Subject: Solid Waste Services Long Range Financial Plan 2025-2053

File Number: ACS2024-FCS-FIN-0008

Report to Environment and Climate Change Committee on 18 June 2024

and Council 26 June 2024

Submitted on June 7, 2024 by Cyril Rogers, General Manager and Chief Financial Officer, Finance and Corporate Services Department

Contact Person: Isabelle Jasmin, Deputy City Treasurer, Corporate Finance, Finance and Corporate Services Department

613-580-2424, ext. 21312, Isabelle.jasmin@ottawa.ca

Ward: Citywide

Objet : Services des déchets solides – Plan financier à long terme 2025-2053

Numéro de dossier : ACS2024-FCS-FIN-0008

Rapport au Comité de l'environnement et du changement climatique

le 18 juin 2024

et au Conseil le 26 juin 2024

Soumis le 7 juin 2024 par Cyril Rogers, Directeur général et chef des finances, Direction générale des finances et des services organisationnels

Personne ressource : Isabelle Jasmin, Trésorière municipale adjointe, Services des finances municipales, Direction générale des finances et des services organisationnels

613-580-2424, poste 21312, Isabelle.jasmin@ottawa.ca

Quartier : À l'échelle de la ville

REPORT RECOMMENDATION(S)

That the Environment and Climate Change Committee recommend that City Council:

1. Approve a funding plan that supports the operating and capital requirements for the Solid Waste Master Plan and recommended actions as outlined in this report.

2. Approve the implementation of a fully recoverable fee model as outlined in this report, to fund Solid Waste Services for both waste diversion and garbage, as opposed to the current hybrid model of tax funding for waste diversion and fee for garbage, to be implemented and phased-in, if required, as part of the 2025 budget exercise.

3. Approve the establishment of a Solid Waste debt service limit of 15 per cent as outlined in this report, similar to Rate Supported services, while maintaining the 8.5 per cent limit for tax and rate services combined, established by Council.

4. Direct staff to explore the feasibility of including Solid Waste Services as a separate development charge in the next Development Charge Background Study.

RECOMMANDATION(S) DU RAPPORT

Que le Comité de l'environnement et du changement climatique recommande ce qui suit au Conseil municipal :

1. Approuver un plan de financement permettant de donner suite aux besoins en matière de fonctionnement et d'immobilisations énoncés dans le Plan directeur de la gestion des déchets solides ainsi qu'aux mesures recommandées dans le présent rapport.

2. Approuver la mise en œuvre d'un modèle de frais entièrement recouvrables, tel qu'il est décrit dans le présent rapport, pour financer à la fois les activités de réacheminement des déchets et celles en lien avec les ordures des Services des déchets solides, par opposition au modèle hybride actuel, qui prévoit le financement par l'impôt pour le détournement des déchets et par les frais établis pour les ordures, et de mettre en œuvre ce modèle progressivement, si nécessaire, dans le cadre de l'exercice budgétaire de 2025.

3. Approuver l'établissement d'une limite de 15 % pour la charge du remboursement de la dette des Services des déchets solides, comme indiqué dans le présent rapport, ce qui est comparable aux services financés par les redevances, en maintenant la limite de 8,5 % qu'il a établie pour les services financés par les recettes fiscales et les services financés par les redevances combinés.

4. Demander au personnel de se pencher sur la possibilité d'inclure les redevances des Services des déchets solides en tant que redevances d'aménagement distinctes dans la prochaine étude du contexte des redevances d'aménagement.

EXECUTIVE SUMMARY

The Solid Waste Services Long Range Financial Plan (LRFP) is the first for Solid Waste Services. It was developed to establish a financial plan that considers current, and upcoming capital needs for Solid Waste Services, to better prepare for the funding that will be required to address those needs, while providing financial predictability to residents and rate payers. This report provides recommendations and a funding strategy to address the current capital needs and the recommended actions of the Solid Waste Master Plan (SWMP).

The SWMP provides the framework for how the City will manage and divert waste over the next 28 years while ensuring responsibilities for waste management services can be met in a sustainable way. By implementing the SWMP recommended actions, the City will meet regulatory requirements, increase diversion, and defer the need for a new landfill long enough to build up cash reserves and a predictable source of funds for a future residual waste management technology, and to fund ongoing operating and capital needs.

The LRFP affordability model compared the financial impact of implementing these actions and against the status quo. In both scenarios, the revenue requirement to provide the service will continue to increase. The SWMP recommended actions are affordable, as long as the funding plan aligns with the following parameters:

- Solid Waste debt service limit of 15 per cent, similar to other rate supported services.
- The Solid Waste Reserve fund will be replenished over time to return to a surplus position and to smooth spending for capital requirements approved as part of the SWMP.
- Annual fees will increase at the same rate as operating costs required to deliver the service, will be minimized as much as possible and will be smoothed over the forecast period in order to provide predictability for ratepayers.

Solid Waste costs are currently recovered from both a curbside service fee, and a percentage of the property tax bill, which results in many users paying different

amounts, based on property assessment values. Under this current model, there are also many properties, namely commercial, that are paying for a service in which they are not receiving.

Staff recommend implementing a fully recoverable fee model, that is more aligned with a utility funding model for this type of service. A fee-based model would be more equitable, flexible, clear, and sustainable than the current hybrid model funded from both taxes and fees. This would have the impact of eliminating the waste diversion charge on the property tax bill for all properties and increasing the residential curbside service fee, also on the tax bill. This would be a flat fee for single and multi-residential properties.

Table 1 below provides a projection of the annual fee per single residential property.

The status quo scenario, which includes the ten-year regulatory and renewal investments, as well as investment in a new landfill, forecasted to be operational by 2036.

The SWMP scenario, which also includes the ten-year regulatory and renewal investments, investment in the 25 SWMP recommended actions suites, and future investment in a future residual waste management technology.

Table 1 – 2025-2034 Forecasted Fee per Single Residential Unit

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	10 Yr Avg
Status Quo												
Fee	**227**	**252**	**263**	**282**	**291**	**298**	**307**	**326**	**345**	**362**	**371**	**310**
% Increase		11%	5%	7%	3%	2%	3%	6%	6%	5%	2%	5.0%
SWMP Fee												
Fee	**227**	**265**	**283**	**311**	**319**	**326**	**341**	**348**	**356**	**366**	**381**	**330**
% Increase		17%	7%	10%	3%	2%	5%	2%	2%	3%	4%	5.4%

The SWMP provides the framework for how the City will manage and divert waste over 28 years while ensuring responsibilities for waste management services can be met in a financially sustainable way.

RÉSUMÉ

Le Service des déchets solides – Plan financier à long terme (PFLT) est le premier pour les Services des déchets solides. Il a été élaboré en vue d’établir un plan financier qui

prend en compte les besoins actuels et à venir en matière de capitaux pour les Services des déchets solides afin de mieux préparer le financement qui sera nécessaire pour répondre à ces besoins, tout en offrant une prévisibilité financière aux résidents et aux contribuables. Ce rapport renferme des recommandations ainsi qu'une stratégie de financement visa à répondre aux besoins actuels en matière de capitaux et aux actions recommandées dans le Plan directeur de la gestion des déchets solides (PDGDS).

Le PDGDS définit la structure-cadre selon laquelle la Ville vise à gérer et à réacheminer les déchets au cours des 28 prochaines années, tout en veillant à ce que les responsabilités en matière de services de gestion des déchets puissent être assumées d'une manière durable. En mettant en œuvre les actions recommandées par le PDGDS, la Ville répondra aux exigences réglementaires, augmentera le réacheminement des déchets et reportera la nécessité d'un nouveau site d'enfouissement suffisamment longtemps pour constituer des réserves de trésorerie ainsi qu'une source prévisible de fonds pour une future technologie de gestion des déchets résiduels, en plus de financer les besoins courants en matière d'exploitation et de capitaux.

Le modèle d'abordabilité du PFLT a comparé les répercussions financières de la mise en œuvre de ces actions et du statu quo. Dans les deux cas, les besoins de revenus pour fournir le service continueront d'augmenter. Les actions recommandées par le PDGDS sont abordables, tant que le plan de financement reste dans les limites des paramètres suivants :

- limite de 15 % pour la charge du remboursement de la dette des Services des déchets solides, semblable à celle des autres services financés par les taux;
- le fonds de réserve pour la gestion des déchets solides sera reconstitué au fil du temps afin de revenir à une position excédentaire et de lisser les dépenses pour les besoins en matière de capitaux approuvés dans le cadre du PDGDS;
- les frais annuels augmenteront au même rythme que les coûts d'exploitation nécessaires à la fourniture du service, seront minimisés autant que possible et lissés au cours de la période de prévision afin d'assurer la prévisibilité pour les contribuables.

Les coûts de la gestion des déchets solides sont actuellement recouvrés à partir d'un frais de service associés à la collecte des déchets en bordure de rue et d'un pourcentage de l'impôt foncier, ce qui fait que de nombreux utilisateurs paient des montants différents, en fonction de la valeur de l'évaluation foncière. Dans le cadre du

modèle actuel, de nombreuses propriétés, notamment commerciales, paient pour un service qu'elles ne reçoivent pas.

