

Pay-as-you-throw Program for Residential Black Cart Collection

EXECUTIVE SUMMARY

The rollout of the Green Cart residential composting program in 2017 provided Calgarians with a full suite of residential diversion programs, enabling Calgarians to minimize the amount of garbage they put-out in their black carts. A pay-as-you-throw (PAYT) program will allow residents to right-size their black cart and therefore be financially accountable for the garbage they produce.

A municipal scan of four Canadian and four American municipalities identified a wide range of program options and key learnings including: most variable cart programs also have a tag-a-bag component (pay for excess garbage set-out for collection); as the number of choices provided to residents increases, so do program costs; and PAYT programs have mixed impacts on diversion rates, and can increase the potential for contamination within recycling and organics programs.

In order to balance the trade-off between increasing customer choice and higher program costs, Waste & Recycling Services (WRS) is recommending a PAYT program that includes a choice of three black cart sizes (120L, the current 240L, and 360L) and a tag-a-bag program for occasional excess garbage placed outside the black cart.

If approved by Council, the next step towards a PAYT program is the development of a detailed implementation plan, which will be brought back to Council Q2 2019. If approved, the proposed rollout of a PAYT program would occur in 2020.

ADMINISTRATION RECOMMENDATION:

That the Standing Policy Committee on Utilities & Corporate Services recommend that Council direct Administration to develop a detailed implementation plan for a pay-as-you-throw program that includes three black cart sizes and a tag-a-bag program and report back no later than Q2 2019.

PREVIOUS COUNCIL DIRECTION / POLICY

In 2014, the Collection Service Delivery Review (UCS2014-0262) presented third-party recommendations on operational performance and fleet management. One of the recommendations was for WRS to no longer allow residents to set-out excess material beyond what fits in the black cart container provided, or to implement a tag-a-bag system where residents must pay to set-out excess material.

On 2018 May 28, Council approved the Waste & Recycling Services Outlook for 2018 to 2025 (UCS2018-0153). The key trend identified in this report was Increasing Customer Expectations. One of the initiatives identified to respond to this trend was to provide options for residential customers through a variable pricing program that would allow residents to choose a black cart size option and an opportunity to pay for occasional excess materials outside the black cart. Pricing, education and enforcement were also identified in this report as a step towards 70 per cent waste diversion by 2025.

BACKGROUND

With the rollout of the Green Cart Residential Composting Program in 2017, Calgary implemented a full suite of residential diversion programs, enabling Calgarians to minimize the amount of garbage they put out in their black carts. A PAYT program will allow residents to right-size their black cart and therefore be financially accountable for the garbage they produce.

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PAYT is a program where residents pay for the amount of garbage they put out. Typical PAYT programs include a choice of black cart size, and a requirement to pay for excess garbage set out for collection using either City-branded bags or tags for each extra bag (tag-a-bag), or a combination of both. WRS is proposing implementing a PAYT program in 2020, following Council approval.

INVESTIGATION: ALTERNATIVES AND ANALYSIS

A PAYT program introduces choice to residential customers. Not all households produce the same amount of garbage and, not all households require the same level of service. Customers prefer to be charged for the level of service they require and a PAYT program allows residents to make decisions to divert more material or generate less waste to lower their service costs. This typically results in a higher level of customer satisfaction.

In considering a Black Cart PAYT program, WRS developed four program objectives:

1. Provide residential customers choice in black cart size;
2. Minimize program costs and residential customer rates;
3. Minimize blue and green cart contamination; and
4. Promote waste diversion and reduction.

A scan of other municipalities shows a wide range of program options (Figure 1). The key learning from reviewing programs in other municipalities is that as the number of choices provided to residents increases, so do program costs.

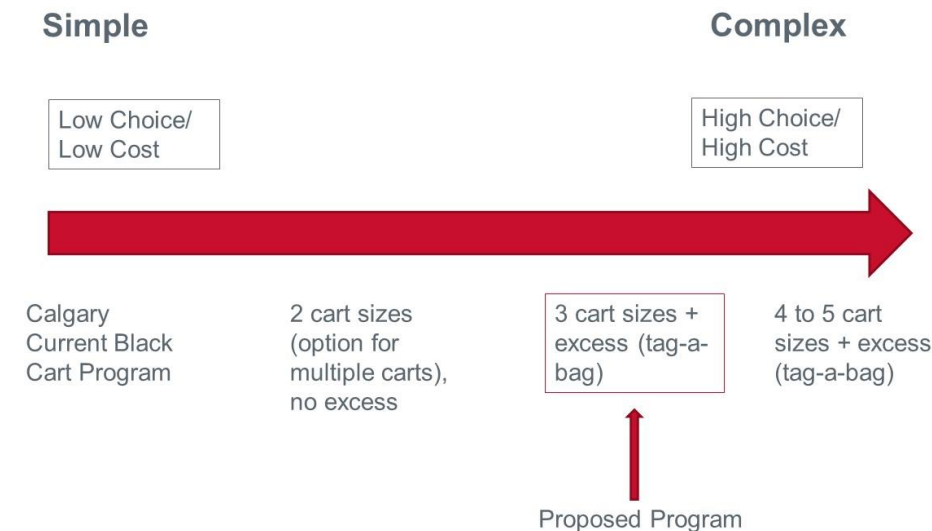


Figure 1: Range of Pay-as-You-Throw Options Investigated

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The PAYT Program scan included four Canadian and four American municipalities (cities of Coquitlam, Toronto and Vancouver, Region of Peel, and cities of Grand Rapids, Minneapolis, Portland and San Francisco). Detailed summaries for each municipality are included as Attachment 1. Key findings include:

1. Customers were often offered a choice of cart size when automated collection was implemented, minimizing costs.
2. Tag-a-bag programs are commonly offered to residents to manage excess waste.
3. Increasing the number of cart sizes available increases program costs in terms of inventory management, cart maintenance and switching carts.
4. The impact of a PAYT program on diversion is mixed. Some municipalities experience increased diversion rates, while others experience increased contamination in their diversion programs.

