

WASTE & RECYCLING SERVICES INDICATIVE RATES AND FEES 2019-2022

2018 APRIL 25



MAKING LIFE BETTER EVERY DAY



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1.0 EXECUTIVE SUMMARY

This report proposes five indicative rates/charges for Council approval. These rates, combined with The Corporate indicative property tax rate, determine the majority of Waste & Recycling Services' (WRS') sources of revenue for the next business cycle. The rates for Council approval include: Black Cart Program charge, Blue Cart Program charge, Green Cart Program charge, Basic Sanitary rate and Minimum Load charge for waste disposal at Waste Management Facilities (WMF). Table 1 outlines the three residential charges and the waste disposal rate and charge for materials brought to the WMF for the 2019-2022 business cycle.

WRS' financial model objective for 2019-2022 is to align revenue with the cost of service for customer classes, while reducing WRS' dependency on tax support for specific residential services. This will create a cost structure for residential services that is more transparent to the customer; has better equity among customer classes; and facilitates variable levels of service, which supports customer choice in the future.

The indicative rates and charges in this attachment were developed to ensure that: WRS is able to continue next steps towards the 70 per cent by 2025 diversion goal; maintain services levels for existing customers; extend those services to new communities; maintain capacity and efficiency of its infrastructure; and respond to inflationary impacts.

MONTHLY CHARGE: \$ PER 30 DAYS	2018	2019	2020	2021	2022
Waste Management Charge	\$4.90	REMOVED			
Black Cart Program Charge	NOT APPLICABLE	\$6.75- \$6.85	1% - 2%	1% - 2%	1% - 2%
Blue Cart Program Charge	\$8.50	\$8.70- \$8.80	1% - 2%	1% - 2%	1% - 2%
Green Cart Program Charge	\$6.50	\$8.50- \$8.70	1% - 2%	1% - 2%	1% - 2%
Monthly Residential Subtotal	\$19.90	\$23.95 – \$24.35	\$24.19 – \$24.84	\$24.43 – \$25.33	\$24.68 – \$25.84
DISPOSAL RATES AT WASTE MANAGEMENT FACILITIES	2018	2019	2020	2021	2022
Basic Sanitary Rate per tonne	\$113	\$113	\$113	\$115	\$115
Minimum charge per load	\$20	\$25	\$25	\$25	\$25

Table 1: Indicative charges and rates for 2019-2022

WRS will monitor costs; customer activity; and economic recovery and may adjust rates and charges for 2021 and 2022 through Council approval as part of the Mid-Cycle Adjustment process, if necessary.



2.0 INTRODUCTION

WRS, as part of One Calgary has one defined line of service – Waste & Recycling. The service's plan and budget will be developed through 2018 for Council consideration in November. Preliminary overviews of anticipated initiatives as well as operating and capital investment are provided in the following sections. The strategies and investments identified in this report will be funded by a combination of these proposed rates/charges and the indicative property tax rate. These investments and plans will be further developed and refined as part of the One Calgary service plans and budget process.

WRS currently has a financial model that includes a blend of property tax, grants and fees to fund WRS' programs, associated activities and increase diversion. While this financial model had historically served WRS' financial requirements, the evolution of services delivered by WRS requires financial changes to ensure reliable funding options are in place, providing long-term self-sufficiency in an environment with changing and evolving business drivers.

As part of Action Plan 2015-2018, WRS completed a financial review to inform the 2019-2022 business plan and budgeting cycle. This led to WRS' establishing four financial objectives that future financial models would achieve and are as follows: financially and operationally sustainable; support waste diversion; transparent; and equitable

On 2018 March 19, Council approved WRS' new financial model (UCS2018-0150) for implementation as of 2019 January 01. The changes included in One Calgary 2019-2022 are; an increase in fee revenue of \$20 million annually balanced by a reduction in tax support of \$20 million annually (\$10 million for residential and \$10 million for non-residential customers). The decrease in tax support is offset by an increase to the Green Cart Program charge; removal of the Waste Management Charge; introduction of a residential Black Cart Program charge; and fee for service contracts for condominium customers who are currently tax supported.

