;
- Result in an increase in annual operating costs by up to \$20 million annually by 2031, 76 per cent of which is to meet regulatory compliance requirements and the remaining 24 per cent being service enhancements; and,
- Delay investment required for a new landfill/residual waste management solution until 2049, allowing more time to invest in the reserve fund to support future capital needs.
- Avoid approximately \$120 million dollars in landfilling costs by increasing waste reduction and diversion actions.

Over the 30-year planning period, the most significant cost increases are required within the first 10 years, when the majority of initiatives are planned for implementation. New revenue generation opportunities were identified during the Waste Plan's development and will be further refined as business cases are developed and tabled for Council consideration. High-level opportunities include:

- Generation and sale of renewable natural gas;
- Clean Fuel Credits;
- Development Charges for Solid Waste; and,
- Revenue from new recycling markets.

Overall, implementing the SWMP Actions will come at a marginal cost, estimated at less than an extra \$1.00/month per household, but with all the potential environmental and social benefits, including more options for residents to reduce waste and participate in a wider range of recycling opportunities at home, in parks and public spaces, at City Facilities and events and also investing in innovative technology solutions the reduce

the carbon footprint of managing the City's waste. All the waste reduction and diversion Actions will also extend landfill life by approximately 14 years.

### **Next Steps**

The Solid Waste Master Plan is a fluid document that will adapt to the changing waste landscape overtime. Additionally, it will be modified to ensure alignment with City projects and priorities, legislation from other levels of government, and changing behaviour and disposal habits.

Should Council approve the Solid Waste Master Plan as outlined in this report, staff will begin Action planning, implementation and execution. Stakeholder support and input will continue to be invaluable to staff, and engagement with specific groups will continue through the term of the SWMP. The following touch points with Council are anticipated over the next 12 months:

- Anaerobic Digestion business case (Q1 2025)
- Landfill Gas Management Strategy business case (Q1 2025)
- Mixed Waste Processing prefeasibility study (Q2 2025)
- Waste-to-Energy Incineration prefeasibility study (Q2 2025)

Staff will also provide members of Council with an update on planning and implementation for Actions under Action Suites identified in Table 1 above, with other plans to seek approval for Actions in Table 2 in advance of implementation.

Updates on the Solid Waste Master Plan will be provided to members of Council at minimum on an annual basis, with additional updates to be provided as required. As approved through the Solid Waste Master Plan Roadmap report ([ACS2019-PWE-GEN-0007](#)), staff will undertake a refresh of the SWMP every five years, based on industry best practices, to assess performance and to develop the subsequent short-term implementation plan to achieve the SWMP's overall goals and targets. The complete Solid Waste Master Plan can be found appended to this report as Supporting Document 1.

### **FINANCIAL IMPLICATIONS**

The Solid Waste Master Plan is being tabled alongside the Solid Waste Long Range Financial Plan 2025-2053 (LRFP). The LRFP presents Council with a series of recommendations to sustainably fund both the current unfunded capital plan for Solid Waste Services as well as the recommendations of the SWMP. The Financial implications of the SWMP are included in the LRFP (ACS2024-FCS-FIN-0006).

### **LEGAL IMPLICATIONS**

There are no legal impediments to approving the recommendations in this report.

### **COMMENTS BY THE WARD COUNCILLOR(S)**

This is a City-wide report.

### **CONSULTATION**

The Solid Waste Master Plan Phase 1 report outlined the SWMP's Communications and Engagement Strategy which involves three different series' for engagement activities to ensure member of Council, stakeholders and residents all have ample opportunities to provide their inputs and insights on each phase of the plan.

With an understanding of how broad the range of stakeholders and residents are who may be looking to get involved in the SWMP's development, staff are using a wide variety of communication tools to raise awareness of the opportunities for engagement. Staff also applied the City's Equity and Inclusion lens to develop connections with various groups that are at risk for exclusion in order to disseminate information about engagement opportunities. Individuals were encouraged to participate in either online workshops or during focus groups to ensure their perspective was heard and considered.

This Solid Waste Master Plan is built on a solid foundation of stakeholder feedback which was provided through Engagement Series 1, 2 and 3, as described in this report and in further detail within Supporting Document 2 appended to this report.

