DA TORONTO

REPORT FOR ACTION

2022 Rate Supported Budgets – Solid Waste Management Services and Recommended 2022 Solid Waste Rates and Fees

- Date: November 1, 2021
- To: Budget Committee
- From: Chief Financial Officer and Treasurer and General Manager, Solid WasteManagement Services
- Wards: All

SUMMARY

This report outlines the recommended 2022 Solid Waste Management Services (SWMS) Rates and Fees arising from the adoption of the 2022 Solid Waste Management Services Operating and Capital Budgets. The recommended rate increase is consistent however fee increases will vary based on customer group and are highlighted in Table 1.

Table 1 highlights the recommended key Solid Waste Management Services Rates and Fees effective January 1, 2022.

Customer Group	% Rate Increase	Comments
Multi-Residential	3.00%	Maintain service levels and fund Capital Program
Single Family and Residential Units Above Commercial (RUAC)	3.00%	Maintain service levels and fund Capital Program
Bag Tags, Bin Purchase	3.00%	Maintain service levels and fund Capital Program
Commercial, Divisions, Agencies and Corporations, Schools	3.00%	Maintain service levels and fund Capital Program
Blended Rate	3.00%	

Table 1 - 2022 Recommended Rates and Fees Increases (Effective January 1, 2022)

The recommended three (3) per cent increase in Solid Waste Management Services Rates will provide and maintain Council Approved service levels unchanged from the prior year and fund the 2022 Capital Budget and 10-Year Capital Plan. The \$15.546 million increase in 2022 operating expenditures over prior year is attributable to the increase in organic collection and processing costs due to volume and contractual inflation adjustments, increase in the Fleet Reserve contribution as per the vehicle replacement plan, reinstatement of advertising and promotion budgets that were previously reduced due to the prior year's provincial pandemic shutdown, start-up of the Dufferin Renewable Natural Gas Facility (RNG) and increase in debt principal and interest payments to fund the 10-Year Capital Budget & Plan.

The three (3) per cent utility rate increase for 2022 is recommended to maintain the contribution to Waste Management Reserve fund in line with last year's forecast to finance future capital investments, which include the construction of the 3rd Anaerobic Digester, Landfill Gas Development or Energy from Waste initiatives and Dufferin Waste Facility Site Improvement.

The 2022 Operating Budget expenditure is \$390.966 million, representing an increase of \$11.651 million or 3.1% increase over the prior year approved budget including a \$13.157 million contribution to the Waste Management Reserve Fund, all of which are offset by total revenues of \$390.966 million.

The 2022 Capital Budget is \$69.729 million including carry-forwards, which is comprised of \$63.668 million in new 2022 funding and \$6.061 million in funding carried forward from 2021 into 2022. The 2022 Capital Budget and Plan remains generally unchanged from last year focusing on the following key capital objectives and priorities for Solid Waste Management Services:

- To safely and efficiently collect materials from 875,000 homes, business and public spaces by implementing Council's direction on health and safety by installing telematics solutions on vehicles in support of Vision Zero 2.0;
- To manage 900,000 plus tonnes of material in an environmentally and fiscally sustainable manner which includes constructing a 3rd Anaerobic Digester (AD) to help address organics processing capacity constraints;
- To continue investigating long-term disposal options including landfill capacity development and energy from waste and strategically using alternate landfill sites; and
- To continue to develop and invest in renewable energy such as Renewable Natural Gas (RNG) facilities.

RECOMMENDATIONS

The Chief Financial Officer and Treasurer and the General Manager, Solid WasteManagement Services recommend that:

- 1. City Council adopt effective January 1, 2022, the Solid Waste Management Services Rates and Fees as set out in Appendix A attached to this report.
- City Council authorize that the necessary amendments be made to the Municipal Code Chapter 441 – Fees and Charges, and any other necessary Municipal Code Chapters as may be required to give effect to these Recommendations.
- 3. City Council authorize the City Solicitor to introduce any necessary Bills required to give effect to Council's decision and authorize the City Solicitor to make any necessary refinements, including stylistic, format and organization, as may be identified by the City Solicitor, the Chief Financial Officer and Treasurer, and General Manager Solid Waste Management Services.
- 4. City Council direct that all the rates, fees and charges set out in Appendix A to this report, adopted by Council in Recommendation 1 and 2 above, continue in full force and effect until such time as they are amended or repealed by City Council.
- 5. City Council authorize the General Manager, Solid Waste Management Services to negotiate and enter into amending agreements with the City's existing contractors providing the sale and distribution of garbage bag tags to extend the contracts for a term ending December 31, 2023, with one optional year to extend and with the provision that the City, in its sole discretion, may end the contract term earlier than the specified end date, and on any other terms satisfactory to the General Manager, Solid Waste Management Services, and each in a form satisfactory to the City Solicitor.
- 6. City Council extend the existing authority for the General Manager, Solid Waste Management Services or designate, from December 31, 2021 until December 31, 2026, to negotiate and enter into any agreements or related documents necessary to facilitate renewable energy projects from biogas/landfill gas, for the City, including without limitation non-competitive procurement agreements under Code Chapter 195, agreements to receive funding, and related amending agreements, on such terms that are acceptable to the General Manager, Solid Waste Management Services, and in a form satisfactory to the City Solicitor.
- 7. City Council extend the existing authority for the General Manager, Solid Waste Management Services or designate, from December 31, 2021 until December 31, 2026, to negotiate and enter into any agreements or related documents necessary to produce, manage, market, distribute, use and sell renewable energy projects, from biogas/landfill gas, resulting from the implementation of Recommendation 6 and/or the associated environmental attributes, including without limitation non-competitive procurement agreements under Code Chapter 195, agreements to receive funding, and related amending agreements, on such

terms that are acceptable to the General Manager, Solid Waste Management Services, and in a form satisfactory to the City Solicitor.

8. City Council authorize the Deputy City Manager, Corporate Services, or designate to negotiate and enter in to any lease agreement, license agreement, easements or similar instruments necessary to implement Recommendations 6 and 7 where Code Chapter 213 does not otherwise apply, on terms acceptable to the Deputy City Manager, Corporate Services and the General Manager, Solid Waste Management Services, and in a form satisfactory to the City Solicitor.

FINANCIAL IMPACT

Solid Waste Management Services is a utility funded program that recovers program costs from a combination of service rates and fees, recoverable debt, other charges, the sale of recyclables and industry stewardship funding. The 2022 Budget provides funding to support Solid Waste Management Services operations and capital projects, and diversion by reducing materials entering the waste stream and overall waste sent to landfill.

Revenues total \$390.966 million in the recommended 2022 Operating Budget as outlined in the table below.

Revenue Source	Revenue Total	% of Total
Service Rates and Fees	\$335.009M	86%
Industry Stewardship funding	\$27.324M	7%
Sale of Recyclables	\$11.042M	3%
Interdivisional Recoveries	\$7.194M	2%
Capital Recoveries	\$5.436M	1%
Other Recoveries	\$4.961M	1%
Total	\$390.966M	100%

Table 2: 2022 Operating Budget Revenues

Service Rates and Fees of \$335.009 million represent 86% of total revenues which consists of a three (3) per cent rate increase.

The 2022 Recommended Rates and Fees associated with the various customers and services are outlined in Appendix A.

The 2022-2031 Capital Budget and 10-Year Plan totals \$849.120 million, which includes

2021 capital carryovers to 2022 and future years of \$15.483 million, financed by reserve funding of \$392.712 million (46%) and recoverable debt of \$456.408 million (54%).

The City issues debt on behalf of Solid Waste Management Services and debt servicing costs are repaid to the City by Solid Waste Management Services through the Debt Reserve Fund financed by operating fee revenues. Capital projects are funded by the Program's operating contributions to the Waste Management Reserve Fund, Fleet Reserve, Green Lane Reserve Fund and Perpetual Care Reserve Fund.

The Solid Waste Management Services 2022 Operating Budget also includes \$34.411 million to repay debt issued to fund capital infrastructure needs (\$16.396 million) and to pay for the Green Lane Landfill acquisition (\$18.015 million).

At its meeting of March 7, 2019 City Council adopted the recommendations in the Executive Committee Report EX2.3 "2019 Rate Supported Budgets – Solid Waste Management Services and Recommended 2019 Solid Waste Rates & Fees" and directed the General Manager, Solid Waste Management Services and the Executive Director, Financial Planning to develop a Multi-Year Financial Strategy and rate structure for the Solid Waste Management Services Division which was reported back in the 2020 budget submission to Budget Committee.

A consultant has been retained to work with Solid Waste Management Services to assist with this review to maintain a sustainable multi-year financial plan under the following scenarios:

- Develop a baseline scenario that trues-up the rates to equal the cost of providing existing services.
- Assess the potential impact of full Extended Producer Responsibility (EPR) starting in 2023 that identifies the impact of the City's reduced recycling responsibilities when recycling collection, processing and recycling disposal responsibilities are transferred from the City of Toronto to producers of printed paper and packaging.
- Review SWMS 10-Year Capital Budget and Plan funding to ensure capital reserve contributions and recoverable debt adequately fund current and future infrastructure requirements.