Based upon 2018 rates, if this was in effect today, each single family residential household would see an increase of approximately \$4.35 per month on their residential utility bill for Black and Green Cart Programs combined. There would be a corresponding decrease of approximately \$2 per household per month for the median residential property due to the reduction in property tax support. This would result in a net increase of approximately \$2.35 per month for the median residential property tax support.

Based on the proposed indicative rates for 2019 in this report, each single family residential household would see an increase in the range of \$4.05 to \$4.45 per month on their residential utility bill for Black, Blue and Green Cart Programs combined. With the current share between residential and non-residential property tax, there would be a corresponding decrease of approximately \$2 per household per month for the median residential property. This would results in a net increase of \$2.05 to \$2.45 per month for the median residential property. It is important to note that, with these changes, the non-residential sector will no longer be



subsidizing the residential black and green cart programs. How the reduction in tax support will be allocated is within Council's purview.

The property taxes that do still support WRS, will be redirected to community-wide and strategic initiatives. WRS' indicative rates in this attachment align with Council's direction to transition to the new financial model in 2019.

The objective of WRS' financial model for 2019-2022 is to align revenue with customer classes and their services, while reducing WRS' dependency on tax support for specific residential services. This creates a cost structure for residential services that is more transparent to the customer and has better equity among customer classes.

Council approval of the five rates/charges in this report, combined with The Corporate indicative property tax rate, will determine the majority of WRS' sources of revenue for the next cycle. The rates for Council approval include: Black Cart Program charge, Blue Cart Program charge, Green Cart Program charge, Basic Sanitary rate and Minimum Load charge for waste disposal at Waste Management Facilities.

3.0 CONTEXT

WRS provides a broad mix of front line services to the citizens of Calgary, and manages operational and environmental performance at The City's waste management facilities (WMF). These include: three active landfills; five closed landfill sites; and nine household hazardous waste drop-off locations operated in partnership with the Calgary Fire Department. WRS also operates community-based diversion programs including: Christmas tree depot program; electronics and paint recycling; Community Recycling Depots (CRDs); and community cleanups. Most visibly, WRS delivers Black Cart Program, Green Cart Program and Blue Cart Program for over 325,000 residential customers.

WRS is also responsible for developing and managing waste diversion programs, and providing infrastructure planning, project delivery and asset management. There is a strong focus on providing strategic planning services to support maximum waste diversion in all sectors (residential, construction & demolition and industrial, commercial & institutional) to support the target of 70 per cent waste diversion by 2025.

4.0 WRS BUSINESS PLAN 2019-2022

The 2019-2022 service plan and budget cycle will be one of planning and refining for WRS, as WRS continues to work towards the target of 70 per cent diversion by 2025.

Variable pricing is a part of WRS' overall waste diversion strategy. Variable cart sizes and pricing, including tag-a-bag for excess, for the Black Cart Program will increase awareness of the amount of waste generated by residents and encourage participation in both the Blue and



Green Cart Programs. It will also provide residents with choice in the level of black cart service they receive.

WRS has several studies and plans that will be updated and implemented over the course of the next business cycle. The Collection Services Review will commence in 2018 and will result in a report to Council in late 2018. The Landfill Master Plans, which are the main planning documents for the WMF, will also be updated during the next business cycle. WRS will start the process for renewals of the Landfill Approvals to Operate with Alberta Environment and Parks, which will be completed in the 2023-2026 cycle.

During 2019-2022 WRS will also be reviewing the model and technology used for recycling, and identifying the approach that should be taken in the 2023-2026 cycle. Finally, WRS will continue consolidation of the Community Recycling Depot network. With the city-wide requirement for onsite recycling in 2016, use of the depot network has changed. WRS will continue to monitor this service to ensure it is operated in an efficient manner, while maintaining a cost-effective level of service.

4.1 WRS Program Descriptions

WRS seeks Council approval of the five rates/charges in this report, these are based on the programs and program descriptions in Table 2.