Le personnel recommande la mise en œuvre d'un modèle de frais entièrement recouvrables, qui est plus conforme à un modèle de financement des services publics pour ce type de service. Un modèle basé sur des redevances serait plus équitable, plus flexible, plus clair et plus durable que le mode hybride actuel financé à la fois par des taxes et des redevances. Cette mesure aurait pour effet d'éliminer la redevance de réacheminement des déchets sur la facture d'impôt foncier pour toutes les propriétés et d'augmenter les frais de service associés à la collecte des déchets en bordure de rue, également sur la facture d'impôt foncier. Il s'agit de frais fixes pour les propriétés résidentielles et les immeubles à logements multiples.

Le tableau ci-dessous présente une projection des frais annuels par propriété résidentielle.

Le scénario du statu quo, qui comprend les investissements réglementaires et de renouvellement sur dix ans, ainsi que l'investissement dans un nouveau site d'enfouissement, qui devrait être opérationnel en 2036.

Le scénario du PDGDS, qui comprend également les investissements réglementaires et de renouvellement sur dix ans, les investissements dans les 25 suites d'actions recommandées par le PDGDS et les investissements pour une future technologie de gestion des déchets résiduels.

Tableau 1 – Prévision de la redevance par unité résidentielle pour la période 2025-2034

	2024	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**moyenne sur 10 ans**
Statu quo												
Frais	**227**	**252**	**263**	**282**	**291**	**298**	**307**	**326**	**345**	**362**	**371**	**310**
% d'augmentation		11 %	5 %	7 %	3 %	2 %	3 %	6 %	6 %	5 %	2 %	5,0 %
Frais du PDGDS												
Frais	**227**	**265**	**283**	**311**	**319**	**326**	**341**	**348**	**356**	**366**	**381**	**330**
% d'augmentation		17 %	7 %	10 %	3 %	2 %	5 %	2 %	2 %	3 %	4 %	5,4 %

Le PDGDS définit la structure-cadre selon laquelle la Ville vise à gérer et à réacheminer les déchets au cours des 28 prochaines années, tout en veillant à ce que les responsabilités en matière de services de gestion des déchets puissent être assumées d'une manière financièrement durable.

BACKGROUND

Long range financial plans (LRFPs) support good financial planning. Once developed, these plans are updated each term of Council to reflect new information such as changing policy priorities, economic and market factors, costing changes, and new legislated requirements, if required. This is the first LRFP for Solid Waste Services for the City of Ottawa. It was developed to establish a financial plan that considers the current, and upcoming capital needs for solid waste services, to better prepare for the funding that will be required to address those needs, while providing financial predictability to residents and rate payers. This report provides recommendations and a funding strategy to address the current capital needs and the actions of the Solid Waste Master Plan (SWMP).

Overview of Solid Waste Management in the City of Ottawa

The City of Ottawa covers a broad geographic area spanning approximately 2,800 square kilometers and includes over 5,600 kilometers of roadways. Within these boundaries, Ottawa is home to a population of over one-million people, with a population distribution of 55 per cent urban, 35 per cent suburban and ten per cent rural. In Ottawa, servicing this population involves providing waste collection services, including garbage, blue and black box, green bin, leaf and yard waste and bulky item pick up to approximately:

- 310,000 units receiving curbside service
- 132,000 units receiving bin service
- 750 on-street waste bins (garbage and recycling)
- 5,400 waste bins in City parks
- 500 City facilities
- 300 small businesses and places of worship through the Yellow Bag Program for Small Businesses
- 309 schools through the Green Bins in Schools Program

Curbside waste collection in the City includes:

- Weekly green bin (organic material and yard waste) collection (unlimited material volume).
- Bi-weekly collection of blue and black box on alternating weeks (unlimited material volume).
- Bi-weekly garbage collection (up to three approved containers of garbage, effective Q3 2024, previously six bulky items, or any combination which does not exceed six in a bi-weekly period);
- Bi-weekly collection program for diapers and incontinence products for qualifying, registered households, alternating with the garbage collection (one bag limit).
- Collection of recyclables in the same truck as organics (separate compartments); and,
- Collection of garbage and bulk items in a separate truck.

The City is also responsible for processing all the waste that is collected. These are services that are mandated by the Province and many of the costs to deliver this service are regulatory in nature and are not discretionary. Solid waste services is an essential service to the residents of Ottawa.

Overview of Current Funding Structure

On April 15 2005, Council approved the Integrated Waste Management Master Plan (ACS2005-PWS-UTL-0008) which outlined the implementation of an alternative method to fund solid waste management services to increase the incentive to divert materials from landfill.

The hybrid funding model enacted two different and distinct sources of funding City solid waste management services: waste diversion/recycling costs continued to be funded by the assessment-based tax bill; and costs for residual garbage collection and landfill disposal fees would be funded by residential and multi-residential properties through the implementation of a uniform flat fee (the Solid Waste Curbside Service Fee).

Waste diversion program costs (blue/black/green bin) are currently funded by taxes so that the program costs can be assessed back to all property owners, including the industrial, commercial, and institutional sector since they generate/produce the

recyclable materials. However, with the implementation of Individual Producer Responsibility (IPR) for recycling, the current hybrid funding model will need to be revisited.

Solid Waste Master Plan

On July 10, 2019, Ottawa City Council approved the Solid Waste Master Plan (SWMP) Roadmap report (ACS2019-PWE-GEN-0007) which outlined the scope and framework for the development of the City's 30-year Waste Plan. Once finalized, the SWMP will provide the overall framework, direction, and goals for solid waste management, diversion, and reduction policies over the short-, medium- and long-term horizon. On July 7, 2021, Council approved the Phase 2 report (ACS2021-PWE-SWS-0003) which provided detailed information relating to the City of Ottawa's long-term waste management needs, the high-level long list of options to meet future needs, and the evaluation process to evaluate the options. The final SWMP will be presented alongside this LRFP report and includes 25 proposed Action Suites (containing 50 actions) for implementation to address the City's solid waste needs over the next 28 years. The five objectives of the SWMP are:

- Objective 1: Maximize the reduction and reuse of waste.
- Objective 2: Maximize the recycling of waste.
- Objective 3: Maximize the Recovery of Waste and Energy and the Optimal Management of Remaining Residuals
- Objective 4: Maximize operational advancements.
- Objective 5: Develop a Zero Waste culture across the City.

DISCUSSION

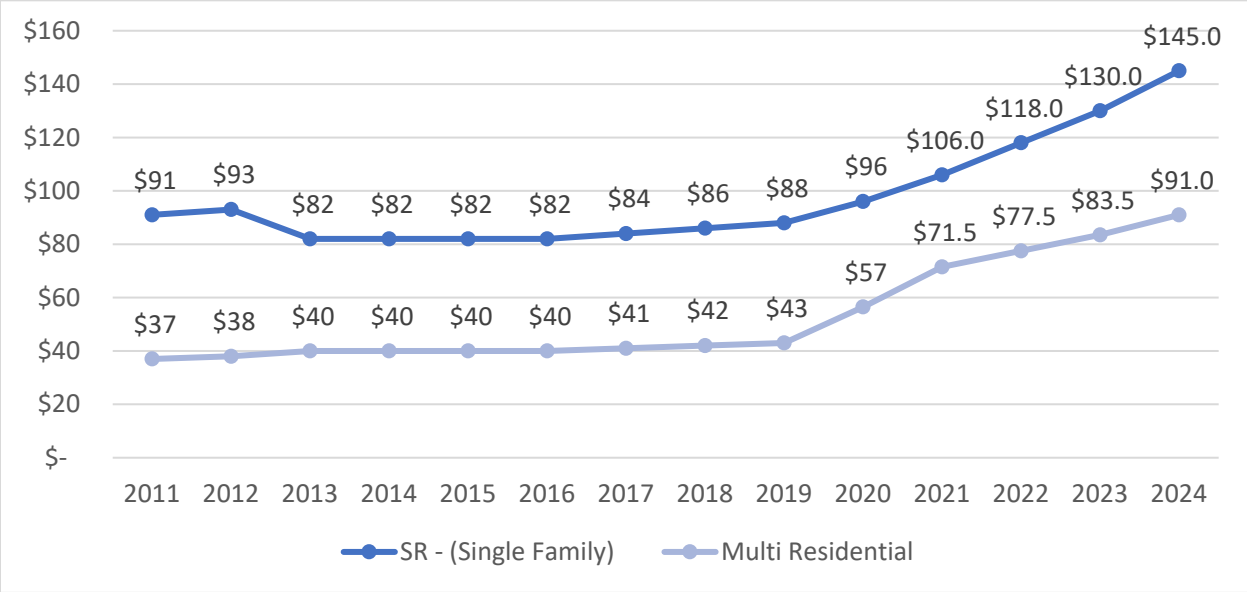
Historical Funding Summary

The Solid Waste Curbside Service Fee is a direct charge to residents who benefit from the curbside service of garbage and is a separate line item on the property tax bill. Since 2013, when the City moved to bi-weekly pick up, until 2019 the fee for single residential households (SR) remained quite low at $82.