The 2022 Operating Budget is recommending a three (3) per cent rate increase which is consistent with the direction received during the 2021 budget process for 2022 outlook in last year's budget submission. The three (3) per cent rate increase for 2022 is an increase from last year's budget which included a lower 1.5% increase that mitigated impacts on Solid Waste Management Services customers in response to the ongoing COVID-19 pandemic. In addition, the SWMS capital plan and rate model have been developed based on a three (3) per cent annual rate increase for the 2023 and 2024 outlook years, and the remaining seven years through 2031, to ensure sufficient contributions to reserves are maintained to fund the capital budget and plan. This year-over-year increase is aligned with the rate increase projection that was presented to Council during the 2021 budget process.

The introduction of Extended Producer Responsibility (EPR) results in a net reduction in expenditures of \$1.979 million beginning in 2023, an additional \$10.882 million in 2024

has been incorporated in the outlook years to help stabilize the rate. If the City has not transitioned to EPR by 2024, Solid Waste Management Services will need to reassess the projected future annual rate increases to ensure service levels and funding for the 10-year Capital Budget and Plan are able to be sustained.

Operating Budget recommends the following user fees:

	Approved	Rec'd for Approval				Projecte	ed Rate In	creases			
Customer Type	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Multi Residential	1.50%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Single Family & RUAC	1.50%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Commercial and Other	1.50%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Blended Rate	1.50%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%

Table 4: 2022 Recommended 2022 and Proposed 2023 to 2031 User Fee Increase

Forecasted future rates and fee increases by customer group are as described in Appendix B.

SWMS 10-Year Capital Budget and Plan funding

This report recommends that the user fees be increased by 3.00% in 2022 and 3.00% in each of the subsequent 9 years as indicated in Table 4 above, which is the same as last years projected increases.

In addition, EPR funding of \$1.979 million in 2023 and \$10.882 million in 2024 and Renewable Natural Gas (RNG) revenues of \$3.305 million in 2022. The EPR funding contributes to keeping user fee increases to the rate of inflation over the 10-year Capital Budget and Plan. However, if City has not transitioned to EPR by 2024, Solid Waste Management Services will need to reassess the projected future annual rate increases to ensure funding for the 10-year Capital Budget and Plan is able to be sustained.

Given the recommended rate increase, as well as EPR and RNG funding the Capital or Waste Management Reserve balance will change from \$67.694 million in 2022 to \$43.346 million in 2023 and to \$88.422 million in 2031 which is adequate to fund the recommended 10-Year Capital Budget and Plan and provides a reserve balance base for future year requirements beyond 2031 such as a new or expanded land fill site or other Council approved diversion facility as shown below in Chart 1.



Chart 1 – Capital Funding and Waste Management Reserve Balance

Table 5 provides a summary of anticipated major capital investments required in the 10-Year period beyond the 10-Year Capital Plan (2032-2041) which aligns to the implementation of longer term disposal options including future landfill options once Green Lane is at capacity, completion of Energy from Waste as well as a new future Mixed Waste Processing facility.

Table 5 - Ca	pital Investments	for the pe	eriod 2032	to 2041 i	is \$825.000 r	million

Capital Investment	2032 - 2036	2037 - 2041	Total
Future Landfill ^{1,2}	\$150.000M		\$150.000M
Future Energy from Waste ²		\$325.000M	\$325.000M
Future Mixed Waste Processing Facility ²		\$250.000M	\$250.000M
Total	\$150.000M	\$575.000M	\$825.000M

Note 1: Total estimated cost is \$250.000M; \$100.000M of this total has been accounted for in years 2030/2031 within the 2022-2031 Capital Plan submission.

Note 2: Pending Council direction

Pending initiatives and actions, in addition to Extended Producer Responsibility uncertainties, that may impact Solid Waste Management Services future operating costs and revenues are shown below.

Expiry and renewal of following major operating contracts valued at \$338.825 million over the next three years include:

- District 1 Collection contract expiring June 30, 2022 with one (1) option year remaining (\$75.421 million); RFQ in progress, new contract to take effect July 1, 2023.
- Processing and Haulage of Source Separated Organics waste contacts with two (2) service providers is expiring on May 31, 2024 with one (1) option year

(\$23.255 million).

- Processing services for Leaf & Yard Waste expiring December 31, 2022, with two (2) option years remaining (\$64.559 million).
- Two (2) processing services contracts for up to 30,000 tonnes of Leaf and Yard Waste annually are expiring November 30, 2023 with two (2) option years (\$5.815 million).
- Supply, delivery and maintenance of recycling and garbage bins expiring November 30, 2022 (\$47.149 million).
- Single Stream Recovery Material Processing Contract expiring January 31, 2023, with four (4) option years remaining (\$113.565 million).
- Mechanical Litter removal expiring Dec 31, 2024 (\$9.061 million).

The extent to which these initiatives and contract changes will impact future expenditures and revenues is not fully known; however, estimates have been included in the outer years.

DECISION HISTORY

At its meeting on December 17 and 18, 2019, City Council adopted the recommendations in the Executive Committee Report EX11.3 "2020 Rate Supported Budgets - Solid Waste Management Services and Recommended 2020 Solid Waste Rates and Fees" directed the General Manager, Solid Waste Management Services to:

4. City Council request the General Manager, Solid Waste Management Services and/or designate to continue consulting and negotiating with Provincial Officials to ensure inclusion of the City's priorities in any new anticipated waste diversion regulations or policy statements that implement the Resource Recovery and Circular Economy Act, 2016, and the Waste Diversion Transition Act, 2016.

5. City Council authorize the General Manager, Solid Waste Management Services and/or designate until the end of 2025, to negotiate and enter into any new agreements, amendments of existing agreements, or acknowledgements, including on the basis of a non-competitive procurement under Municipal Code, Chapter 195, Purchasing, necessary in connection with the efforts indicated in Part 4 above - including advocacy, business transformation, financial analysis, or receipt of funding on terms and conditions satisfactory to the General Manager, Solid Waste Management Services and each in a form satisfactory to the City Solicitor.

7. City Council authorize the Chief Financial Officer and Treasurer and the General Manager, Solid Waste Management Services and/or designate, to negotiate and enter into any new agreements, amendments of existing agreements, or acknowledgements, including on the basis of a non-competitive procurement under Municipal Code Chapter 195, Purchasing, necessary in connection with the efforts to produce, manage, market, distribute, use and sell Renewable Natural Gas and other environmental attributes associated with Renewable Natural Gas production on terms and conditions satisfactory to the General Manager, Solid Waste Management

Services and each in a form satisfactory to the City Solicitor and the Executive Director, Corporate Real Estate Management.

The City Council Decision document can be viewed at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2019.EX2.3

At its meeting on July 28 and 29, 2020, City Council adopted the Infrastructure and Environment Committee report IE14.7 on Citywide Greenhouse Gas Reduction Strategy through Blending Renewable Natural Gas and Natural Gas, a Low-carbon Fuel Option directed the General Manager, Solid Waste Management Services to:

1. City Council direct that Renewable Natural Gas produced at the Dufferin and Disco Road Organic Processing Facilities be delivered by Solid Waste Management Services via the local gas utility distribution company for distribution to all enrolled City gas accounts under the City Natural Gas Purchasing Program managed by the Environment and Energy Division and to those enrolled accounts for City's agencies, boards and corporations that elect to purchase Renewable Natural Gas, at a cost per cubic meter not to exceed the amounts required to fully recover all Renewable Natural Gas capital and operating costs.

<u>The City Council Decision document can be viewed at:</u> <u>http://app.toronto.ca/tmmis/viewAgendaltemHistory.do?item=2020.IE14.7</u>

At its meeting on September 30, 2020, City Council adopted the Infrastructure and Environment Committee report IE15.4 Transition of Toronto's Blue Box Program to Extended Producer Responsibility directed the General Manager, Solid Waste Management Services to:

7. City Council direct the General Manager, Solid Waste Management Services to report back on the impact and proposed management of materials and sources not eligible for transition including costs (i.e. non-residential customer base).

8. City Council authorize the General Manager, Solid Waste Management Services or designate to negotiate and enter into any new agreements or amending agreements (including but not limited to amending agreements to receive external funding) necessary for the City's continued waste diversion operations until the latter of December 31, 2026 or the transition period end date indicated by the Resource Recovery and Circular Economy Act, 2016 or the Waste Diversion Transition Act, 2016, or any regulations thereunder, on terms satisfactory to the General Manager, Solid Waste Management Services and each in a form satisfactory to the City Solicitor and conditional on approved funding.

10. City Council request the General Manager, Solid Waste Management Services to provide to all Members of Council communications material to share on potential and proposed changes to the blue box program as a result of proposed Extended Producer Responsibility regulations.