Charge or Rate	Program Description – level of service
Black Cart Program charge	Every-other-week collection of 240 litre black cart, including excess to approximately 325,000 customers.
Blue Cart Program charge	Weekly collection of a 240 litre blue cart to approximately 325,000 customers.
Green Cart Program charge	Weekly summer collection, every-other-week winter collection of a 240 litre green cart, including excess to approximately 325,000 customers.
Basic Sanitary rate	Waste disposal at two waste management facilities (WMF). Spyhill WMF: 6 days per week operation year round. East Calgary WMF: 6 days per week October to April, 7 days per week April to October.
Minimum load charge for loads less than 250 kilograms	Existing: Disposal and diversion of materials at Throw 'n' Go's at WMF. Spyhill WMF: 6 days per week operation year round. East Calgary WMF: 6 days per week October to April, 7 days per week April to October. Shepard WMF: Residential only April to October, 4 days per week.

Table 2: Rate, charges and program descriptions



5.0 WRS FINANCIAL PLAN 2019-2022

A report to Committee in 2016 February (UCS2016-0136) on WRS Financial Model Review demonstrated that a self-sustaining model, with less reliance on tax support and greater use of fees provides the strongest support for achieving WRS' future financial objectives. WRS' financial objectives are:

Financially and Operationally Sustainable

A sustainable model has reliable and adequate funding for all operating, capital and long-term liability requirements. Stable funding is required to maintain assets, meet increasingly stringent regulatory requirements, provide reliable, high quality waste and recycling services, and keep pace with growth. A sustainable model is one that is flexible and adaptable to changes within WRS' operating environment.

Supports Waste Diversion

A financial model that supports waste diversion is able to adjust to accommodate new programs and changes to existing programs. WRS will continue to develop diversion strategies for each sector into the next business cycle. The future financial model must be able to support the delivery of these strategies and their associated programs and services.

Transparent

A transparent model allows for easy communication between WRS, their stakeholders and customers. It creates a shared understanding of the services that WRS provides, their value and how they are funded. A transparent financial model establishes rates and fees that are justifiable, fair, and stable for the end customers.

Equitable

Ensuring the model is equitable, produces rates that have no unintentional cross-customer subsidizations. This supports cost of service principles, such that recipients of a service pay the full cost for that service.

WRS will transition to a more self-sustaining financial model in 2019. The objective of WRS' financial model for 2019-2022 is to align revenue with customer classes and their services, while reducing WRS' dependency on tax support for specific residential services. This creates a cost structure for residential services that is more transparent to the customer and with better equity among customer classes. The rates and charges proposed by WRS for 2019-2022 have been sent with these objectives in mind.

5.1 Operating Budget

Black Cart Program Charge

As part of the 2019-2022 Financial Plan, WRS will introduce a new Black Cart Program charge. The charge will reflect cost recovery and includes: operating costs for collection, waste disposal



and overhead; capital costs for collection and waste disposal at WMF; education and communication; and landfill liability contribution.

Variable pricing is a part of WRS' overall waste diversion strategy. This initiative will be proposed as part of the 2019-2022 service plans and budgets. WRS will discuss with Council different approaches for introducing variable cart sizes and variable pricing to Black Cart Program customers in the second quarter of 2018 and will return to Council in early 2019, for approval of an implementation plan. Finally, WRS will report back through the 2019 Budget Adjustment process in November with a revised charge structure which aligns with program implementation to customers in 2020.

Blue Cart Program Charge

There is uncertainty regarding revenue from the sale of recyclables. Traditional recycling markets in China have disappeared as a result of initiatives such as Green Fence and National Sword. These initiatives focus on making sure that materials exported to China are of a high quality. China has effectively stopped receiving recyclables collected through residential programs outside of their own domestic market. Many other jurisdictions are following in China's steps by implementing increasingly stringent standards for imported recyclables.

WRS is currently working with our recycling processor, Cascades Recovery+, to locate new potential buyers for recyclable materials and implementing new processes and technology to increase the quality of the end-product. Contract costs for this service are tied to inflation factors.