### **ACCESSIBILITY IMPACTS**

The actions within the Solid Waste Master Plan will be implemented according to the accessibility-related legislative framework consisting of the Integrated Accessibility Standards Regulation (IASR) of the Accessibility for Ontarians with Disabilities Act, 2005, (AODA) in addition to the City's Accessibility Design Standards (ADS), where applicable, as well as the City of Ottawa's Accessibility Policy.

Any promotional and educational campaigns related to the Solid Waste Master Plan will include accessible formats and communication supports, including but not limited to, closed captioning on videos and alt-text on images. Additionally, any public-facing web content regarding the Solid Waste Master Plan will conform with the World Wide Web Consortium Web Content Accessibility Guidelines (WCAG)

## 2.0 Level AA.

The City also recognizes that many people with disabilities in Ottawa live in multi-residential properties, due to the proximity of medical centres and other amenities, as well as the general accessibility of these units, such as wide accessible entryways and lobbies, access to elevators, and having barrier free access to all rooms in apartments. The City also recognizes that waste-disposal rooms in multi-residential buildings are small and often lack accessible features, such as automatic door openers, which can limit the ability of people with disabilities to independently dispose of their waste. As such, the City will continue to work with the property management sector to ensure success in the roll-out of the mandatory Green Bin program, as well as the Chute Closure/ Conversion to Organic Chutes Pilot Program at all multi-residential buildings. This will include encouraging property management groups to consider how their residents with permanent or temporary disabilities will access these services.

Additionally, the use of alternative collection containers, such as in-ground collection, front-end load containers, multi-stream containers, and waste bins with solar compactors will have accessibility features and improve the overall accessibility of waste collection in parks, public spaces and multi-residential buildings. Following approval of the recommendations outlined in the report, staff would continue engaging with stakeholders, including staff in the Accessibility Office and the Accessibility Advisory Committee, as well as the wider community of accessibility-related stakeholders to receive feedback on the implementation, development, and delivery of services in the Plan. Continuing to engage with these stakeholders with disabilities will help identify and mitigate barriers and challenges prior to implementation from a cross-disability perspective and understand the unique needs and feedback from residents with disabilities, thus reducing or eliminating barriers and challenges faced by these residents.

### **ASSET MANAGEMENT IMPLICATIONS**

The recommendations documented in this report are consistent with the City's Comprehensive Asset Management (CAM) Program objectives. The implementation of the Comprehensive Asset Management program enables the City to effectively manage existing and new infrastructure to maximize benefits, reduce risk, and provide safe and reliable levels of service to community users, now and into the future. This is done in a socially, culturally, environmentally, and economically conscious manner.

When the City commits to the acquisition of new assets, consideration must also be given to the City's commitment to fund future operations, maintenance and renewal costs. When reviewing long term financial sustainability, the City must also account for future depreciation (or landfill space consumption) and the need to invest in asset enhancement to respond to regulatory changes and/or other service level changes. When reviewing the long-term impacts of asset acquisition, it is useful to consider the cumulative value and lifecycle costing of the acquired assets being taken on by the City.

Presentation of the Solid Waste Master Plan and the Solid Waste Long Range Financial Plan together articulates proposed target levels of service and an accompanying financial plan to provide for the acquisition, operation, maintenance and renewal of the assets required to support the delivery of Solid Waste Services.

Establishing financial mechanisms to cover the ongoing and future operating and capital costs associated with asset lifecycle activities—including operation, maintenance, renewal, and replacement—is a fundamental aspect of good asset management practice. This approach supports the reliable and sustainable continuity of the service.

If approved, new assets, service levels changes and financial forecasts identified in the Solid Waste Master Plan and accompanying Solid Waste Long Range Financial Plan would be reflected in the next update of the Solid Waste Services Asset Management Plan.

## **CLIMATE IMPLICATIONS**

Solid Waste Services has worked closely with the City's Climate Change and Resiliency team to understand and align where possible with the Climate Change Master Plan and the Energy Evolution Strategy. In addition, the City's Climate Vulnerability and Risk assessment, completed in June 2022, identified a number of medium risks for Solid Waste Services. The potential and impacts of these risks will be monitored as relevant SWMP Actions are planned and implemented. As an example, this could include increased waste tonnages to manage and process due to severe weather events.