The City Council Decision document can be viewed at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2020.IE12.4 At its meeting on September 30, 2020, City Council adopted the Infrastructure and Environment Committee report IE12.4 Mixed Waste Processing Study Update directed the General Manager, Solid Waste Management Services to:

1. City Council direct the General Manager, Solid Waste Management Services to consider future work on the development of a mixed waste processing facility, with or without a thermal treatment process, where the overarching goals are maximizing resource recovery through reduce, reuse, recycle, energy recovery then residual disposal, minimizing the dependence on long term landfill use all while ensuring the financial sustainability of the Solid Waste Management Services program.

2. City Council direct the General Manager, Solid Waste Management Services to report back to the Infrastructure and Environment Committee no later than the end of 2023 with a business case, including a triple bottom line analysis (environment, socialand financial) and a utility rate impact assessment on the mixed waste processing of waste with and without thermal processing compared to increased reduction and diversion and traditional landfilling.

3. City Council direct the General Manager, Solid Waste Management Services to pursue potentially applicable federal government, provincial government, and non-profit organization funding opportunities to assist in implementing Recommendations 1 and 2 above and to negotiate and enter into all necessary agreements to receive any available funding in a form satisfactory to the City Solicitor.

The City Council Decision document can be viewed at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2020.IE12.4

At its meeting on May 8, 2021, City Council adopted item IE21.5 "Authority to Negotiate and Enter into Regional Waste Management Co-operation and Contingency Agreements" by the Infrastructure and Environment Committee Report adopted the following:

1. City Council authorize the General Manager, Solid Waste Management Services, or their designate to negotiate and enter into agreements with Ontario municipalities (including their agencies, local boards and corporations), for the City's use of their waste services and their use of the City's waste services where feasible, excluding the use of Green Lane Landfill, at rates that, at a minimum, ensure full cost recovery for the City, and / or a reciprocal tonnage agreement, on other terms and conditions satisfactory to the General Manager, Solid Waste Management Services, and in a form satisfactory to the City Solicitor.

2. City Council authorize the General Manager, Solid Waste Management Services, or their designate, to negotiate and enter into new residual disposal agreements and / or amending agreements with Ontario landfills to provide for contingency and operational re-direction capacity for terms not to exceed five (5) years, and on terms and conditions satisfactory to the General Manager, Solid Waste Management Services, and in a form satisfactory to the City Solicitor.

3. City Council authorize the General Manager, Solid Waste Management Services, or their designate, to negotiate residual disposal agreements with Ontario energy from waste facilities to provide for contingency and operational re-direction capacity for terms not to exceed five (5) years and City Council direct the General Manager, Solid Waste Management Services to report back to City Council prior to entering into any agreements with energy from waste facilities with the following information:

- a. the facility's location, age, technology used and environmental compliance approval reporting requirements;
- b. a comparison of the facilities performance and permitted emissions against the highest international standards (European Union emission standards or World Health Organization recommended standards);
- c. any information on how the facility has been meeting or exceeding their environmental compliance approval requirements;
- d. reported emission data for the last five years from all monitors (required and voluntary);
- e. cash analysis and reporting; and
- f. any considerations as it relates to meeting the City's TransformTO climate actions and greenhouse gas targets, including a detailed greenhouse gas analysis of the impact of the different facilities, using scope 3 emission analysis and including all additional processing (e.g. trucking ash to landfill).

The City Council Decision document can be viewed at: <u>http://app.toronto.ca/tmmis/viewAgendaltemHistory.do?item=2021.IE21.5</u>

At its meeting on June 8, 2021, City Council adopted item IE22.9 "Update on Environmental Assessment Act Amendments Affecting Future Residual Waste Disposal Considerations" by the Infrastructure and Environment Committee Report adopted the following:

1. City Council direct the City Manager, in consultation with the General Manager, Solid Waste Management Services, to advocate for the Government of Ontario to provide greater certainty and clarity regarding the municipal support requirement in section 6.0.1 of the Environmental Assessment Act.

2. City Council request that the Government of Ontario establish a Waste Disposal Working Group that includes the City of Toronto and other large Ontario landfill owners, to support the planning of future residual waste disposal infrastructure and capacity needs for the Province to accommodate population growth.

The City Council Decision document can be viewed at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2021.IE22.9

At its meeting on June 8, 2021, City Council adopted item IE22.6 "Single-Use and Takeaway Items Reduction Strategy - Stage 1" by the Infrastructure and Environment Committee Report for the General Manager, Solid Waste Management Services to:

2. Report back in the first quarter of 2022, with an update and action plan on Stage 2 of 11 | P a g e the Single-Use and Takeaway Items Reduction Strategy, including:

- a. any new considerations of the impact of the COVID-19 pandemic;
- b. any further implementation details on the Government of Canada's proposed integrated management approach to plastic products to prevent waste and pollution (Federal Program);
- c. an implementation timeline and approach aligning the City's proposed Phase Two consultation mandatory measures with the Federal Program;
- d. an implementation timeline and approach to implement the City's proposed Phase Two consultation mandatory measures should the Federal Program not come into effect in 2022, which will demonstrate the City's commitment towards zero waste and a circular economy;
- e. an implementation timeline and proposed approach for any recommended additions or enhancements to the City's originally proposed Phase Two consultation mandatory measures to reduce and prevent the generation of singleuse and takeaway items in the City of Toronto;
- f. a review of options to incentivize businesses in the City of Toronto to reduce single-use and takeaway items such as partnership opportunities, financial incentives and grant programs; and
- g. next steps in planning for additional items to address through Single-Use and Takeaway Items Reduction Strategy, Stage 2.

3. City Council request the Government of Canada to consult with the City of Toronto to identify how the City of Toronto can support the Government of Canada's proposed integrated management approach to plastic products and prevent waste and pollution.

4. City Council authorize the General Manager, Solid Waste Management Services to negotiate and enter into any and all agreements and amending agreements necessary to collaborate with businesses, non-profit organizations, and community organizations to support the implementation of the Voluntary Measures Program outlined in Attachment 8 to the report (May 7, 2021) from the General Manager, Solid Waste Management Services, on terms and conditions satisfactory to the General Manager, Solid Waste Management Services, and in a form satisfactory to the City Solicitor.

5. City Council direct the General Manager, Solid Waste Management Services to develop and implement a promotion and recognition program for businesses in the City of Toronto that adopt the Voluntary Measures Program outlined in Attachment 8 to the report (May 7, 2021) from the General Manager, Solid Waste Management Services.

6. City Council direct the City Manager, in consultation with the appropriate City Divisions, to identify where the Voluntary Measures Program can be implemented at City-run facilities, events and with City vendors, and how to implement the Voluntary Measures Program at those facilities and events in order to take a leadership role in supporting the reduction of single-use and takeaway items, and to report to the Infrastructure and Environment Committee by the fourth quarter of 2021.

7. City Council direct the City Manager, in consultation with the appropriate City Divisions, to submit for consideration as part of the 2022 Budget process, the

resourcing and supporting budget required to implement the Voluntary Measures Program and the existing initiatives to reduce single-use and takeaway items at City-run facilities.

8. City Council direct the General Manager, Solid Waste Management Services, in consultation with the appropriate City Divisions, to accelerate development and release of a guidance document for businesses to help support COVID-19 green recovery and reopening plans that:

- a. includes how to minimize single use and takeaway items;
- b. encourages the safe use and acceptance of reusable items; and
- c. provides guidance on choosing single use and takeaway items that are not made of materials such as expanded polystyrene foam and black plastic where singleuse and takeaway items cannot be avoided as they are difficult to recycle or not accepted in the City of Toronto's Blue Bin Program.

The City Council Decision document can be viewed at: <u>http://app.toronto.ca/tmmis/viewAgendaltemHistory.do?item=2021.IE22.6</u>

At its meeting on June 8, 2021, City Council adopted item IE22.8 "Partnership Authority to Support Toronto's Circular Economy Outcomes" by the Infrastructure and Environment Committee Report adopted the following:

1. City Council authorize the General Manager, Solid Waste Management Services to negotiate, enter into, and execute an agreement and any ancillary documents with the Canada Plastics Pact, as an Implementation Partner, which would include the City's provision of in-kind support to further the goals of the Canada Plastics Pact and to support efforts towards the Canada Plastics Pact achieving agreed upon targets, on such terms and conditions satisfactory to the Chief Financial Officer and Treasurer and in a form satisfactory to the City Solicitor.

2. City Council authorize the General Manager, Solid Waste Management Services to negotiate, enter into, and execute agreements, as may be required, with local, regional, national, and international non-profit, public, and private sector organizations to provide in-kind and/or financial support from the approved Solid Waste Management Services budget where it is determined that the project or initiative will advance the City's aspirational circular economy goals, on such terms and conditions satisfactory to the Chief Financial Officer and Treasurer and in a form satisfactory to the City Solicitor.