Calgary faces a couple of challenges in implementing a PAYT program. The first is managing Calgary's existing inventory of 240L black carts. The second is that Calgary's Black Cart Program is largely comprised of fixed costs (73%), with 27% of the rate accounting for the handling and disposal of the garbage. Based upon WRS' new rate model and the indicative rates for 2019 this equates to a pricing window of approximately \$6.75 to \$6.85 per month for residential customers in 2019 for the current single-sized black cart program. Adding additional black cart size options for residents will increase the overall program costs. With program approval, WRS will undertake a financial evaluation and develop a pricing structure for the variable cart program for Council's approval during the 2019 budget adjustment process.

In order to balance the trade-off between increasing customer choice and higher program costs, WRS is recommending a PAYT program that includes a choice of three black cart sizes (120L, the current 240L and 360L). It is further recommended that a tag-a-bag program be implemented at the same time as the roll out of the variable cart program. Combining a choice of black cart size with a tag-a-bag program allows the resident to choose the cart size that meets their needs most of the time and provides an outlet for the occasional extra bag placed outside the cart.

Rollout of a PAYT program will be a significant undertaking that will require development of a detailed implementation plan.

Elements of this implementation plan will include:

- Developing tools and resources to help residents make an informed decision about appropriate cart size;
- Citizen engagement to understand the potential demand for each of the three black cart sizes;
- Developing a process to connect with residents who want a different cart size;
- Undertaking a financial evaluation and developing a pricing structure for the program;
- Developing a pricing structure and distribution plan for either bags or tags; and
- Ongoing management of the existing inventory of 240L black carts.

Program cost considerations include:

- Cart purchase, inventory tracking, and management;
- Printing and distribution of tags or bags; and

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- Education and enforcement options to mitigate the potential for increased contamination to the blue and green cart programs.

Stakeholder Engagement, Research and Communication

Calgarians will require access to information, tools and resources in order to choose the appropriate black cart size that will meet their needs for most collection periods and enable WRS to purchase the right number of small and large black carts. WRS will present these details to Council as part of the implementation plan in 2019 Q2.

Strategic Alignment

The Leadership Strategic Plan includes commitments to strengthen The Corporation's financial position. Action Plan 2015-2018 includes Strategic Action W2 – Be as efficient and effective as possible, reducing costs and focusing on value-for-money and related Business Unit Action W2.1 – Continually improve on plans and practices to manage financial health.

Social, Environmental, Economic (External)

Social

Diverting materials from landfill requires changes in behaviour by residents, industry and businesses. A PAYT program will allow residents to right-size their black cart and be financially accountable for the garbage they produce.

Environmental

A PAYT program provides an incentive to residents to optimize the diversion of waste from their black cart. Diverting waste reduces greenhouse gas emissions, redirects natural resources back into the economy, reduces environmental liability, and increases the life of landfills.

Economic (External)

Implementing a variable black cart program will allow residents to choose a black cart size that matches the amount of garbage they produce and to be charged for the service they receive.

Financial Capacity

Current and Future Operating Budget:

There is no impact on WRS' 2018 operating budget. If approved, the PAYT program will impact WRS' One Calgary 2019-2022 operating budget. Program implementation and sustainment costs will be reported back as part of the 2020 Budget Adjustment Process (2019 November).

Current and Future Capital Budget:

This report does not impact WRS' 2018 capital budget. Implementation of a variable cart program, if approved, will require the capital purchase of additional sizes of carts. Assuming that fewer than 50 per cent of residents choose a different black cart size, the estimated total cost is approximately \$10 million. Cart purchases following implementation will be included in the growth plan for all cart based residential services.

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To streamline the purchase of additional black cart sizes, WRS can include alternate cart sizes in the existing procurement plan for 2019. To take advantage of this opportunity, WRS needs to include the capital budget for various carts in WRS' infrastructure investment plan (WRIIP) as part of One Calgary 2019-2022 service plans and budgets. Carts will not be purchased without Council's approval of the full implementation plan.

Risk Assessment

There is a risk that if a significant proportion of residents choose a small cart (120L), the price differential between the small and medium size cart might not meet their expectations for a low cost option.

Residents who generate more waste will be paying more and may not have budgeted for the expense.

There is a risk that some customers may choose the smallest black cart option based upon cost alone and dispose of additional garbage by putting it in their blue or green cart, resulting in additional contamination and costs for those programs.

REASON(S) FOR RECOMMENDATION(S):

To balance increasing customer choice and increased program costs, WRS is recommending three black cart sizes (120L, the current 240L, and a larger 360L) and a tag-a-bag program for occasional excess garbage placed outside the black cart.

ATTACHMENTS

1. Attachment 1 – Municipal Scan of Pay-As-You-Throw Practices
2. Attachment 2 – Presentation