The SWMP is recommending a series of Actions that will improve the environmental impacts of Solid Waste Services, these actions can be put into 3 categories: Diversion from Landfill, Renewable Natural Gas and Energy Production, and Fleet.

### Diversion from Landfill

Methane emitted from landfills results from the decaying of organic waste over time under anaerobic conditions. Because methane is both a powerful GHG and short-lived compared to carbon dioxide, increasing diversion from landfill, particularly of organic material, would have a significant effect on reducing GHG emissions. Energy Evolution projected that diverting organic waste from the landfill and using it to generate renewable natural gas was one of the top five actions to achieving the Council- approved GHG emission reduction targets.

The first five years of the SWMP will focus on landfill reduction and diversion of organics from landfill that will result in GHG emissions reductions. Over the 30-year SWMP, the emission reductions from those early actions is an estimated cumulative 4,620 tonnes of CO<sub>2</sub>e per year, equivalent to removing 1,415 passenger vehicles off the road every year, according to calculations available through [Natural Resources Canada](#).

The Actions that will take place in the first 5 years are:

- Action 1: Waste Avoidance, Reduction, and Reuse Initiatives
- Action 4: Enhanced Source Separation of Waste
- Action 5: Supporting Additional Diversion in Multi-Residential Buildings
- Action 6: Waste Diversion Initiatives and Strategies at City Facilities
- Action 7: Waste Diversion in Parks and Public Spaces

These Actions will support the goal set out by the Energy Evolution Model to remove 98 per cent of organics from landfill.

#### Renewable Natural Gas, Energy Production and Enhanced Diversion

The SWMP additionally assessed three possibilities for processing waste that have the potential to further reduce emissions. These options may not be mutually exclusive and are as follows:

1. Anaerobic digestion to process household organic waste and generate renewable natural gas
2. Waste to Energy, specifically mass-burn incineration/thermal combustion
3. Mixed Waste Processing to further divert materials to their



designated stream

While the various processes may have potential for further emission reductions (summarized in [Supporting Document 3](#) of the Draft SWMP), these actions are undergoing further analysis as part of feasibility studies and business case development to inform Council decision-making. This includes further analysis on waste stream compatibility, more refined costs and revenue opportunities, environmental and social impacts, ownership of the environmental attributes of the prospective renewable natural gas, energy or recovered materials produced, market sounding and community support for these technologies.

### Fleet

The SWMP action of Working Toward a Zero Emissions Solid Waste Fleet supports the SWMP Objective to Maximize Operational Advancements. The action includes reviewing emissions from the City's current solid waste fleet vehicles and researching vehicles that use low-carbon fuels. The estimated total amount of GHG emissions from City-owned or contracted waste collection vehicles is 13,040 CO<sub>2</sub>e annually, which the Action aims to reduce to zero by reviewing emission reducing fleet technologies and fuel types. Opportunities with electrification, RNG, and CNG are all on the table – the SWMP commits to adjusting plans for a zero-emissions fleet based on the rapid change and development of the industry and as new fuel sources become available and scalable. Furthermore, until such time that zero-emission fleet and new fuel sources become readily available and reliable, staff continue to optimize collection vehicle routing to enhance operating efficiencies, reduce costs and reduce GHG emissions, many of which is driven through creative procurement strategies to drive change through new collection contracts.

## **INDIGENOUS, GENDER AND EQUITY IMPLICATIONS**

The Solid Waste Master Plan (SWMP) was developed using input from stakeholder groups and members of the public throughout each phase of development, as outlined in this legislative report. Waste management impacts everyone, and meaningful engagement helps ensure the SWMP was built to reflect community needs and desires.

To ensure the SWMP is supported by the community, it was critical that City staff reached out to a robust list of stakeholders that are representative of Ottawa's diverse

demographics and the many businesses, associations, and organizations that contribute to Ottawa's economic, social, and environmental well-being.

A comprehensive Communications and Engagement Strategy was developed with the broad goals of raising awareness at the community level and ensuring residents and stakeholders were provided ample opportunity to provide final input in the SWMP's development.