3. City Council authorize the General Manager, Solid Waste Management Services to seek out potential funding opportunities and negotiate, enter into, and execute agreements, as may be required, to receive funding from local, regional, national, and international non-profit, public, and private sector organizations to support the advancement of the City's circular economy goals, on such terms and conditions satisfactory to the Chief Financial Officer and Treasurer and in a form satisfactory to the City Solicitor.

The City Council Decision document can be viewed at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2021.IE22.8 At its meeting on July 14, 15 and 16, 2021, City Council adopted the recommendations in the Infrastructure and Environment Committee Report IE23.4 "Changes to Yard Waste Program to Support Employee Health and Safety" back to the General Manager, Solid Waste Management Services, to conduct a life cycle analysis of kraft paper bags, and further, review additional options to minimize environmental impacts while addressing employee health and safety concerns, and to report back to City Council with the findings.

The City Council Decision document can be viewed at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2021.IE23.4

At its meeting on July 14, 15 and 16, 2021, City Council referred Item IE23.4 back to the General Manager Solid Waste Management Services, to conduct a life cycle analysis of kraft paper bags, and further, review additional options to minimize environmental impacts while addressing employee health and safety concerns, and to report back to City Council with the findings.

The City Council Decision document can be viewed at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2021.IE23.4

At its meeting on July 14, 15 and 16, 2021, City Council referred item IE23.5 "Supporting Biodiversity in Toronto - Changes to Spring Yard Waste Schedule" by the Infrastructure and Environment Committee Report back to the General Manager, Solid Waste Management Services with a request to:

1. Evaluate opportunities to communicate biodiversity concerns to residents and to encourage them to do outdoor, residential clean-up later in the spring;

2. Consult with City Councillors about any proposed changes for yard waste collection schedules; and

3. Report back to the September 14, 2021 meeting of Infrastructure and Environment Committee.

The City Council Decision document can be viewed at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2021.IE23.5

At its meeting on October 1 and 4, 2021, City Council adopted the recommendations by the Infrastructure and Environment Committee Report IE24.11 "Blue Box Regulation that Transitions the City of Toronto's Blue Bin Recycling Program to Producers":

1) the General Manager, Solid Waste Management Services to report back in 2022, to the Infrastructure and Environment Committee, with an update on the status of any negotiations that may occur with registered Producer Responsibility Organizations, as well as the status of the producer rule making and allocation table and their impact on the City's blue box operations during the transition period from July 1, 2023 to December 31, 2025.

2) City Council request the Province of Ontario to direct the Resource Productivity and Recovery Authority, as part of its regulatory oversight responsibilities, to develop and implement a process to engage the City of Toronto during the development of the Common Collection System Agreement which will allow the City to support the transition for Producers, to prepare residents for any changes to blue box recycling servicing change requirements, and to also make any necessary adjustments to other areas of the City's integrated waste management service to mitigate any negative impacts to residents' experience with curbside waste management services as well as mitigate any potential undue financial burden on City of Toronto ratepayers.

3) City Council communicate to the Minister of the Environment, Conservation and Parks, City Council's position that in order for a successful transition of Toronto's Blue Box program to producers:

- a. Producer Responsibility Organizations must work with the City on frequently servicing blue box containers in public spaces (i.e. City parks, playgrounds, streets, transit stops) to reduce litter accumulation, facilitate safe vehicular and pedestrian access to these areas, as well as have service standards for managing designated materials from these public spaces;
- b. the Province of Ontario should revisit management requirements for some broad material categories as the recovery targets for those materials are close to being achieved, even under the current provincial diversion rate; and
- c. the translation component of the promotion and education obligation that is mandated for producers must extend beyond English and French to include all of the languages that reflect the diversity of the City of Toronto and the Province of Ontario.

The City Council Decision document can be viewed at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2021.IE24.11

COMMENTS

2022 Operating Budget

The 2022 Operating Budget's gross expenditure of \$390.966 million is outlined in detail in the concurrent Solid Waste Management Services 2022 Operating Budget Notes. These expenditures are fully recovered by revenues as outlined in Table 6 below.

2022 Solid Waste Management Services Gross Expenditures	\$377.809
Capital Contribution	\$13.157
Total 2022 Expenditures	\$390.966
Residential Volume Based SWMS Rates (User Fees)	\$335.009

Table 6 - Operating Budget Summary

Total 2022 Revenues
Other revenues (sale of recyclable materials, industry stewardship funding, fees, and recoveries for waste collection from City agencies and programs)

This budget allows Solid Waste Management Services to maintain all current service levels and allocates sufficient funds to the reserve to finance and support future capital needs over the 10-Year Capital Plan timeframe. The 2022 Operating Budget changes are outlined in Table 7.

	2021 Projected Actual	2022 Budget	\$ Change	% Change
General Operating Expenditures	\$353.635M	\$377.809M	\$24.174M	6.84%
Capital Contribution	\$17.137M	\$13.157M	-\$3.980M	-23.22%
Year-end surplus	\$4.914M		-\$4.914M	-100.00%
Total Expenditures	\$375.686M	\$390.966M	\$15.280M	4.07%
Volume Based SWMS Rates (User Fees)	\$325.572M	\$335.009M	\$9.437M	2.90%
Other Revenues	\$50.114M	\$55.957M	\$5.843M	11.66%
Total Revenues	\$375.686M	\$390.966M	\$15.280M	4.07%

Table 7 - 2022 Operating Budget Changes

The 2022 Operating Budget includes pressure of \$24.174 million as listed below:

- Increase in salaries and benefits in the amount of \$1.678 million due to inflationary increases and 7 new FTEs.
- Increase in services and rents \$15.012 million resulting from an increase in tonnage collected and processed and contract inflationary increases.
- Increase in contribution to Fleet reserve \$4.120 million based on operational needs.
- Increase in debt financing costs of \$0.438 million to fund the 2022 capital budget.
- Increase in inter-divisional transfers \$1.670 million.
- Increase in equipment, material & supplies and other expenses of \$1.256 million due contract inflationary increases and operational needs.

The above pressures are offset by revenue changes totalling \$15.280 million as follows:

Increase in collection revenues of \$8.027 million which is comprised of \$5.314 million in single family residential revenues, \$1.892 million in multi-residential revenues, and other non-residential collection customer's revenue of \$0.821 million.

- Increase in Tipping fee, Load weighing revenue and other revenue changes of \$1.017 million due to volume losses.
- Increase in estimated funding from RPRA \$2.448 million due to volume increase.
- Increase of sale of RNG of \$3.305 million.
- Increase of Capital recovery of \$0.482 million.

The purpose of the Waste Management Reserve Fund is to provide funding for the capital needs of the Division. The rate model is predicated on the replenishment of the reserve through contributions from the Operating Budget sufficient to ensure that an adequate balance is maintained in this reserve fund. In 2022, Solid Waste Management Services has included a \$13.157 million contribution to the Waste Management Reserve Fund.

2022 Capital Budget and 10-Year Plan

The Solid Waste Management Services 2022-2031 Capital Budget and Plan Budget Notes provide additional details on the Solid Waste Management Services' proposed 10-Year Capital Plan. Solid Waste Management Services 2022 tangible assets are valued at \$571.385 million. The state of good repair of these assets, as well as the development of new infrastructure, is funded through the Capital Budget.

The 2022 Capital Budget of \$69.729 million is comprised of \$63.668 million for previously approved and new capital projects and a carry forward of \$6.061 million from 2021. The 2022 budget, including carried forward amounts, includes projects in the following categories: Legislated (\$26.405 million), State of Good Repair (\$21.781 million), Service Improvement (\$19.703 million) and Growth Related (\$1.840 million).

The top three 2022 capital budget projects (by dollar value) total \$39.559 million and comprises 57% of the \$69.729 million 2022 Capital Budget and are as follows:

1. Green Lane Landfill site - primarily for legislated cell development (\$15.717 million in 2022).

2. Transfer Station Asset Management - state of good repair projects at 7 Transfer Stations (\$14.153 million in 2022).

3. Perpetual Care of Closed Landfill - legislated costs to monitor Solid Waste Management Services' 160 closed landfills and maintain regulatory compliance (\$9.688 million in 2022).

The Long Term Waste Management Strategy's recommended 2022 Capital Budget is \$7.967 million which will execute the following four priority actions:

- Development of Promotion & Education Tools (\$3.512 million);
- Extended Producer Responsibility Transition (\$2.805 million);
- Mixed Waste Processing with Organics Recovery Study (\$0.550 million);
- Long Term Waste Management Strategy Update (\$0.350 million); and
- Policy Planning Studies (\$0.750 million).

The top three projects (by dollar value) total \$408.322 million and comprise 48% of the \$849.120 million 10-Year Capital Budget & Plan (2022 to 2031):

- 1. Transfer Station Asset Management (\$140.118 million);
- 2. Green Lane Landfill Development (\$138.231 million); and
- 3. New Organics Processing Facility (3rd Anaerobic Digester) \$129.973 million.