As well, overall recycling materials commodity values have decreased. The revenue from the sale of recyclables, used to keep the Blue Cart Program charge affordable, is at risk. Without this source of funding, WRS will need to make up the funding shortfall from the WRS sustainment reserve. WRS will continue to monitor access to recyclable markets and the value of commodities.

Green Cart Program Charge

As part of the 2019-2022 Financial Plan, WRS will modify the Green Cart Program charge. In 2019, the removal of \$10.1 million property tax subsidy, or approximately \$2.50 per household per month, from shifting to every-other-week black cart collection from the Green Cart Program will create a charge that reflects cost recovery.

2018 will be the first full year of operation of the Green Cart Program. To date participation is high and tonnes to be managed are greater than expected resulting in higher than anticipated processing costs. Contract costs for processing are tied to inflation factors.

In addition, WRS will continue to evolve the level of service for the Green Cart Program with a change to every-other-week green cart collection in the winter of 2018. The approximately \$0.50 per month saving created from this change will be passed onto residential green cart customers.



Basic Sanitary Rate

For the next cycle, WRS proposes small changes to the Basic Sanitary Rate for disposal at the WMF. Setting this rate is a key indicator to the waste industry within the Calgary Economic Region.

WRS experienced a landfill revenue shortfall due to reduced landfill tonnes to the WMF. While a decline in landfill waste tonnes was expected as part of Calgary's 70 per cent diversion across all waste sectors by 2025 target, the drop experienced by WRS has been accelerated by the economic downturn and competitive environment.

Actions have been taken to reduce costs in both the operating and capital budgets for the WMF, while trying to minimize customer impacts and meet their needs. The new WMF schedule, which started 2018 February, optimizes commercial commerce days, and standardize the days of operation across the sites. Effectively, two sites will have all services, six days per week and the third site will only accept industrial waste, green cart materials and the residential Throw 'n' Go open over the summer months. Customer feedback continues to be monitored.

The City continues to set rates at a level that supports diversion via existing markets and service providers, but will not increase rates for 2019 and 2020 as the economic recovery within the region is still fragile. Historically, waste is a lagging indicator and one of the last to experience economic recovery.

Minimum Load Charge

For residential customers, WRS will work towards full cost of service over time, while monitoring customer accessibility and affordability. Changing customer patterns at the WMF have redistributed costs across all services at the WMF. Current minimum load charges do not represent full cost recovery for this service. To balance customer demands and costs this service requires an increased charge.

Also, WRS aligns the Minimum Load charge with the Basic Sanitary rate as this rate is applied to any loads less than 250 kilograms. One quarter or 250 kilograms of the \$113 per tonne Basic Sanitary rate is \$28.25. As such a rate of \$25 per load achieves better alignment.

WRS doesn't inflate this charge annually. For the last several cycles increases were only implemented at the start of a cycle, with WRS managing inflationary pressures accordingly.

5.2 Capital Budget - Waste & Recycling Infrastructure Investment Plan (WRIIP)

The Waste & Recycling Infrastructure Investment Plan (WRIIP) identifies capital investments that are required to address four key investment drivers: maintain assets, meet increasingly stringent regulatory requirements, provide reliable and high quality waste and recycling services, and keep pace with growth. The WRIIP contains proposed investments of approximately \$300 million to be completed over the next 10 years.



For the 2019-2022 budget, the WRIIP will be revised based on decreased tonnage to Waste Management Facilities, and therefore decreased tipping fee revenue. Annual spending, including Gas Tax Funding (GTF), of approximately \$30 million per year will be the target. GTF will be used to complete many projects that are necessary for legislative and regulatory compliance. Infrastructure Calgary's Corporate Infrastructure Investment Plan process will prioritize GTF for the One Calgary 2019-2022 service plans and budgets. Figure 1 shows WRS' proposed infrastructure investments by investment driver for the next cycle.