, which was not financially sustainable. Since 2019 the fee has increased to $145 and the multi- residential (MR) has increased to $91, which is approximately 63 per cent of the single residential fee. The increase in the annual Solid Waste Curbside Service Fee

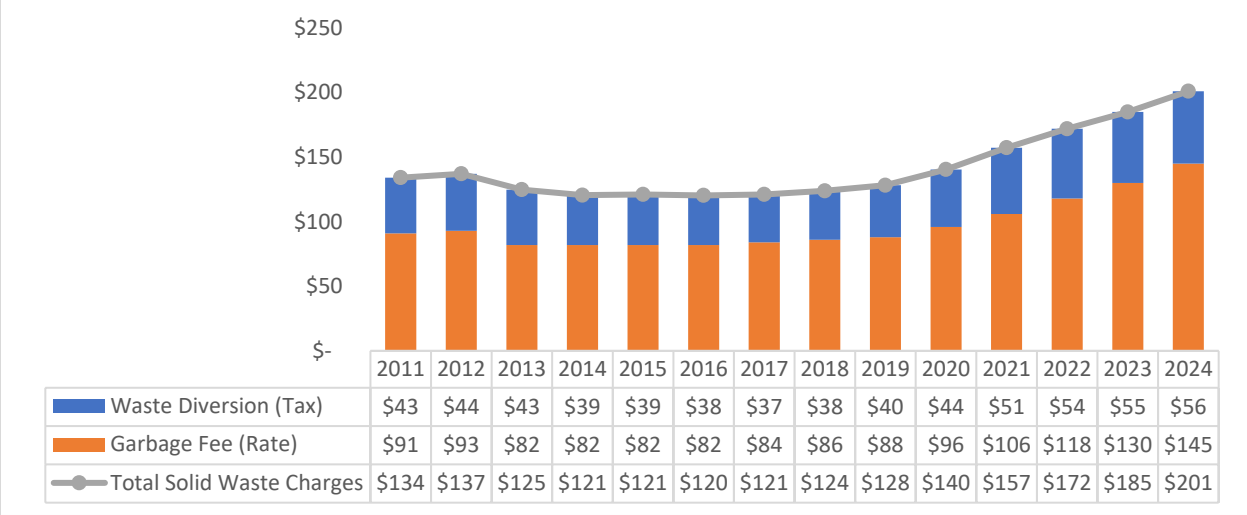
is shown in Chart 1 below.

Chart 1 – Annual Solid Waste Curbside Service Fee



Waste diversion costs, which are funded by property taxes have not varied significantly over the years, with the fee subsidizing more and more of this service. The amount paid from an average residential property owner has ranged between $37 and $56 annually from 2011 to 2024. It should be noted that the waste diversion costs funded by property taxes is paid by all taxpayers in the City, including commercial properties. Chart 2 below shows the historical trend of the total combined charge for the average residential property (assumes assessment value of $415 thousand) including both the tax levy and fee:

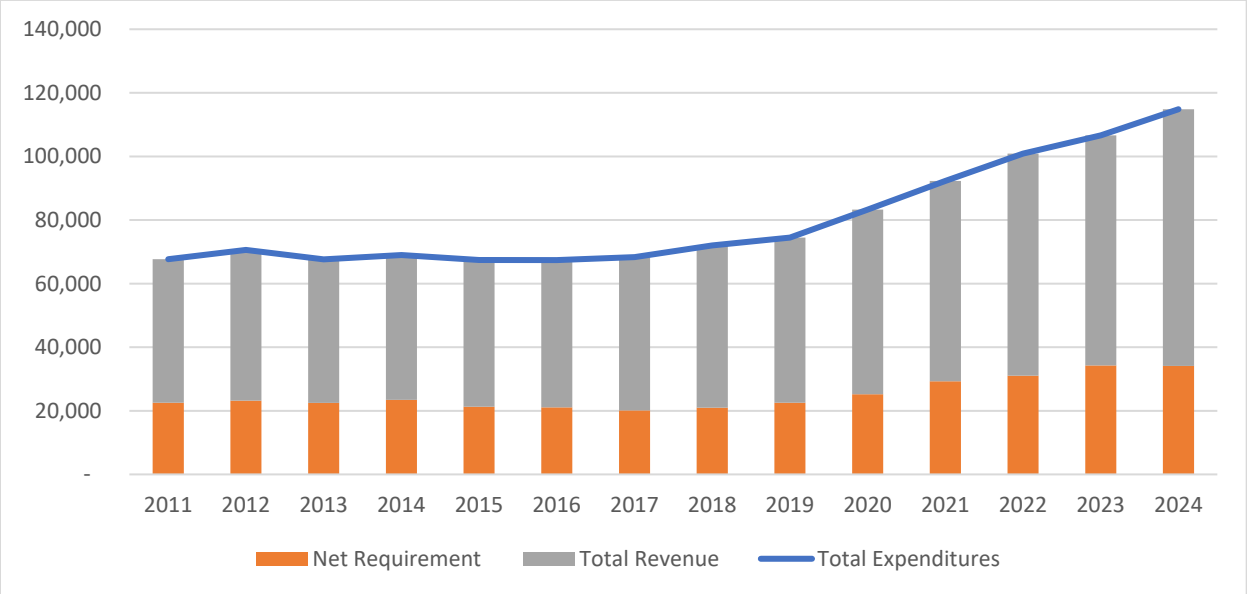
Chart 2 – Combined Annual Solid Waste Charge for Average Single Residential



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Waste Diversion (Tax)	$43	$44	$43	$39	$39	$38	$37	$38	$40	$44	$51	$54	$55	$56
Garbage Fee (Rate)	$91	$93	$82	$82	$82	$82	$84	$86	$88	$96	$106	$118	$130	$145
Total Solid Waste Charges	$134	$137	$125	$121	$121	$120	$121	$124	$128	$140	$157	$172	$185	$201

Total Expenditures have increased since 2020 as a result of increasing operating costs mainly due to collection contracts, as well as contributions to capital, for regulatory and asset renewal pressures.

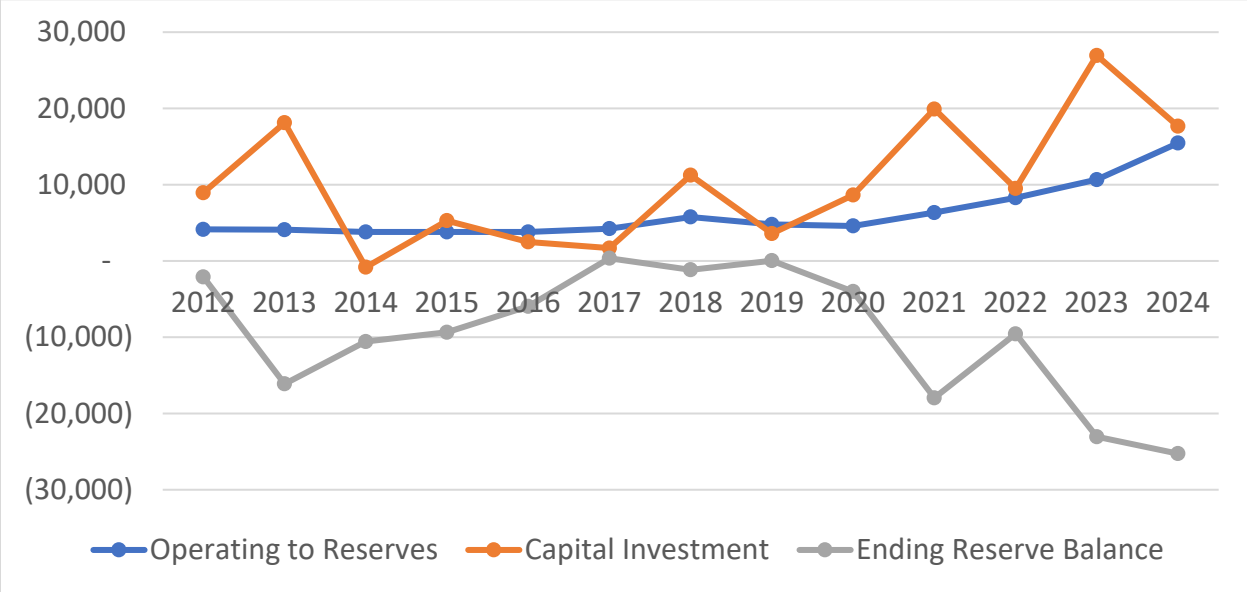
Chart 3 – Solid Waste Historical Operating Budget (in millions $)



Solid Waste Services has its own combined operating and capital reserve fund, which is used to offset any annual operating pressures, and to provide funding for capital investments. Approximately $5 million has been contributed annually to the reserve from operating over the last ten years and the Solid Waste Reserve Fund has been in a deficit position every year. In 2020, increases to the fee were implemented in order to

gradually improve the overall financial sustainability of solid waste services and replenish the reserves over time. Solid waste services has experienced significant increases in operating costs, largely driven by regulatory requirements, over the past several years and have developed a SWMP that will require increased capital investments over the next ten years and beyond, including the eventual replacement of the Trail Road Waste Facility (TWFL). The Solid Waste reserve fund is currently in a deficit position of $25 million.