Staff applied the [City's Equity and Inclusion Lens](#) to develop connections with various groups that are at risk for exclusion in order to disseminate information about engagement opportunities and encourage participation. This was done through working with Hill and Knowlton to target several community groups and reach equity-denied groups. Communications and educational materials in multiple languages were also created. In addition, a range of engagement methods were utilized to encourage broad participation, including focus groups with the specific equity-denied groups listed above.

In keeping with project commitment to reach diverse communities, participation in Engagement Series 3 was encouraged from a broad range of residents from across Ottawa. This included ensuring residents were able to participate regardless of primary language or ability.

Planned activities for Engagement Series 3 included four in-person public information sessions at accessible locations across the City, two virtual information sessions, and online engagement through the City's online platform Engage Ottawa. A public survey was also conducted and was available in five languages; English, French, Arabic, Simplified Chinese, Spanish. To bolster participation in engagement from a wide range of stakeholders, including Equity Diversion and Inclusion groups, two-pager documents that provided pertinent information on the Waste Plan were developed in 10 languages, including English, French, Arabic, Simplified Chinese, Spanish, Inuktitut, Anishinaabemowin, Farsi, and Turkish. An information session was also conducted with the SWMP's Stakeholder Sounding Board, which represents various perspectives from across the community.

Statistics on the demographics of survey respondents include percentage of survey respondents who personally identified as someone in the following groups: (0.6 per

cent) Indigenous, (6.3 per cent) Francophone, (4.2 per cent) 2SLGBTQQIA+, (6.6 per cent) Immigrant, (10.3 per cent) Older Adult (65 years and older), (8.2 per cent) Persons with a disability, (1.5 per cent) Persons living in poverty, (3.9 per cent) Racialized person, (6.6 per cent) Rural, (18.1 per cent) Woman, (1.5 per cent) Youth (29 years old and under), (15.7 per cent) Do not identify, (13.0 per cent) Prefer not to answer, (3.3 per cent) Identify as Other.

During Engagement Series 3, over 22 Equity, Diversion and Inclusion groups were invited to participate in an online focus group to provide feedback on the Waste Plan.

Focus groups that were held included representation from:

- Canadian Council of the Blind
- Ottawa Disability Coalition
- Youth Ottawa

An online focus group was held with Youth Ottawa with nine participants representing the group. An online meeting was held with one member of the Canadian Council of the Blind and email feedback was received detailing input from several members of the Ottawa Disability Coalition. General feedback included:

- Education will be a big key to success, it needs to start early and should be consistent and ongoing.
- Make sure accessibility considerations are taken into account during the planning phases, not as Actions are being implemented.

Staff used this feedback to:

- Confirm importance of early planning and implementation of Actions that focus on education.
- Factor addressing barriers into both the planning and implementation phases of Actions.

Further details can be found in the What We Learned Report appended as Supporting Document 2.

A significant portion of feedback from Equity, Diversion and Inclusion groups during

Engagement Series 3 centered around potential barriers to participating in some of the Action Suites and ideas and opportunities to overcome some of these barriers. This included:

- Physical barriers, such as handling large carts
- Lack of internet access
- Convenience concerns, such as needing to drive large distances or requiring a vehicle in order to recycle many items not collected at the curb

This feedback was documented by staff and will be used to help inform the planning and implementation of relevant Action Suites in the SWMP.

### **RISK MANAGEMENT IMPLICATIONS**

All risks and associated mitigation measures have been outlined within the body of the report.

### **TERM OF COUNCIL PRIORITIES**

The Solid Waste Master Plan aligns with the proposed [2022-2026 Term of Council priority](#): a city that is green and resilient. Outcomes that support this priority include:

- Reducing emissions associated with the City's operations and facilities; and,
- Increasing waste reduction and diversion.

### **SUPPORTING DOCUMENTATION**

Document 1: Solid Waste Master Plan

Document 2: What We Learned Report (Engagement Series 3 Feedback)

### **DISPOSITION**

Upon approval of this report, staff will plan and implement the Solid Waste Master Plan Year 1 Actions. Staff will report on program performance in Year 2, at which time further approvals may be sought in order to implement additional Actions. Staff will work with Finance Services to seek necessary funding for support the SWMP, as outlined in the Solid Waste Long Range Financial Plan (ACS2024-FCS-FIN-0006), which was tabled alongside this legislative report.