Investment Driver	Objective	Percentage of WRIIP 2019-2022
Maintain assets	Maintaining, protecting and extending the life of infrastructure investments.	15% - 25%
Regulatory & Environmental Protection	Continuing to meet increasingly stringent regulatory and environmental protection requirements.	30% - 40%
Service	Continuing to provide reliable and high quality services to meet the needs of citizens.	15% - 25%
Growth	Providing infrastructure to meet the needs of a growing city.	10% - 20%

Figure 1: WRS WRIIP - Draft Expenditure by investment driver

6.0 WRS' SOURCES OF FUNDING

WRS' operating, capital and net contributions to WRS Sustainment Reserve and Landfill Liability Fund are funded from a mix of property taxes, fee revenue and grants.

Figure 2 shows how WRS funding sources have changed over time. As a percentage of funding, WRS has decreased its dependence on tax support and increased the use of fees. WRS proposes to continue this trend in the 2019-2022 business plan and budgeting cycle.



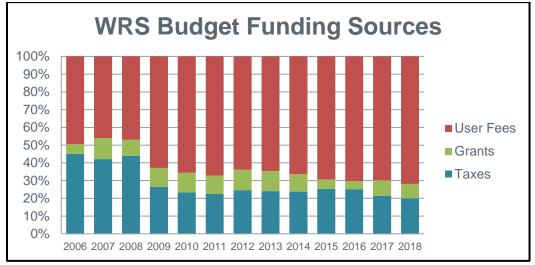


Figure 2: WRS Funding Sources 2006-2018

Fee Revenue

WRS' reliance on fees as a source of funding has increased over the last several business cycles. WRS' primary fees revenue for 2019-2022 are Landfill Tipping Fees, Black Cart Program charge, Blue Cart Program charge and Green Cart Program charge.

Residential program charges work towards full cost of service recovery including: collections; processing/disposal; education; communication and marketing. The rate charged is net of revenues received from the sale of recyclables or compost. These charges will create a cost structure for residential services that is more transparent to the customer; has better equity among customer classes; and facilitates variable levels of service, which supports customer choice in the future.

The residential Black, Blue and Green Cart Program charges will be non-tax supported as there is a customer who receives the benefits from that service who can be charged. The use of charges helps to manage growth, or lack of growth, in an equitable way.

Landfill tipping fees need to be set appropriately to cover costs of operating, capital and landfill liability for the WMF. Landfill tipping fees also need to be set at a level to encourage diversion opportunities, but do not impede economic recovery.

Setting rates without certainty of costs is a risk for WRS in the next cycle. For example: throughout 2018, WRS will continue to evolve services and levels of service to best meet the needs of our citizens. This year will be the first full-year of the city-wide Green Cart Program including every-other-week collection in the winter months and changes to the days and hours of operation at the waste management facilities. Also, the lack of a collective bargaining agreement makes it challenging to estimate costs for specific rates and charges that have a large percentage of salary and wages expenditures.



WRS will mitigate these risks by: single sources of funding for each service, where possible, such that risks in one service do not impact other services and the use of the WRS Sustainment Reserve to offset revenue fluctuations and manage cash flow for both operating requirements.

Tax Support

WRS' financial model includes some tax support. WRS will use tax to fund Community Recycling Depots and other community-wide programs and strategic initiatives. Switching tax support to these types of programs and initiatives better supports the need to balance high citizen expectations with limited resources. Combined these programs and initiatives require approximately \$20 million in tax support per year.

Examples of the types of programs, services and initiatives that would be funded from tax support include:

- Community Recycling Depots
- Christmas tree depot program
- Community Clean ups net of support from other Business Units
- HHW Program net of Provincial government funding
- Corporate support of waste and recycling services
- Education and Communications
- Infrastructure planning and Asset management

In 2018, WRS' total tax support was just over \$40 million. As noted in UCS2018-0150, WRS will reduce the amount of property tax by \$20 million and Administration will forward these tax dollars to the One Calgary service plans and budget discussions.