Chart 4 – Solid Waste Reserve Fund Balance 2012 – 2024



Funding Model / Strategy

The current funding model recovers garbage related expenditures from the Solid Waste Curbside Service Fee, and the diversion related expenditures from the property tax base. The average total cost per single residential unit in 2024 is $201 annually.

As the City is no longer responsible for blue and black bin collection and processing, and tipping fee revenue will significantly decline as a result no longer receiving ICI waste at Trail Road, there is less revenue to offset the costs, resulting in the total diversion program being recovered from the property tax base.

A total of $34.1 million was funded from the tax supported budget in 2024 $6 million of which is an allocation from corporate common revenues and $28.1 million funded from property tax.

In the status quo scenario, where SWMP actions are not implemented, the total cost per

single residential unit would increase to roughly $219 in 2025.

As many of the SWMP recommended actions are aiming to increase diversion, they would be funded from the property tax base. As a result, the annual net requirement from property tax would significantly increase over the 2025-2053 timeframe, reducing the amount of property tax funds available to fund other citywide services. The tax pressure would increase from $34 million in 2025, to $60 million in 2053.

Fully Recoverable Fee Model

Staff recommend implementing a fully recoverable fee model, with only a small percentage remaining on the tax bill for solid waste services that benefit citywide properties, such as collection and processing from public garbage bins. Implementing a fully recoverable fee model is more equitable, flexible, clear, and sustainable than the current hybrid model:

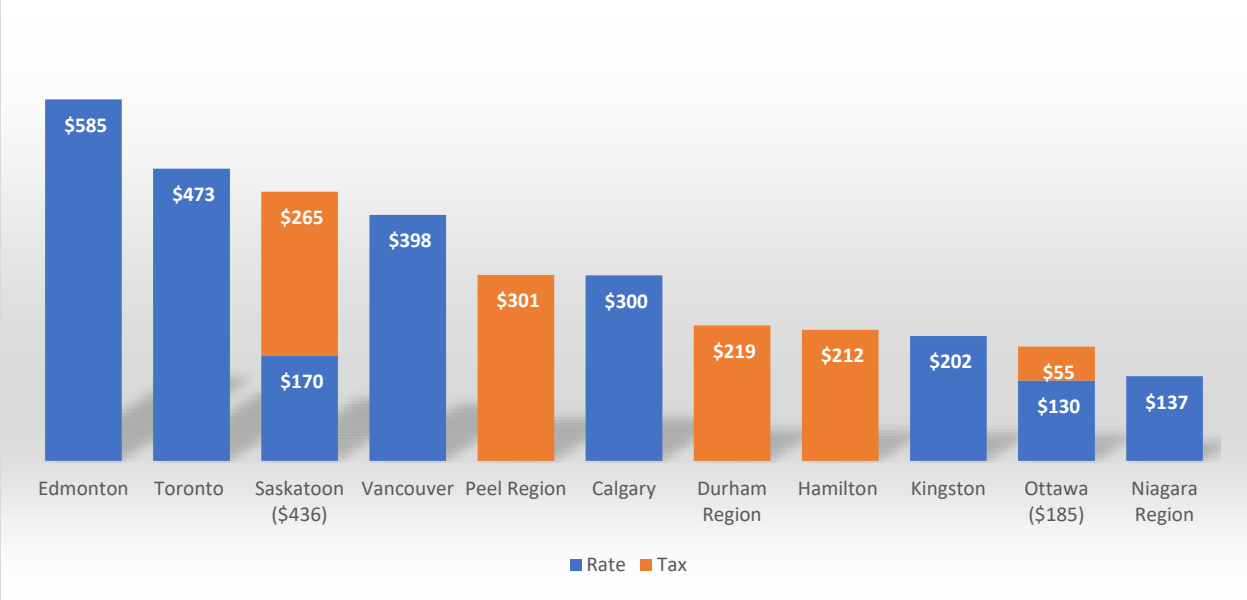
- ***Equitable:*** currently 30 per cent of the solid waste budget is funded by property tax and citywide revenues, which is paid by all property taxpayers including commercial properties, whereas a fully recoverable fee would charge the properties that are directly receiving this service. Properties with higher assessment values are currently paying more for the same service.
- ***Flexible:*** a fully recoverable fee model can be better aligned to the overall service requirements similar to a utility model, rather than depending on citywide tax increases and competing for funding with other citywide services.
- ***Clear:*** the cost of delivering solid waste services is much clearer and fees can be tied more directly to the service provided.
- ***Sustainable:*** Fee increases can be planned over a longer time horizon. The LRFP includes a 28-year time horizon to ensure that capital requirements are built into the funding plan to provide smoother and more predictable fee increases. A cost recovery model will also leverage other sources of revenues or fees for service to help reduce the residential service fee.

Moving to a fully recoverable fee model from one that is currently funded partially by tax, will increase the cost slightly for the single residential home from $201 annually for an average home assessed at $415 thousand to $227 annually flat fee for all single residential homes. That is an increase of approximately $2 per month, to better align the fee charged with the service received.

Municipal Scan of Solid Waste Charges

In preparing the LRFP and SWMP, staff conducted an extensive scan of solid waste charges in other municipalities across Canada. Funding models varied from a 100 per cent cost recovery fee-based system, to a hybrid system, where a portion of costs are recovered from a fee, and the remaining amount recovered from property taxes to a 100 percent tax-based model. The majority of these municipalities placed limits on the amount of waste that is collected. Several municipalities have a cart-based system, where residents pay a fee-based on the size of their collection cart and pay additional fees for ancillary services. Based on a similar level of service, collected bi-weekly, the City of Ottawa's solid waste charges are among the lowest of similarly sized municipalities, while historically, having the highest limit (six containers) of items collected. Chart 5 below provides a comparison of solid waste charges among 11 municipalities in 2023.

Chart 5 – 2023 Municipal Comparison of Solid Waste Charges (Garbage, Recycling & Organics)



Solid Waste Affordability Model

As a companion report to the SWMP, the Solid Waste LRFP was developed to ensure the financial sustainability and affordability of these services over the long term. The SWMP covers a 28-year timeframe from 2025 to the end of the SWMP in 2053, with estimated operating and capital requirements over the next ten years that include recommended actions for waste diversion. Per Council direction, staff are also

assessing the feasibility of alternate technologies for waste management. The Solid Waste LRFP includes projected financial requirements over the next 28 years. There is more confidence in the estimates for the first ten years than in the later years, which will depend on the technologies chosen and the business cases to support those decisions. Therefore, the Solid Waste LRFP is an evolving plan, reflecting very preliminary estimates of future capital requirements. However, it is important to project funding requirements as far into the future as possible, in order to establish a funding strategy that prepares the City financially for the inevitable investments that will be required.

The Solid Waste Affordability Model is a comprehensive assessment of the SWMP's affordability based on a forecast of all solid waste revenues, operating costs and capital expenditures from 2025 to 2053. For the SWMP to be affordable, fees must increase with solid waste costs. In the next 28 years, solid waste services will experience more capital-intensive pressures, and solid waste revenue will need to increase accordingly.

Solid waste services has a combined operating and capital reserve which is used to manage unanticipated operating expenses and annual contributions to reserves must be sufficient to cover not only annual capital funding requirements but also any larger investments expected in the near future, to be funded in combination with debt financing. Having a solid waste reserve provides stability to rate payers as the SWMP is implemented in 2025-2053, with capital requirements that will vary significantly over the years. The funding plan for solid waste services was developed using the following principles:

- The Solid Waste Reserve Fund will be replenished over time to return to a surplus position and to smooth spending for capital requirements approved as part of the SWMP.
- Solid waste services operating surpluses will be used to replenish the Solid Waste Reserve Fund.
- The amount of debt servicing will never exceed 15 per cent of solid waste revenues.
- The combined amount of debt servicing funded from tax and rate revenue will never exceed 8.5 per cent of City own source revenues.
- Debt will be issued for terms that match the life of the assets they are funding, which not only reduces the annual operating impact of debt issuance but also ensures that infrastructure investments are paid for by future generations that

will benefit from these assets; and,

- Annual fees will increase at the same rate as operating costs required to deliver the service, will be minimized as much as possible and will be smoothed over the forecast period in order to provide predictability for ratepayers.

The LRFP analyzed the projected costs under two scenarios, the first being the cost of continuing current operations, which includes asset renewal and regulatory capital investments and the investment in a new landfill in 2036. Asset renewal includes investments that will maintain the current solid waste assets in a good state of repair, and regulatory investments that are mandated, such as the development and capping of Stage 5 at Trail Road Waste Facility (TWFL). The LRFP also analyzed the cost of adopting the SWMP, which includes the core asset renewal and regulatory capital investment requirements, the cost of the SWMP recommended actions net of offsetting savings and revenue generating opportunities, and a cost of investing in a residual waste management strategy such as a future landfill, mixed waste processing facility, or waste to energy technology.