The 10-Year Capital Plan (including carry-forward) was updated to include Climate Change Resiliency projects including the 3rd Organics Processing Facility (Anaerobic Digester estimated at \$129.973 million) to address the shortage of green bin processing capacity, the landfill gas control and utilization from Green Lane Landfill and Keele Valley Closed Landfill (\$69.306 million) and building a Net-Zero Dufferin Waste Management Facility Administration Building (\$40.000 million).

Extended Producer Responsibility

In preparation for the transition of Toronto's Blue Bin Program to Extended Producer Responsibility on July 1, 2023, significant planning, research, analysis, and advocacy work will be undertaken throughout 2022. This includes negotiations with Producer Responsibility Organizations on the transition of Toronto's program, business transformation and change management work that will result in a roadmap of undertakings necessary to transition to a future business state, and a review of the Solid Waste Management Services utility rate model. The proposed 2022 budget provides continued support to ensure that Solid Waste Management Services has the required resources and professional services that are critical to meet the timelines of the regulation and to provide a seamless transition for Toronto and its residents.

Environment Days at Depots

Community Environment Days are traditionally held in various locations throughout the City accommodating up two scheduled per Ward per year between April and October. Due to the COVID-19 pandemic, Community Environment Days in 2020 and 2021 pivoted and were held as drive-through events at the City's Drop-off Depots. Events followed Toronto Public Health guidelines with enhanced COVID-19 protocols in place and were operated with optimal efficiency, resulting in the successful collection of hazardous waste materials, electronic waste and items for donation as well as the provision of free bagged compost.

In 2020, there were seven events held with an average of 434 visitors attending. In 2021, there will be a total of 14 events held. Up until mid-October 2021, there have been 8 events so far with an average of 368 visitors attending. Residents are still able to drop off residential hazardous waste and electronics throughout the year at Drop-off Depots during regular business hours and are not limited to the Community Environment Day events. Some services offered at Community Environment Days are also provided through curbside collection, such as electronic waste and toxic taxi services, in addition to services provided by other non-profit organizations who collect textiles and other used goods for donation.

The traditional format of Community Environment Days provide events within communities that are more accessible to residents and within walking distance for highly populated neighbourhoods. With the success of the drive-through events at Drop-Off Depots this budget supports continuation of both the traditional format within communities and an additional seven events at Drop-Off Depots in 2022. This will provide an opportunity for residents to become familiar with the services offered at the Drop-Off Depots in order to encourage more reduction, reuse and recycling of materials as well as education on proper disposal. The recommended service level change will accommodate up to 51 traditional Community Environment Day events and an additional seven events (one at each of the City's seven Drop-off Depots) for a total of up to 58 events per year.

Green Bin Accepted Items

As part of the 2021 Budget, Council directed the General Manager, Solid Waste Management Services to review, as part of the work of the Province's transition to extended producer responsibility programs and the amended Food and Organic Waste Policy Statement, the currently accepted items in the City's existing diversion programs. The direction included a primary focus on materials in the Green Bin stream and a report back to Council with recommendations on items to remain or exclude from the list of accepted items using a triple bottom line approach which considers financial, environmental and social considerations.

First developing a Review Framework approach and focusing on items accepted in the Green Bin stream will help to inform how any challenging products can be managed and also consider impacts of transition of product management to extended producer responsibility. Work is underway to establish a partnership with academia to help support the development of the Review Framework and conduct the review. The scope of work will include identifying specific problematic material categories and conducting a jurisdictional scan and triple bottom line analysis in order to inform decision-making for those material categories. In addition, complementary research projects to further study compostable and biodegradable materials are being conducted. At this time, there are no changes to the current list of accepted items in the Green Bin stream. Any recommendations on changes will be brought forth in a future report to Council.

Long Term Waste Management Strategy

The City's Long Term Waste Management Strategy (the Waste Strategy) was approved by Council in July 2016. The Waste Strategy provides a long term planning framework for the City's Solid Waste Management Services policy and program decisions for the next 30 to 50 years.

The procurement process to hire a consultant to undertake a five-year review and update of the Waste Strategy has been delayed due to reprioritization of resources during the COVID-19 pandemic response and is now anticipated to begin in late 2022.

Funding included in the 2022 Capital Budget totals \$7.967 million for the following subprojects as shown in Table 8 below:

Sub-Projects	2021	2022
Promotion & Education, Circular Economy and Reduction, Reuse and Multi-residential Programming	\$2.922M	\$3.512M
Preparation for Extended Producer Responsibility Transition	\$1.491M	\$2.805M
Mixed Waste Processing with Organics Recovery Study	\$0.754M	\$0.550M
Long Term Waste Management Strategy Update	\$0.712M	\$0.350M
Policy Planning Studies	\$0	\$0.750M
Total	\$5.880M	\$7.967M

Table 8 – 2022 Long Term Waste Management Strategy Budget by Sub-Project

Impact of Fees on Diversion and Source Separation, Contamination of Blue Bins, Illegal Dumping and Undersized Choice in Household Bin Size

Solid Waste Management Services continues to review and monitor Blue Bin contamination rates to determine if there are any corresponding trends related to fees charged, waste diversion, source separation, contamination, illegal dumping and choice of bin size. Due to the continued response to the COVID-19 pandemic, resources for this work have been limited. The contamination rate has not increased and has remained at an average of 29% over the past several years.

In 2020, operational monitoring and analysis was conducted to determine if there were any corresponding trends between garbage bin size and occurrences of overflowing garbage bin lids or excess garbage bags being set out by single family households. This was undertaken city-wide and for all garbage bin sizes. Monitoring and analysis of the households inspected indicated that less than 1% had set out an extra garbage bag for collection beside their Garbage Bin.

In addition, approximately 4% had garbage bin lids ajar and overflowing. Based on the analysis results there does not appear to be any correlation between bin size and the likelihood of having an overflowing garbage bin lid or excess garbage bag set out. The monitoring did identify that for those households that set out an extra garbage bag, approximately 57% did not have a garbage bag tag affixed. This non-compliance is being addressed through continued education and campaigns on the use of garbage bag tags for overflow material.

Landfill Capacity Constraints

Landfill capacity in Ontario is increasingly scarce and estimated to be depleted by 2036 or sooner if residual waste exports to the United States discontinue. In 2021, Solid Waste Management Services hired a technical consultant to begin a Residual Waste Disposal Options study. The study will be undertaking an assessment to evaluate the remaining lifespan of Green Lane Landfill and to develop a baseline for which to assess potential impacts to capacity through scenario forecast modelling. The study will also identify and develop short and long-term options for the efficient and effective management of the City's residual waste to meet waste management needs over the next 50 years through analyzing planned, existing, and new options for residual waste management including disposal at traditional landfills and energy from waste facilities. A report on recommendations for future options for long-term residual disposal is planned to be presented to Council within the next 12 - 18 months.

Existing landfill contracts have been examined and Council authorities pursued to determine further options on extending the life of Green Lane Landfill and increasing available disposal capacity. The new Green Lane Landfill Operations, Maintenance and Construction Contract guarantees increased waste compaction rates which is intended to improve the City's ability to maximize the use of the landfill airspace by consuming proportionately less overall volume in the landfill for the given tonnages. In addition, guaranteed annual tonnages have been reduced from 400,000 to 350,000 tonnes per year which allows the City greater flexibility as it works to reduce the volume of waste going to landfill through waste reduction programs and diversion policies, and will result in disposal cost savings.

On May 5, 2021, Council adopted Item IE21.5 entitled "Authority to Negotiate and Enter into Regional Waste Management Co-operation and Contingency Agreements" which provides authority to enter into new residual disposal agreements and/or amending agreements with Ontario landfills and energy from waste facilities to provide for contingency and operational re-direction capacity (i.e. sending tonnage to those landfills to save space at Green Lane Landfill). Under this authority, existing contracts have been extended to ensure continuity of services as the Division negotiates preferential terms for longer contracts with the goal to have contracts in place until the end of August 2026. The Division has also conducted meetings with energy from waste facilities to determine their capacity to accept the City's municipally collected waste, and to determine if they can meet the conditions outlined in Council's approval. As directed, Solid Waste Management Services will bring forth a report to Council before entering into any agreements with these facilities.