Grants (Gas Tax Funding)

WRS has received GTF as a source of funding since 2006, and has relied on it for the completion of many capital projects necessary to meet legislative and regulatory compliance. Continued use of GTF in 2019-2022 budget cycle will support keeping WRS' rates and charges at reasonable levels. As such, WRS will request similar funding amounts in the 2019-2022 budget cycle via the Infrastructure Calgary process.

Funding mechanisms

The following are funding mechanisms that WRS uses to manage services.

WRS Sustainment Reserve

The purpose of this reserve is to provide an operating contingency to offset revenue fluctuations, manage cash flow for both operating and capital requirements, and financing needs associated with capital expenditures. A target balance for sustainment purposes of 10 per cent of the current year's annual revenue is to be maintained.

WRS expects to fund the majority of their capital plan for 2019-2022 from a combination of this reserve and GTF. Estimates for the 2019-2022 cycle indicate that WRS should be able to meet the reserve target balance, fund capital and manage revenue variations.



Landfill Liability Fund

The Public Sector Accounting Board (PSAB) requires that a liability for closure and post closure care of landfills must be recognized on government financial statements. The calculation of the landfill liability and the funding of that liability are two separate actions. As of 2017 December 31, WRS has a funded landfill liability in consideration of current account balances and capital plan.

Self-Supported Debt

In recent years, WRS has increased the use of self-supported debt in the funding of capital projects. In Action Plan 2015-2018, the capital budget is funded by up to 50 per cent debt, which was largely used for construction of the Organics & Biosolids Composting Facility. WRS expects limited use of debt in the 2019-2022 budget cycle.

7.0 PROPOSED 2019-2022 INDICATIVE RATES AND CHARGES

The rates and charges shown in Tables 3 and 4, were developed to ensure that: WRS is able to continue next steps towards the 70 per cent by 2025 diversion goal; maintain service levels for existing customers; extend those services to new communities; maintain capacity and efficiency of its infrastructure; and respond to inflationary impacts.

7.1 Residential

WRS will work towards full cost of service over time, while monitoring customer affordability.

WRS will discuss with Council different approaches for introducing variable cart sizes and variable pricing to Black Cart Program customers in the second quarter of 2018. Any changes to rates as a result of those decisions would be addressed via the annual Budget Adjustment process.

Table 3: Residential Indicative charges for 2019-2022

MONTHLY CHARGE: \$ PER 30 DAYS	2018	2019	2020	2021	2022
Waste Management Charge	\$4.90	REMOVED			
Black Cart Program Charge	NOT APPLICABLE	\$6.75- \$6.85	1% - 2%	1% - 2%	1% - 2%
Blue Cart Program Charge	\$8.50	\$8.70- \$8.80	1% - 2%	1% - 2%	1% - 2%
Green Cart Program Charge	\$6.50*	\$8.50- \$8.70	1% - 2%	1% - 2%	1% - 2%
Monthly Residential Total	\$19.90	\$23.95 – \$24.35	\$24.19 – \$24.84	\$24.43 – \$25.33	\$24.68 – \$25.84

*An additional \$10.1 million in property tax funding, equivalent to \$2.50 per household per month, from changing to every-other-week black cart collection, was used to subsidize the Green Cart Program charge in 2018.



7.2 Disposal

Rates will continue to be set at a level that supports diversion via existing markets and service providers, but does not impede economic recovery within the region. Historically, waste is a lagging indicator and one of the last to experience economic recovery.

Minimum load charges will work towards cost of service. To balance customer demands and costs this service requires an increased charge.

Table 4: Disposal Indicative rates and charges for 2019-2022

DISPOSAL RATES AT WASTE MANAGEMENT FACILITIES	2018	2019	2020	2021	2022
Basic Sanitary Rate per tonne	\$113	\$113	\$113	\$115	\$115
Minimum charge per load	\$20	\$25	\$25	\$25	\$25

WRS will monitor all operating and capital costs; customer activity; and economic recovery and may adjust rates and charges for 2021 and 2022 through the Mid-Cycle Adjustment process, if necessary.