Table 2 below provides an overview of the key financial assumptions that were built into each scenario, highlighting the key differences between status quo and the Solid Waste Master Plan. The costs included in the chart are inflated and occur at different points in time in the affordability model. Comparisons of total operating and capital costs over time for each scenario will be presented in the operating and capital expenditure projection sections below.

The first column highlights the regulatory requirements that were included in the financial model that are mandatory. The second column includes the pressures included in the status quo scenario, and the final column includes assumptions related to implementing the SWMP.

Table 2 – Estimated Financial Implications of Status Quo vs SWMP (Inflated $)

Financial Assumptions	**Regulatory Requirements**	**Status Quo - New Landfill by 2036**	**SWMP – Landfill by 2050**
Capital Expenditures to Maintain Over Next 10 Years	$117M	$68M	$68M
Recommended Actions	$275M		$71M

Next 28 Years			
Increased Operating Costs by 2031			$20M annually
Increased Debt Servicing Cost by 2035		$15M annually	
New Landfill / Residuals Management System		$536M	$791M
Avoided Cost of Landfilling 2024-2049			($120M)

The capital expenditure of approximately $185 million required to maintain the current service over the next ten years includes $117 million (63 per cent) which is required to meet regulatory compliance requirements, and $68 million (37 per cent) for asset renewal requirements. These costs will be incurred in both the status quo scenario, and if the SWMP action are implemented.

The SWMP, includes approximately $346 million of recommended actions, of which, $275 million (80 per cent) is to meet regulatory compliance requirements, with the remaining, $71 million (20 per cent) being service enhancements. Included in these actions are a new anerobic digestion facility, which will reduce organics processing costs, as well as investments in Stage 6 at TWFL, which combined with the service enhancement actions, will help extend the life of TWFL by approximately 14 years.

Increased annual net operating costs of approximately $20 million by 2031 are required to implement the SWMP. Operating costs for the new anerobic digestion facility, TWFL stage 6 expansion, and other service enhancements, total to approximately $23 million annually in 2031, offset by operational savings, and potential revenue from renewable natural gas generated at the anerobic digestion facility of approximately $3 million, a net impact of $20 million. Approximately 76 per cent of net operating costs are for regulatory compliance activities.

If the SWMP actions are not adopted, investment in a new landfill will be required. As part of the SWMP process, expert consultants (Dillon) were hired to provide an estimate for a new landfill. This work was completed in 2023, and included an estimate for the purchase of land, permitting, and the construction of a landfill (facility, first cell, liner, leachate collection) that would suit the City of Ottawa’s needs. The estimated construction costs of $368 million is a Class D estimate in 2023 dollars. A 40 per cent

contingency was applied to the class D estimate and escalated annually by three per cent to provide a conservative estimate of $536 million of construction costs for a new landfill to be in operation by 2036. The debt servicing costs would be approximately $15 million annually and would continue for the next 30 years.

With the SWMP actions, the life of TWFL will be extended by approximately 14 years, which will provide enough time to replenish the SW reserve to invest in a residual waste management system (Landfill, Waste to Energy, Mixed waste processing facility), operational by 2050, estimated to be approximately $791 million. The funding strategy for a future landfill or residual management system and the impact on reserves is explained in greater detail later in the Reserve Fund section of the report.

Operating Revenue Projections

Currently solid waste operations are primarily funded from two sources, the Solid Waste Curbside Service Fee, and taxes. In the projections, we assumed a utility model where the hybrid model is eliminated, and a fully recoverable fee was implemented. Additionally, some revenues are received from tipping fees, the sale of yellow bags, which is offered to commercial clients, and revenue from the producers of blue and black box materials. The key assumptions used in projecting future revenue to operations are as follows:

Annual Growth – The forecasted assessment growth is in line with the current official plan and assumes the number of households will increase annually by an average of 1.2 per cent, from 442 thousand households in 2024, to roughly 617 thousand households by 2053.

Tipping Fees – Assumed the tipping fees will significantly decline in 2025, in line with the SWMP recommended action of no longer accepting waste from industrial and commercial clients.

Recycling materials – The City receives roughly $17 million annually from producers of blue and black box materials. With the implementation of IPR, it is assumed that the City will no longer receive any revenue related to blue and black box materials by 2026.

Solid Waste Service Fee – Garbage related costs are currently recovered from the curbside service charge. For revenue projection purposes, the affordability model conservatively assumed the annual fee will increase at the same rate as operating costs, over the 2025-2053 timeframe, an average of 4.2 per cent

Other Revenue – The affordability model also included conservative estimated projections for other sources revenue, including additional fees related to the sale of yellow bags, and tipping fees for organic material.

Operating Expenditure Projections

The projected annual operating expenditures for both scenarios are included in the affordability model and shown in Chart 6 below**.**

Chart 6 – 2025-2053 Operating Expenditure Projections (Status Quo vs SWMP)

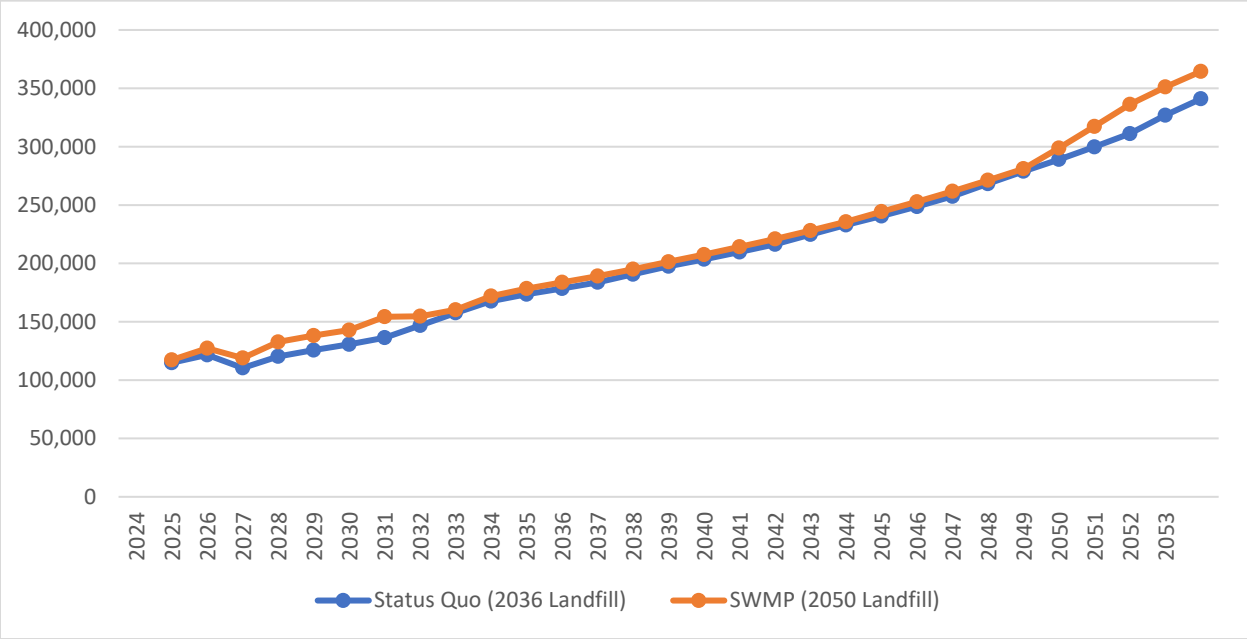


Chart 6 demonstrates that there is a minimal impact on the operating costs to implement the SWMP. The SWMP adds $20 million annually, but status quo would require an early investment in a new landfill adding $15 million annually in debt servicing. The LRFP includes the operating costs to maintain the current delivery of solid waste services and reflects the changes to the cost structure as the SWMP recommended actions are implemented. The operating cost assumptions take into consideration all of the recommended actions including a new organics processing facility, waste diversion initiatives, and the residual waste management strategy. The operating costs estimates include the maintenance and lifecycle costs for all solid waste assets. The average annual increase in operating expenditures 2025-2053 is four per cent. The key assumptions are as follows:

Staff Costs – Staff costs are increased annually, at an average of two per cent.

Contracts / Materials – In the ten-year timeframe, materials and contract costs increase at an average of five per cent annually and over the 28-year timeframe to 2053, they increase at an average of three per cent

Fleet Costs – Fleet costs are forecasted to increase annually at an average of eight per cent to account for inflationary pressures.

Any revenue in excess of operating costs, will be available to fund a cash contribution to capital and debt servicing in a given year. Table 3 summarizes the forecasted revenue and operating costs, and the net operating revenue identified as available to fund capital.