Ontario Waste Management Association. (January 2021). State of Waste in Ontario: Landfill Report.

https://www.owma.org/down/eJwFwQEKgCAMAMAXqeGmab!ZKynKIDYIen13u!qQxTk 5rIOUHrUCIhp9@aZXLPfmphQjUkbDgNVggs0UzMVA8JI59gF8tGOtP8LsF0U=/OWMA %20Landfill%20Report%202021%20_FINAL_lowres.pdf

Reinstatement of Advertising and Public Education Budget

In 2021 the budget was reduced as City-wide communication efforts were focused on Covid-19 and the Division would not have been able to spend the budget. The proposed 2022 Solid Waste Management Services budget reinstates funding for advertising and public education and supports the activities of the newly established Stakeholder and Community Outreach. This includes community communications and campaigns, outreach, engagement and consultation initiatives as it relates to waste diversion and reduction. Communications and outreach supports also serve to educate residents, customers and stakeholders on how to properly manage and sort waste through a variety of activities, including campaigns and advertising, management of waste- reduction related volunteer programs, the development of Waste Management Guides, and maintenance of tools, such as the TOwaste app. These activities are essential in working towards greater waste reduction and diversion and key actions in the Long- Term Waste Management Strategy, which rely on residents, customers and

stakeholders properly managing waste and adopting behaviours that lead to waste reduction overall.

The 2022 budget also supports engagement and consultation activities with Rights Holders (Indigenous communities), residents and customers that inform Solid Waste Management Services' approach to working towards meaningful engagement and implementing the City's commitments to Indigenous Peoples, as it relates to its infrastructure (e.g. landfills, transfer stations, etc.) within and outside of Toronto. These activities will help ensure Solid Waste Management Services has a cohesive approach to public education by increasing its understanding of how people consume information and what incentivizes people to reduce and divert waste.

Impact of the new education resources on diversion rates

In December 2020, Council directed Solid Waste Management Services to replace its annual Waste Collection Calendar (Calendar) with two new products: a condensed Waste Management Guide and a Utility Bill Insert (UBI) collections schedule to be included with existing Utility Bills. This approach was taken in 2021 when preparing 2022 materials to reduce costs associated with the production of the traditional Calendar and to reduce waste.

Solid Waste Management Services, in collaboration with the Strategic Communications and Revenue Services Divisions, have developed a UBI that will be distributed to singlefamily home customers and renters of residential above commercial units between September and December 2021. Single-family home customers will receive their UBI, corresponding to their relevant collection schedule (one out of 20 possible versions), along with their Utility Bill in fall 2021 depending on their Utility Bill cycle. To facilitate this change, Solid Waste Management Services has included messaging in previous Utility Bills that an insert containing a customer's collection schedule will be delivered to them with their next Utility Bill. Renters, who likely do not receive a Utility Bill directly, will receive an independent mail-out that will be clearly marked to indicate the inclusion of a collections schedule within the same timelines. It is expected all UBI recipients will have their collection schedule by December 2021. This change does not impact multiresidential building customers. It is expected that approximately 460,000 customers will receive a UBI.

Furthermore, Solid Waste Management Services has developed a condensed Waste Management Guide that is smaller in size and number of pages than the traditional Calendar. This guide contains high level information on proper sorting, waste diversion and reduction and Solid Waste Management Services programs. The guide also provides information on how to access more details about programs and services online. This guide no longer contains a collections schedule and, therefore, does not have to be reprinted annually. All single family, multi-family households and residential units above commercial locations, that receive city service, will receive a guide by December 2021 and will be able to reuse it year after year.

As of January 2022, the new approach will be in effect. As part of its implementation

plan Solid Waste Management Services will be monitoring feedback provided by customers and residents, including compliments, complaints and questions. This information will be provided to Council as part of the 2023 Budget process. In addition, Solid Waste Management Services has allocated funds within its advertising and public education budget to conduct research on the impacts of these changes on customers and residents as it relates to waste diversion and reduction in 2022. This will be used toinform future year planning and will also be summarized and provided through an update to Councillors.

Sale and Distribution of Garbage Bag Tags

Garbage bag tags are required for Solid Waste Management Services' non-residential customers (Businesses, Charities, Institutions, Religious Organizations, Schools and City Divisions, Agencies and Corporations) to set out garbage if not subscribed to a bin collection service. Single family customers are also required use bags tags to set out overflow garbage for collection. Bag tags are currently sold at Canadian Tire and Shopper's Drug Mart stores in Toronto as well as available for purchase online through the City's website.

The contracts for the sale and distribution of bag tags with the current retailers is ending in May 2022. Informing residential and non-residential customers of where garbage bag tags can be purchased is a key information piece included in existing communication materials recently sent to residents (such as the new Utility Bill Inserts with collection information). An extension to the existing contracts is required to provide sufficient time to allow for a competitive process to procure new contracts to start in 2024 and for the new retailers to be identified before the design and printing of new annual communication materials, which would be finalized by July 2023.

Mattress Collection

SWMS successfully negotiated an amendment to the mattress processing contract to allow increased diversion of mattresses from landfill by expanding mattress collection and recycling to cover the entire City. The increase in processing capacity amounts to 4,500 tonne each year. Recycling 4,500 tonnes of mattresses is estimated to save about 51,568 m³ of landfill space or approximately 49,454 tonnes of mixed waste tonnes. The contract amendment also includes an overall operational savings estimated at \$1.490 million over five years.

3rd Anaerobic Digestion (AD) Facility

The Request for Proposal (RFP) to retain a consulting engineer to conceptualize and begin pre-design for the Divisions third Anaerobic Digestion (AD) facility closed on September 15, 2021. Submissions will be reviewed and evaluated by SWMS with PMMD. The anticipated target date for Contract Award is December 2021. The Consultant's work will include the preparation of engineering studies, including key initial planning studies such as updating Organic Material tonnage forecast, candidate site review, preferred site recommendation and Pre-processing technology Assessment.

The project will also include review and implementation of renewable energy options

for the use of the biogas that will be generated at the new facility. Construction is expected to commence in 2025 with operations and commissioning to begin in 2028. Key milestones for the project include engineering studies to be undertaken in 2022, construction award in 2024, design and or permitting in 2024 and 2025, construction in 2025 and 2026 and commissioning in 2028.

Renewable Natural Gas (RNG) Program

Dufferin RNG Facility: Final modification to the facility's injection station was completed in October, and the facility will produce an estimated 300 m3 of RNG per hour, with an annual production estimated to be 2.95M m3 per year, resulting in an estimated GHG reduction of approximately 5,656 eCO2 tonnes by moving to a RNG/NG blend. The RNG produced will be distributed to all enrolled City gas accounts under the City Natural Gas Purchasing Program managed by the Environment and Energy Division, at a cost per cubic meter not exceeding the full cost recovery of all Renewable Natural Gas capital and operating costs.

Disco Road RNG Facility: Similar to Dufferin, staff successfully negotiated and signed an agreement with Enbridge Gas Inc. for the design, build, commission, operate and injection service for the RNG facility. Earthworks, site preparation and technology selection is underway, along with the preliminary permitting and approvals. Construction is anticipated to commence in 2022 and completed by end of 2023. The Disco Road RNG Facility will have a production capacity of an additional 4.6M cubic meters of RNG, resulting in an estimated additional GHG reduction of approximately 8,850 eCO2 tonnes by moving to a RNG/NG blend. Green Lane Landfill – Landfill Gas Utilization study is currently underway. The site will produce approximately 25M cubic meters of renewable natural gas at its peak landfill gas flow rate which would result in an estimated GHD reduction of approximately 55,000 tonnes of eCO2 equivalent annually. The ultimate green energy production and Greenhouse Gas reduction is dependent on the recommendations of the study and City Council's approval to move forward with the project.

First Nations Engagement Grant Funding Program for the Green Lane Landfill Renewable Energy Study Project

In 2021, a steering committee was struck to guide a Landfill Gas Utilization Study at the City's Green Lane Landfill. The core of the committee consists of one (1) member from each of the Chippewa of the Thames Fist Nations, the Munsee- Delaware Nation, the Oneida of the Thames, and the City. There have been five (5) meetings held in 2021 to discuss the technical feasibility of the Study. This approach will allow for First Nations' input early in the process, and hopefully greater up-take and support once the project is defined. The ultimate goal of the study is to define a project that effectively takes landfill gas, and transitions it to a form of green energy, while creating a path for the local First Nation communities to be involved.

Funding for Munsee-Delaware Nation

Solid Waste Management Services has embraced the City's commitment to strengthen relationships with Indigenous communities and advance reconciliation. The Munsee-

Delaware Nation is one of three First Nations in close proximity to the City's Green Lane Landfill. They are not part of the Community Benefits Agreement or the First Nation's Liaison Committee, and have therefore been under-represented when it comes to engagement with the City when compared to the other two First Nations. Funding has been established within the 2022 budget and Solid Waste Management Services intends to seek direction and authority from Council with a separate report in the first half of 2022.