Table 3 - Summary of Forecasted Revenue and Costs (in millions of dollars)

	Average Annual	**2025-2053**
Revenue:		
Solid Waste Service Fee	224.2	6,278
Other Operating Revenue	1.0	28.5
From Property Taxes	1.0	28.5
Total Funds Available	**226.2**	**6,335**
Operating Costs:		
Garbage	77.0	2,155
Diversion	71.3	1,996
SWMP	28.7	805
Total Operating Costs	**177**	**4,956**
Operating Revenue Available for Capital	**49.2**	**1,379**

Capital Revenue Projections

Sources of capital revenue for solid waste services come primarily from contributions from operating. Historically, government grants, from the provincial and federal levels, and development charges have not been sources of capital funding for solid waste services. The LRFP recommends pursuing development charges for the growth portion of the residual waste management strategy and for staff to continue to look for opportunities to leverage government funding programs for these services.

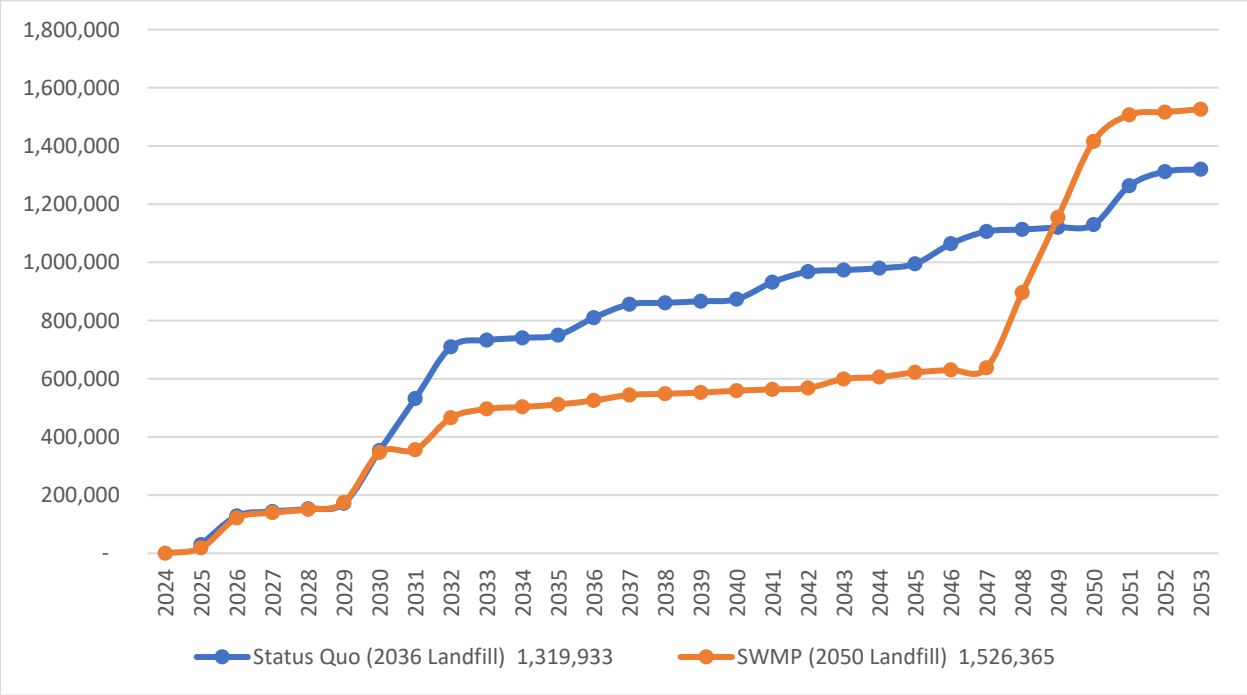
Table 4 - Forecasted Capital Funds (in millions of dollars)

	Average Annual	2025-2053
Operating Revenue Available for Capital	49.2	1,379
Development Charges	1.4	40
Total Funds Available for Capital	50.6	1,419

Capital Expenditure Projections

The projected cumulative capital expenditures for both scenarios are included in the affordability model and shown in Chart 7 below**.**

Chart 7 – 2025-2053 Cumulative Capital Expenditure Projections (Status Quo vs SWMP)



The LRFP identified the capital needs required to continue to operate and meet the renewal and regulatory needs of solid waste services, including investments in opening and closing remaining cells at Trail Road, and a leaf and yard waste facility.

The SWMP identified several actions to be implemented, including a new organics processing facility, expansion at trail road, and exploring new collection cart technologies. A placeholder for a significant investment in residual waste management is included to ensure sufficient funds are available when required. The new landfill/ residual management system estimated in the financial model are very conservative

class D estimates, including a 40 per cent contingency and the landfill implemented by 2050 is in inflated dollars compared to the landfill implemented sooner in 2036.

The first ten years are more predictable but the last 18 years are not and include various assumptions that may change over time. The LRFP will evolve over time as new technologies are explored and Council decides on the direction that should be taken.

The total capital investment required for the Regulatory and Renewal Capital Plan, SWMP, and residual waste management is $1.53 billion over the 28 years, as detailed in Table 5 below. Costs have been escalated by three per cent annually to reflect capital inflation.

Table 5 - Forecast of Capital Investments SWMP (in millions of dollars)

	Average Annual	**2025-2053**
Regulatory and Renewal Capital	12.6	353
SWMP Capital	12.3	346
Residual Waste Management Capital	29.6	828
Total Capital Investment	54.5	1,527

The $1.53 billion exceeds the amount of funds available from all sources. This requires the use of debt to provide stability to current service users and distribute the cost to future service users.

Capital Formation Strategy

Key assumptions relating to capital formation costs are as follows:

Debt Servicing Costs – Due to the capital-intensive nature of solid waste services, debt will be used when appropriate to provide stability to the rate payers, and to distribute the costs to both current and future users of the service. The LRFP assumes an average interest rate of 4.9 per cent.

Contributions to Capital –The contribution to capital is forecasted to increase annually, at an average of three per cent to align with the cost of capital inflationary increases.

Use of Debt

Debt is an appropriate financing tool for assets that benefit multiple generations, like solid waste management, as it allows future generations to contribute towards the costs. Municipalities can only use debt for capital works, debt cannot be used to fund

operating expenditures.

The City's rate supported services' debt servicing policy limit is 15 per cent of own source revenue because it is a capital-intensive service. Staff's recommendation to move to a more utility funding model for solid waste services which is also a capital intensive service and implementing a 100 per cent cost recovery fee similar to the rate supported services, would also require approving the establishment of solid waste's own debt servicing limit, of 15 per cent, similar to rate supported services, while maintaining the 8.5 per cent limit for all services.

Based on current projections of capital needs, it is estimated that approximately 55 per cent of the $1.53 billion capital need or $797 million can be funded from debt to stay within the 15 per cent debt servicing limit and with the estimated $40 million in development charge revenue that could be collected, the City needs to contribute $690 million from cash reserves over the 2025-2053 timeframe to make up the difference.

Table 6 – Capital Funds vs Capital Investments (in millions of dollars)

	Average Annual	2025-2053
Capital Investments	(54.5)	(1,527)
Debt to be Issued	28.5	797
Development Charges	1.4	40
Contribution from Reserves	**24.6**	**690**
Operating Revenue Available for Capital	49.2	1,379
Funds Available for Debt Servicing	**24.6**	**689**

Capital Formation Strategy

Key assumptions relating to capital formation costs are as follows:

Debt Servicing Costs – Due to the capital-intensive nature of solid waste services, debt will be used when appropriate to provide stability to the rate payers, and to distribute the costs to both current and future users of the service. The LRFP assumes an average interest rate of 4.9 per cent

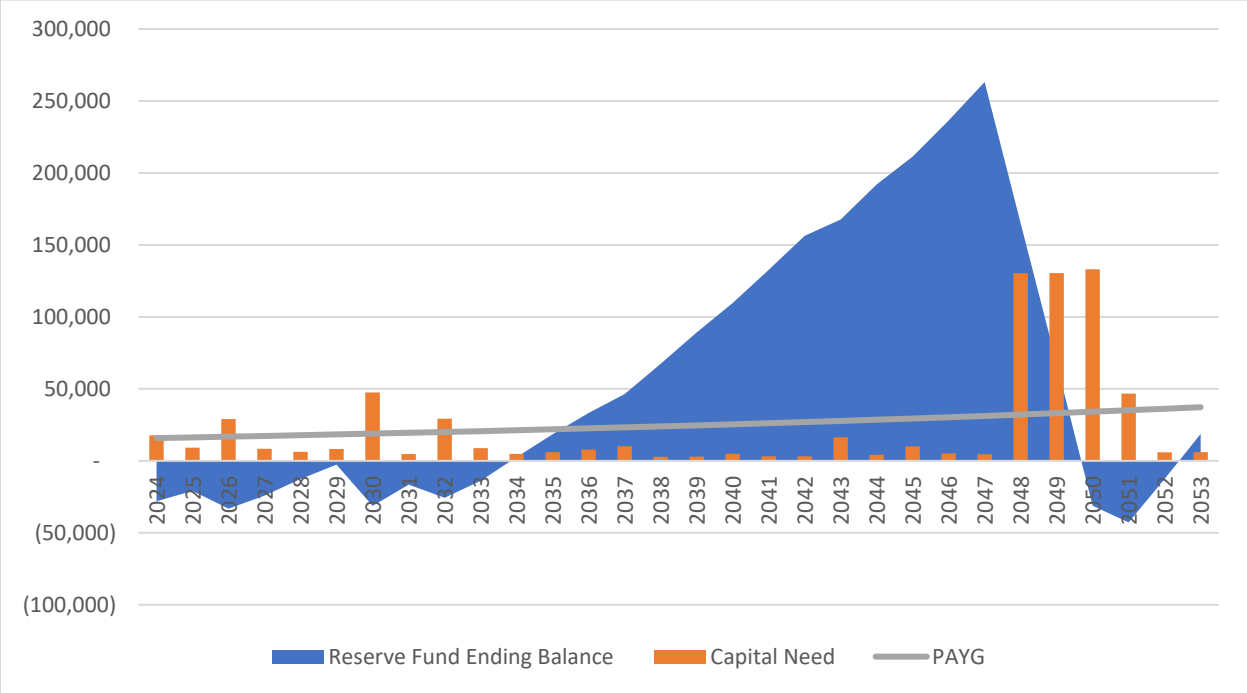
Contributions to Capital – Solid waste services has adapted in recent years to address the upcoming regulatory and renewal needs. The Contribution to capital is forecasted to increase annually, at an average of three per cent.

Reserve Fund

The Solid Waste Reserve Fund is currently in a deficit position, due to increased renewal, and regulatory costs, as well as several years of minimal rate increases. In both the status quo and the SWMP scenarios, the reserve will be used to provide stability to the rate payers and is projected to return to a surplus position by the end of the forecast period.

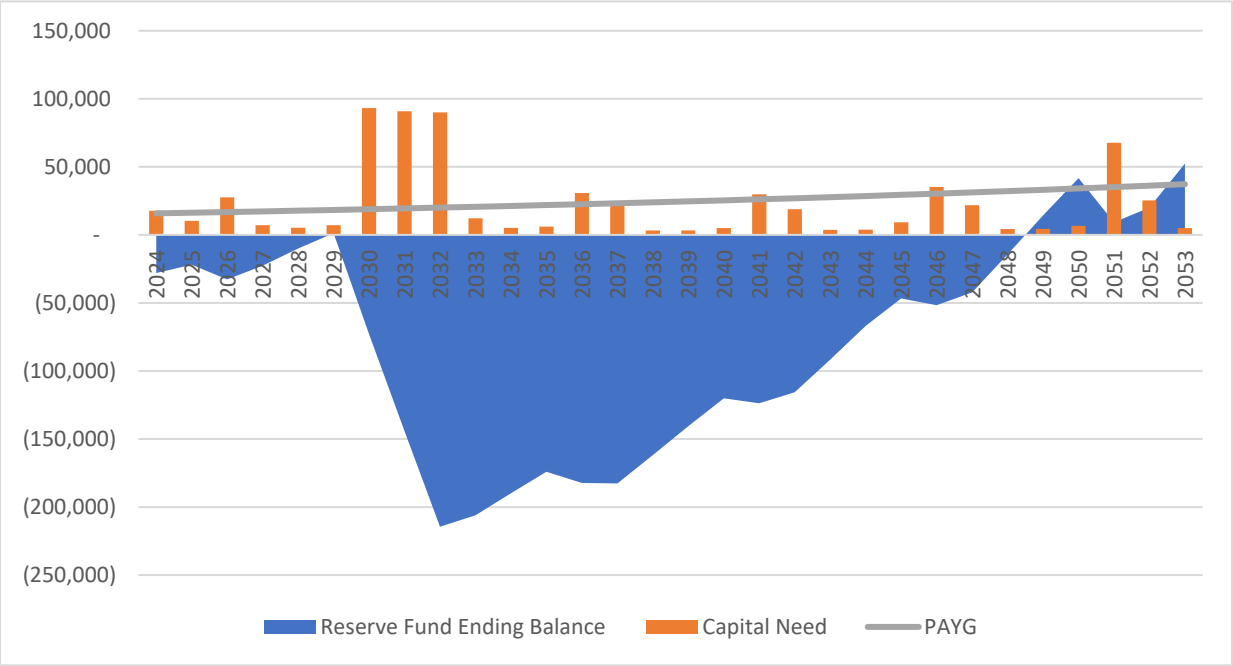
The SWMP includes $346 million of additional capital investments including a new organics processing facility. However, the SWMP actions increase diversion and extend the life of the landfill to 2050, which allows enough time to contribute to the reserve fund in advance of a future residual waste technology, so that reserves are not in a large deficit position and which is much more affordable and financially sound.

Chart 8 – 2025-2053 SWMP Scenario Reserve Fund Forecast (in thousands of dollars)



In the status quo scenario, organics processing continues to be contracted out and the landfill must be replaced by 2036. In this scenario, the reserve fund would be in a significant deficit for approximately 20 years before returning to a surplus position in 2049. It is not financially sustainable or prudent to carry such negative reserve amounts, impacting the City's liquidity levels and possibly impacting the City's credit rating, making this scenario unaffordable.

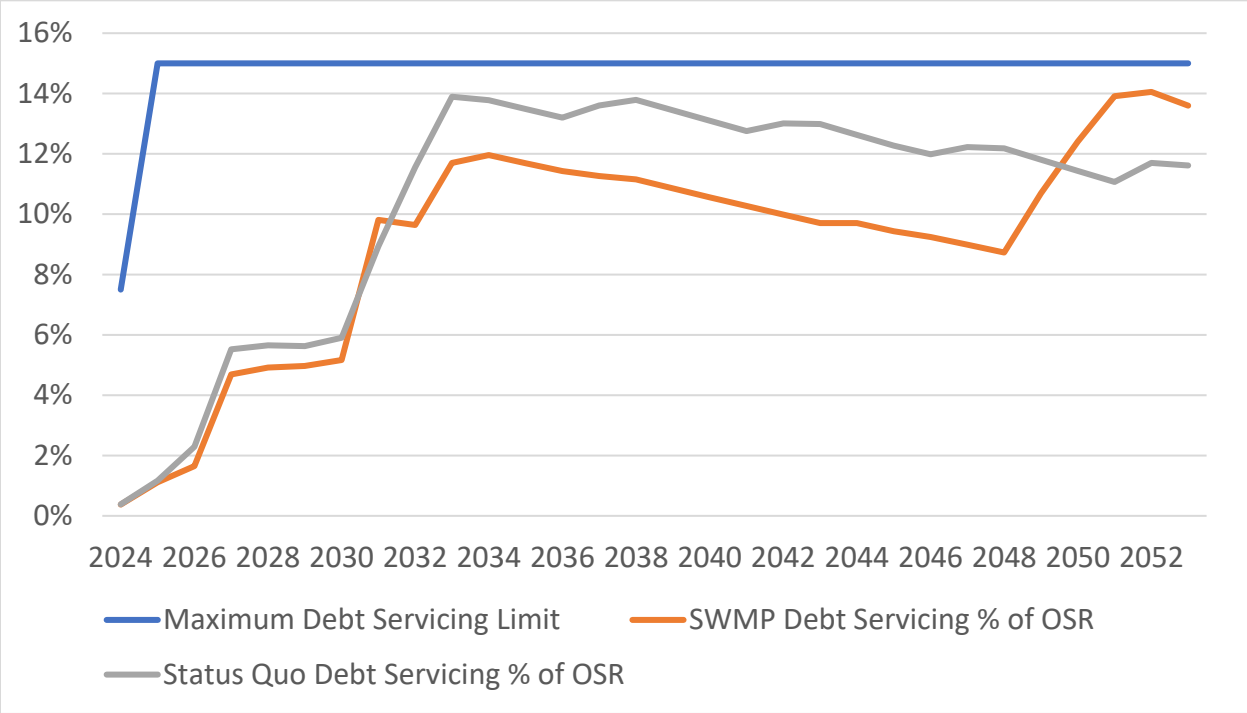
Chart 9 – 2025-2053 Status Quo Scenario Reserve Fund Forecast (in thousands of dollars)



Debt Service Limit

In order to fund the SWMP recommended actions, debt will be used to distribute the costs to current and future users of the service. It is recommended that debt servicing charges (principal and interest) be set at a maximum 15 per cent of the annual rate revenues, similar to the rate supported services for water, wastewater and stormwater, while maintaining the 8.5 per cent limit for all services established by Council. The LRFP forecasts the debt service level to remain below both the 15 per cent and 8.5 per cent limits.

Chart 9 – Projected Debt Servicing as a Percentage of Own Source Revenues



10-Year Forecast of Estimated Fees

For the status quo scenario, the fee is forecasted to increase over the next ten years to meet compliance, and regulatory requirements at TWFL. In addition to regulatory and renewal needs, if the SWMP is not adopted, investments in a new landfill will be required to be operational by 2036. Over the 10-year time frame, the fee is projected to increase from $252 in 2025 to $371 in 2034 for an average increase of five per cent.