Review of Waste Collection Bins in City Parks and Open Spaces

On November 06, 2020 City Council directed the General Manager, Solid Waste Management Services to review the current installment of waste collection bins in parks and open spaces as a pilot project to determine how to improve the quality of Blue Bin recyclables and reduce contamination. In May 2021, Solid Waste Management Services introduced a Beverage Bin Pilot project in 30 parks throughout the City. New beverage bins were designed to exclusively capture empty beverage cans and bottles with a small round hole in the lid instead of the existing lid opening. This was done in order to help prevent contamination from being deposited into the recycling bins and to isolate them for recovery beverage containers, like water bottles and pop cans which are regularly consumed in parks. Special stickers on the lids and signage was developed to support public education. In total 306 pilot bins were installed during a 14 week period (May through August 2021). Over the 14 weeks pilot. 8 tonnes of beverage cans and bottles were diverted from landfill with a 15% average level of contamination. Data is currently being analyzed to determine the success of the pilot and to determine future pilot expansions and other program considerations.

In 2018, Green Bins were introduced at select dog off-leash areas as a pilot program. In 2019, the program was expanded to all dog off-leash areas and approximately 180 tonnes of organic material was diverted from landfill. In 2020 and 2021, the program was expanded beyond dog off-leash areas in select parks. In 2021, SMWS further expanded the program to another 39 parks, totalling to 274 bins located in 141 parks. It is projected that from these 39 parks we have the potential to increase the amount of organic material collected from parks by 12% over 2020. In 2020 the actual increase in weight over 2019 from August 1st to September 30th was 2 tonnes, which is an increase of 6%. This lower capture may be attributed to a lack of awareness about the new bins (which were installed in July) and/or the Covid-19 pandemic. Staff are hoping that there will be a higher increase in 2021 as people become more familiar with our expanded program and pandemic restrictions loosen. Data is currently being analyzed to determine the detailed findings and the overall success of the pilot and to determine ongoing pilot expansions and program considerations. Refer to the table below for additional information.

Year	Parks Added	Locations Added	Bins Added	Weight (tonnes)
2018	21	61	68	42.3
2019	49	96	98	179.5
2020	32	45	45	167.6
2021	39	63	63	180-190*
Total	141	265	274	

Table 9: Parks and Park Bins Added - Pilot

*Projected

Fleet-related safety and accountability enhancements

In June 2019 City Council directed the General Manager Solid Waste Management Service (SWMS) to implement a fleet safety and accountability program for all in-house and contracted vehicles. Starting in October 2019, SWMS began setting up a series of pilot projects to test various fleet safety technology enhancements on our vehicles with a focus on technologies and training that improve driver awareness and behaviour. Over the course of 2020/2021 SWMS ran 10 different pilot projects to test the use of truck side guards, 360 degree camera systems, video-based telematics, GPS/AVL, and cloud-based access and storage of vehicle data and video. SWMS also implemented a dedicated driver training facility at Keele Valley, and advanced simulation based driver training as part of annual In-Service Training. Starting in September 2021, SWMS began 3 new pilot projects that will test the use of in-cab cameras along with AI and Machine Vision technology to provide real time in-cab coaching to drivers. Once all pilot projects are completed in 2022 a report on findings will be generated with recommendations on which technologies should be incorporated into the SWMS fleet.

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SIGNATURE

Heather Taylor Chief Financial Officer and Treasurer Matt Keliher General Manager, Solid Waste Management Services

ATTACHMENTS

Attachment 1: Appendix A – Recommended 2022 Solid Waste Management Services Rates and Fees

Attachment 2: Appendix B – 2022 to 2031 Solid Waste Management Services Rates and Fees Estimates

Appendix A – Recommended 2022 to 2024 Solid Waste Management Services Rates and Fees

1. Multi-Residential Front End Solid Waste Management Services Rates proposed to increase by 3% in 2022, 3% in 2023 and 3% in 2024

Table 1 - Multi-Residential Front End and Multi-Residential Curbside Rates

2022 Rates	Volume (yd³)	Base/Unit	Excess/yd ³
Un-compacted	1.917	\$228.54	\$15.86
Compacted	0.9585	\$228.54	\$31.73

2023 Rates	Volume (yd ³)	Base/Unit	Excess/yd ³
Un-compacted	1.917	\$235.40	\$16.34
Compacted	0.9585	\$235.40	\$32.68

2024 Rates	Volume (yd ³)	Base/Unit	Excess/yd ³
Un-compacted	1.917	\$242.46	\$16.83
Compacted	0.9585	\$242.46	\$33.66

2. Single Family Residential Rates proposed to increase by 3% in 2022, 3% in 2023 and 3% in 2024

Table 2 - Single Family Residential Rates

Bin Size	2022 Annual Rates	2023 Annual Rates	2024 Annual Rates
Small	\$278.34	\$286.69	\$295.29
Medium	\$337.89	\$348.03	\$358.47
Large	\$458.91	\$472.68	\$486.86
Extra-Large	\$532.29	\$548.26	\$564.71
Bag-Only	\$178.19	\$183.54	\$189.05

3. Residential Units above Commercial Rates proposed to increase by 3% in 2022, 3% in 2023 and 3% in 2024

Table 3 - Residential Units above Commercial Rates

Bin Size	2022 Annual Rates	2023 Annual Rates	2024 Annual Rates
Bi-Weekly: Small	\$278.34	\$286.69	\$295.29
Bi-Weekly: Medium	\$337.89	\$348.03	\$358.47
Bi-Weekly: Large	\$458.91	\$472.68	\$486.86
Bi-Weekly: Extra-Large	\$532.29	\$548.26	\$564.71
Bi-Weekly: Bag-Only	\$178.19	\$183.54	\$189.05
Weekly: Small	\$337.89	\$348.03	\$358.47
Weekly: Medium	\$458.91	\$472.68	\$486.86
Weekly: Large	\$650.73	\$670.25	\$690.36
Weekly: Extra-Large	\$1,045.57	\$1,076.94	\$1,109.25
Weekly: Bag-Only	\$237.75	\$244.88	\$252.23

4. Sale of Bins Fees proposed to increase by 3% in 2022, 3% in 2023 and 3% in 2024

Table 4 - Sale of Bin Fees

Customer Type	Bin Size	2022 Annual Rates	2023 Annual Rates	2024 Annual Rates
Multi-Residential Front End and Multi-	95 gallon	Nates	Rates	nates
Residential Curbside	garbage bin	\$116.34	\$119.83	\$123.42
Multi-Residential Front End and Multi-	95 gallon	* · · • · • · • ·		
Residential Curbside	recyclingbin	\$116.34	\$119.83	\$123.42
Multi-Residential Front End and Multi-	35 gallon			
Residential Curbside	organics bin	\$75.28	\$77.54	\$79.87
Multi-Residential Front End and Multi-	26 gallon			
Residential Curbside	organics bin	\$62.62	\$64.50	\$66.44
Non-Residential (Commercial / Divisions,				
Agencies, and Corporations / Schools /				
Charities, Institutions and Religious	95 gallon	\$110.01	¢440.00	¢400.40
Organizations)	garbage bin	\$116.34	\$119.83	\$123.42
Non-Residential (Commercial / Divisions,				
Agencies, and Corporations / Schools /				
Charities, Institutions and Religious	95 gallon	\$440.04	¢440.00	¢100.10
Organizations)	recyclingbin	\$116.34	\$119.83	\$123.42
Non-Residential (Commercial / Divisions,				
Agencies, and Corporations / Schools /	25 gollon			
Charities, Institutions and Religious	35 gallon	<u> </u>	<u> </u>	¢70.07
Organizations)	organics bin	\$75.28	\$77.54	\$79.87
Non-Residential (Commercial / Divisions,				
Agencies, and Corporations / Schools /				
Charities, Institutions and Religious	26 gallon	¢00.00		CC 44
Organizations)	organics bin	\$62.62	\$64.50	\$66.44

5. Other (including Non-Residential) Solid Waste Management Services Fees and Rates proposed to increase by 3% in 2022, 3% in 2023 and 3% in 2024

Table 5 - Non-Residential Rates

		2022 Annual	2023 Annual	2024 Annual
Customer Type	Frequency	Rates	Rates	Rates
Commercial / Divisions, Agencies,				
and Corporations / Schools for Curbside Bin	Bi-Weekly	\$568.16	\$585.20	\$602.76
Commercial / Divisions, Agencies,				
and Corporations / Schools for	147 11	.	• 4 4 - 0 40	* 4 005 50
Curbside Bin	Weekly	\$1,136.33	\$1,170.42	\$1,205.53
Commercial / Divisions, Agencies, and Corporations / Schools for				
Curbside Bin	Twice Weekly	\$2,272.66	\$2,340.84	\$2,411.07
Charities, Institutions and Religious				
Organizations for Curbside Bin –				
Small	Bi-Weekly	\$113.64	\$117.05	\$120.56