Implementing the SWMP, would bring the fee per single residential unit to $265 in 2025, just a $13 difference from status quo which is just over a $1 per month. This fee includes the regulatory and renewal capital needs that are required no matter which scenario is chosen, the SWMP recommended actions, and funding for a future residual waste management system.

Table 7 – 2025-2034 Forecasted Annual Fee for a Single Residential Unit

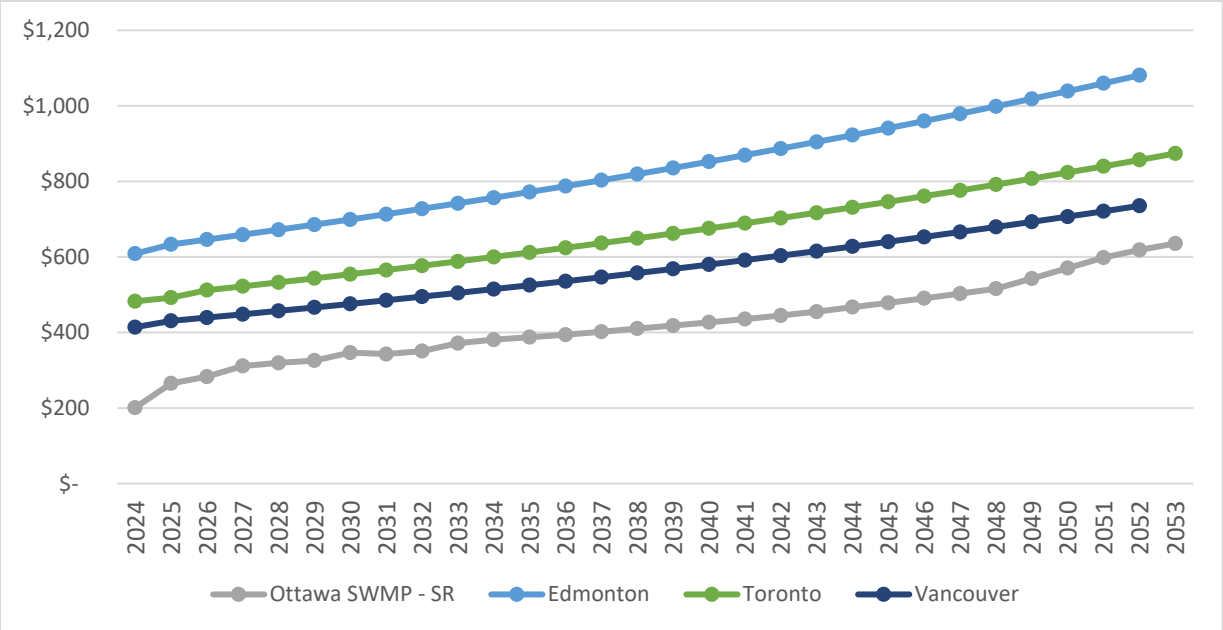
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	10 Yr Avg
Status Quo												
Fee	**227**	**252**	**263**	**282**	**291**	**298**	**307**	**326**	**345**	**362**	**371**	**310**
% Increase		11%	5%	7%	3%	2%	3%	6%	6%	5%	2%	5.0%

SWMP												
Fee	**227**	**265**	**283**	**311**	**319**	**326**	**341**	**348**	**356**	**366**	**381**	**330**
% Increase		17%	7%	10%	3%	2%	5%	2%	2%	3%	4%	5.4%

With an annual average increase of 5.4 per cent over the 28-year timeframe, the SWMP recommended actions can be implemented. These are only estimated fees and Council is not approving these fees as part of the LRFP. Fees will be set annually and approved by Council as part of the budget process. Staff will also explore the possibility, if required, to phase-in the new fully recoverable fee as part of the 2025 budget exercise.

To put these estimated fee projections in perspective, Chart 10 compares these estimated fees for Ottawa against other large municipalities in Canada, assuming their rates increased at only two per cent annually, Ottawa's fee per single residential unit is projected to still be significantly lower than comparable cities.

Chart 10 – 2025-2053 Forecasted Municipal Comparison



Other sources of revenue

The LRFP has included preliminary estimates for energy recovery revenue and will continue to explore other revenue sources listed below.

Additional fees for special services

Additional fees for bulky and hazardous materials can be charged to all customers that dispose of this material. If fees are charged per unit rather than as an incremental fee to the City's base annual fee for garbage collection, revenue may be less predictable as bulky items and hazardous materials are disposed of inconsistently by customers throughout the year. City of Toronto, City of Winnipeg, City of London, City of Guelph, all charge for the collection of bulky materials. Revenue for bulky items would likely be consistent year to year, but the revenue may fluctuate throughout the year based on seasonal changes.

Development Charges

Development charges (DC) are one-time fees paid to the city to offset the growth-related capital costs required to provide additional municipal services arising from new development and redevelopment.

In 2016, the Development Charges Act (DCA) was amended to once again include certain waste management services as a DC eligible service. Services including collection, treatment and processing of organics and recycling are all considered eligible components and can be included in the DC calculation. These types of services are typically referred to as waste diversion (e.g., recycling and organics) and waste collection (e.g., curbside pick-up). The provision of landfill sites and incineration continue as ineligible waste management services and those costs currently cannot be recovered through development charges.

This funding mechanism could provide the City with a new revenue source that can be used for growth related capital projects.

This funding mechanism is highly dependent on development and re-development activity, which is expected, given the City's Official Plan anticipates that Ottawa will grow substantially over the next 28 years. There are several challenges with implementing a new charge, staff will continue to explore its viability as part of the next Development Charge Background Study in 2025.

Energy Recovery

Energy recovery can be a viable source of revenue and greenhouse gas emissions reductions assuming customers continue to produce waste that supports the production of energy. Given the current City goal to increase waste diversion, revenues from landfill gas sales may decline over the long-term if less energy is produced at the Trail Waste Facility, highlighting the need to invest in energy recovery technology from the diversion

processes. Nevertheless, energy that is produced will have a market since municipalities will continue to look for sustainable ways to produce and buy energy rather than utilizing fossil fuels. This is particularly relevant for the City, its Climate Change Master Plan and associated Energy Evolution Strategy. The energy generated can also be used to offset fuel costs for waste collection vehicles or fuel for heating buildings.

Another factor to consider is the funding required to pay for the initial capital cost of an energy recovery system. If the City plans to cover capital costs with revenues alone, it may take many years to recoup the investment before revenues can start being used to offset operating costs or could explore third party options.

Conclusion

The SWMP recommended actions support the overall framework, direction, and goals for solid waste management, diversion, and reduction policies over the short-, medium- and long-term horizon.

The LRFP affordability model assessed the financial impact of implementing these actions in comparison to status quo. In both scenarios, the revenue requirement to provide the service will continue to increase. The SWMP recommended actions are affordable, as long as the funding plan aligns with the following parameters:

- Solid waste debt service limit of 15 per cent, similar to other rate supported services.
- The Solid Waste Reserve Fund will be replenished over time to return to a surplus position and to smooth spending for capital requirements approved as part of the SWMP.
- Annual fees will increase at the same rate as operating costs required to deliver the service, will be minimized as much as possible and will be smoothed over the forecast period in order to provide predictability for ratepayers.

Staff also recommend implementing a fully recoverable rate model, that is more equitable, flexible, clear, and sustainable than the current hybrid model, to be phased-in, if required as part of the 2025 budget

FINANCIAL IMPLICATIONS

Financial implications are outlined in this report.

LEGAL IMPLICATIONS

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

COMMENTS BY THE WARD COUNCILLOR(S)

Not applicable. This is a City-wide report.

CONSULTATION

Not applicable.

ACCESSIBILITY IMPACTS

Finance and Corporate Services adheres to the requirements of the *Accessibility for Ontarians with Disabilities Act*, (2005) in its operations, programs and initiatives. This report is administrative in nature and has no associated accessibility impacts. However, the final Solid Waste Master Plan report (ACS2024-PWD-SWS-0004) which is scheduled to be tabled at Environment and Climate Change Committee on June 18, and then Council on June 26**,** includes numerous accessibility impacts on how the Plan's actions will support people with disabilities.

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

The new approach to cost recovery and financing may have unintended consequences for initiatives related to climate mitigation or adaptation. As it is intended that LRFP could potentially support climate related initiatives in solid waste management, the LRFP may be adjusted to keep it aligned with City climate objectives.

RISK MANAGEMENT IMPLICATIONS

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

TERM OF COUNCIL PRIORITIES

This report supports the City’s ongoing commitments to the current Term of Council Priorities of: a city that has affordable housing and is more livable for all; a city that is more connected with reliable, safe and accessible mobility options; a city that is green and resilient; and a city with a diversified and prosperous economy. The report also promotes the City’s commitment to financial sustainability and transparency.

DISPOSITION

Information contained in this report will be utilized during the annual budget setting process.