Customer Type	Frequency	2022 Annual Rates	2023 Annual Rates	2024 Annual Rates
Charities, Institutions and Religious Organizations for Curbside Bin – Medium	Bi-Weekly	\$227.28	\$234.10	\$241.12
Charities, Institutions and Religious Organizations for Curbside Bin –	Bi-Weekly	\$340.91	\$351.14	\$361.67
Large Charities, Institutions and Religious Organizations for Curbside Bin – Extra-Large	Bi-Weekly	\$568.16	\$585.20	\$602.76
Charities, Institutions and Religious Organizations for Curbside Bin – Small	Weekly	\$227.28	\$234.10	\$241.12
Charities, Institutions and Religious Organizations for Curbside Bin – Medium	Weekly	\$454.52	\$468.16	\$482.20
Charities, Institutions and Religious Organizations for Curbside Bin – Large	Weekly	\$681.79	\$702.24	\$723.31
Charities, Institutions and Religious Organizations for Curbside Bin – Extra-Large	Weekly	\$1,136.33	\$1,170.42	\$1,205.53
Charities, Institutions and Religious Organizations for Curbside Bin – Extra-Large	Twice Weekly	\$2,272.66	\$2,340.84	\$2,411.07
Front End Container – Un-compacted	per yd3	\$15.63	\$16.10	\$16.58
Front End Container – Compacted	per yd3	\$31.28	\$32.22	\$33.19

Table 5a - Non-Residential Organics Collections

Customer Type	Frequency	2022 Annual Rates	2023 Annual Rates	2024 Annual Rates
Commercial / Divisions, Agencies,	Frequency	Nates	Nale 5	Nales
and Corporations / Schools /				
Charities, Institutions and				
Religious Organizations	Twice Per Week	\$451.14	\$464.67	\$478.61
Commercial / Divisions, Agencies,			Ŧ	, , ,
and Corporations / Schools /				
Charities, Institutions and	Five Times Per			
Religious Organizations	Week	\$1,691.80	\$1,742.55	\$1,794.83
Commercial / Divisions, Agencies,				
and Corporations / Schools /				
Charities, Institutions and	Six Times Per			
Religious Organizations	Week	\$2,255.72	\$2,323.39	\$2,393.09

Table 5b - Tip Fees at City Transfer Stations (except Drop and Load Rates)

Customer Type	Material	2022 Fee (Per Tonne)	2023 Fee (Per Tonne)	2024 Fee (Per Tonne)
Non-Residential (Commercial / Divisions, Agencies, and Corporations / Charities, Institutions and Religious Organizations / Schools)	Waste Loads	\$166.26	\$171.25	\$176.39
Non-Residential (Commercial / Divisions, Agencies, and Corporations/ Charities, Institutions and Religious Organizations / Schools)	Recyclable Material Loads	\$124.70	\$128.44	\$132.29
Non-Residential (Commercial / Divisions, Agencies, and Corporations/ Charities, Institutions and Religious Organizations / Schools)	Tire Loads	\$249.38	\$256.86	\$264.57

Note: All other fees for waste loads, recyclable material loads and tire loads based on axle rates when scales are unavailable are also proposed to be increased by 3% in 2022, 3% in 2023 and 3% in 2024 with the exception of Small Paid Waste Load Tip Fee for loads up to 100 kilograms which has been rounded up to \$17 per load in 2022 to minimize cash handling at sites.

Table 5c - Residual Management Rates proposed to increase by 3% in 2022, 3% in
2023 and 3% in 2024

Customer Type	Material	2022 Fee (Per Tonne)	2023 Fee (Per Tonne)	2024 Fee (Per Tonne)
Commercial	Waste Loads	\$166.26	\$171.25	\$176.39
Divisions, Agencies, and Corporations	Bio-solids	\$166.26	\$171.25	\$176.39
Divisions, Agencies, and Corporations	Water Treatment Residue	\$166.26	\$171.25	\$176.39
Asbestos	Waste Loads	\$498.78	\$513.74	\$529.15
Canadian Food Inspection Agency	Waste Loads	\$498.78	\$513.74	\$529.15
Special Handling	Waste Loads	\$498.78	\$513.74	\$529.15
Ministry of Environment Ordered Municipal Waste	Waste Loads	\$498.78	\$513.74	\$529.15
Ministry of Environment Ordered Industrial, Commercial and Institutional Waste	Waste Loads	\$498.78	\$513.74	\$529.15

Table 5d - Solid Waste Management Services Miscellaneous Collection, Haulage and Other Services Rates proposed to increase by 3% in 2022, 3% in 2023 and 3% in 2024

Customer Type	2022 Hourly	2023 Hourly	2024 Hourly
	Rate	Rate	Rate
Non-Residential (Commercial / Divisions, Agencies, and Corporations / Schools / Charities, Institutions and Religious Organizations)	\$113.54	\$116.95	\$120.46

6. Rate for Clean Fill at City of Toronto owned Landfills proposed to increase by 3% in 2022, 3% in 2023 and 3% in 2024

Table 6 - Rate for Clean Fill

Activity	2022 Fee	2023 Fee	2024 Fee
	(Per Tonne)	(Per Tonne)	(Per Tonne)
Sale of Clean Fill (Per load fee)	\$30.66	\$31.58	\$32.53

7. Rates for Drop and Load and Load

Table 7 - Drop and Load Rates and Load Weighting Rates at City Transfer Stations

Customer Type	Activity	2022 Fee (Per Tonne)	2023 Fee (Per Tonne)	2024 Fee (Per Tonne)
All Customers	Drop and Load	\$15.00	\$15.45	\$15.91
All Customers	Load Weighing	\$14.10	\$14.52	\$14.96

Note: Drop and Load rates proposed to decrease by 11.76% in 2022 to align with the market will pay.

8. Oversized and Metal Item Fee is proposed to increase by 3% in 2022, 3% in 2023 and 3% in 2024

Table 8 - Oversized and Metal Item Fees

Customer Type	2022 Fee	2023 Fee	2024 Fee
All Customers	\$20.34	\$20.95	\$21.58

9. Solid Waste Rates for Street Events proposed to increase by 3% in 2022, 3% in 2023 and 3% in 2024

Table 9 -	Street Event Rates
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Customer Type	Activity	2022 Rate	2023 Rate	2024 Rate
All Customers	Signature Street Event Road closures for up to 4 consecutive days – first day	\$991.42 per event	\$1,021.16 per event	\$1,051.79 per event
All Customers	Signature Street Event Road closures for up to 4 consecutive days – each additional day	\$295.41 per additional day	\$304.27 per additional day	\$313.40 per additional day
All Customers	Signature Street Event Rental/Service of 12-60 pairs of Carts – first day	\$3,995.79 per 12-60 pairs of carts \$391.58 per	\$4,115.66 per 12-60 pairs of carts \$403.33 per	\$4,239.13 per 12-60 pairs of carts \$415.43 per
All Customers	Signature Street Event Rental/Service of 12-60 pairs of Carts – each additional day	additional day per 12-60 pairs of carts	additional day per 12-60 pairs of carts	additional day per 12-60 pairs of carts
All Customers	1-day Street Event - road closures for 1 day	\$538.34 per event	\$554.49 per event	\$571.12 per event
All Customers	1-day Street Event Rental/Service of 12-60 pairs of Carts	\$2,359.53 per 12-60 pairs of carts	\$2,430.32 per 12-60 pairs of carts	\$2,503.23 per 12-60 pairs of carts
All Customers	40 yd3 recycling Roll-off Bins	\$215.83 per bin	\$222.30 per bin	\$228.97 per bin
All Customers	Signature Parade: Large parade of 20,000 people + or parade route over 2 km	\$12,100.98 per event	\$12,464.01 per event	\$12,837.93 per event
All Customers	Parade: Smaller parade, 5,000 to 20,000 people, parade route under 2 km	\$3,216.47 per event	\$3,312.96 per event	\$3,412.35 per event
All Customers	Athletic events: full or partial closure for up to 4 days – first day	\$1,400.75 per event	\$1,442.77 per event	\$1,486.05 per event
All Customers	Athletic events: full or partial closure for up to 4 days – each additional day	\$930.13 per additional day	\$958.03 per additional day	\$986.77 per additional day

10. Bag Tag Fees proposed to increase by 3% in 2022, 3% in 2023 and 3% in 2024

Customer Type	Activity	2022 Rate	2023 Rate	2024 Rate
	Garbage Collections:			
All Customers	Fee per Bag or Tag	\$5.96 each	\$6.14 each	\$6.32 each

11. Garbage Bin Upsizing Fee for Single Family and Residential Units above Commercial (RUAC) proposed to increase by 3% in 2022, 3% in 2023 and 3% in 2024

Customer Type	Activity	vity 2022 Rate		2024 Rate	
All Customers	Garbage Bin Upsizing	\$25.65 each	\$26.42 each	\$27.21 each	

Appendix B – 2022 to 2031 Solid Waste Management Services Rates and Fees Estimates

	Rec'd for Approval	Project	Projected Estimated Rate Increases							
Customer Type	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Multi-Residential	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Single Family	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Residential Units Abov e Commercial	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Commercial and others	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Oversized and Metal Items for all customers	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Drop and Load Rates	-11.76%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%

Table 1 - 2022 to 2031 Recommended Rates and Fees Estimates	
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