

Green Cart Program Update June 2024

ISSUE

In May 2023, the City of Saskatoon (City) launched the Green Cart Program (Program), providing city-wide, year-round bi-weekly collection of organics to all residents with curbside collection. This report documents the program's performance in the first full year of operations and provides options to change collection frequency in both winter and summer.

BACKGROUND

History

At its October 22, 2018 meeting, City Council approved the establishment of a new waste management service level of bi-weekly year-round waste and organics collection for all curbside residential households. The history of decision making for the Green Cart program is listed in Appendix 1.

At its regular business meeting on April 25, 2022, City Council resolved in part:

That Administration provide an interim report in quarter three of 2023 on consideration for variable green cart sizes;

Current Status

Appendix 2 details the performance of the green cart program in its first year.

Since May 1, 2023, Loraas Disposal North (Loraas) has processed over 20,452 tonnes of organic materials from the Program. The Solid Waste Reduction and Diversion Plan projected that the annual diversion once the program was fully operational would be between 15,000 and 22,000 tonnes per year.

The City's waste diversion rate for 2023 increased to 33.3% compared to the previous year's rate of 24.5%. This is the first significant increase in a decade.

The Program is funded fully by utility revenues. City Council approved the 2024 utility rate of \$0.239584 per dwelling per day for a roll-out green cart. The monthly average for the green cart utility fee is \$7.29 per roll-out cart but the amount on the bill may vary depending on the number of days in the month. The monthly fee covers collection of food and yard waste from your home, sorting and processing of material, providing cart maintenance and education, bylaw, and program support. In 2025, the approved utility rate is \$0.255643 per day for a monthly average of \$7.78 per month.

In May 2024, the Saskatchewan Waste Reduction Council awarded the City of Saskatoon and the City of Regina the 2023 Waste Minimization Award in the Municipality (>5,000) category for the launch of their green cart programs.

Public Engagement

The Program was designed based on feedback received through the “Saskatoon Talks Trash: Curbside” engagement campaign that ran from February 12 - March 6, 2018. In that time, over 5,000 residents participated in a variety of engagement activities. About half of residents engaged suggested an interest in weekly collection, depending on the cart capacity and the season. Many suggested a schedule of weekly collection from spring to fall and biweekly in the winter. The key findings from the engagement as reported in 2018 are included in Appendix 1.

Every two years the City conducts statistically representative waste and recycling surveys. Key findings from the October 2023 survey include:

- The majority of residents (71%) are satisfied with the overall quality of service received since May 2023, along with the capacity of their current cart size (71%).
- About 3 in 5 residents (57%) state they put their green cart out for pickup every collection period, and 3 in 10 (29%) state that they put it out every second collection period.
- In general, the majority of residents (82%) state that their green cart is less than full (three quarters full, half full, or one quarter full or less) on collection day; however, during peak organic waste seasons, 3 in 10 residents (29%) state that their green cart is full or overflowing.

City of Saskatoon’s Current Approach

There are approximately 75,500 households eligible to participate in the Program. Residential organic waste is collected from 360-litre green carts, and from 240-litre green carts at eligible townhouse properties. Bi-weekly collection is provided year-round. The level of service for the green cart program is available in Appendix 3.

Collection of green carts is currently provided by the same civic staff and fleet that perform the black cart garbage collection. Sharing these resources provides flexibility to move resources from one program to another depending on the demand.

The total amount of organic material collected and the cart set-out rate (the percentage of carts set out for collection) decrease considerably from December to March as shown in Appendix 2. Waste characterization audits also indicate that there is a considerable amount of organic material that is still being disposed of in black carts which shows an opportunity to continue to educate residents on what material can be accepted in the green cart.

The number of resources required to meet the level of service throughout the first year of the green cart program has been highly variable. From spring to fall when yard waste is at its peak and the set-out rate is at its highest, additional resources have been required at times to ensure all the collections can be made as scheduled. In winter when the set-out rate has been at its lowest and there has been primarily food waste in the carts, less operators have been required to perform the green cart collections.

The true cost to collect green carts is difficult to quantify accurately due to several factors. Many resources (staff, equipment, administrative support, etc.) were initially reallocated from the existing garbage collection budget to the green cart program. With the green cart program being a new utility funded model, some existing costs were taken off the mill rate and put on to the utility. Given that the program started in May and that the budget was developed for the entirety of 2023, there were some operating costs which were charged to capital budgets during this transitional year.

The actual expenses from May to December of 2023 for collections alone (staff, supervision, fleet, fuel, and maintenance) were \$2.05M. From January to April of 2024 the total expenses incurred for the collection of green carts was \$607K. The 2024 costs are still subject to change based on the possibility of adjustments to charges from other departments. These costs are under their approved budget of \$3.94M per year; however, they should be only analyzed while understanding the complexity of the accounting methods as mentioned earlier.

Approaches in Other Jurisdictions

Appendix 4 contains a jurisdiction scan for collection frequency and cart size for co-mingled (both food and yard waste) curbside organics programs in larger cities in Western Canada as well as throughout Saskatchewan. Common collection frequencies are weekly or biweekly. There were no examples found of comparable larger cities that offered monthly winter collections; however, some smaller communities in Saskatchewan do have monthly winter collections. Weekly and bi-weekly summer collections are common. Jurisdictions that offer smaller green cart sizes or a choice of cart size commonly provide weekly summer collections.

OPTIONS

Based on the feedback received to date, the Administration has developed four options related to the collection frequency of the Green Cart program:

Option 1: Status Quo

This option is to maintain the existing level of service of year-round bi-weekly collections. This option keeps the service consistent with the first year of the program and continues to utilize staff and resources efficiently. It follows the collection frequency that is currently known and understood by residents of Saskatoon.

Option 2: Monthly Winter Collection

This option is to reduce the winter collection frequency to once every 4 weeks over 4 months from December 1 to March 31. Set out rates of green carts during these months reduces considerably. Weather is typically well below freezing which reduces odours and nuisances associated with organic waste sitting in a cart for up to four weeks. This option would require adjustments to staffing, specifically moving four operators from full-time positions to 8-month seasonal positions, which may have some up-front costs or could be achieved through attrition. There would also need to be changes made to the collection schedule. This adjustment in service can start in December 2024. This option is expected to provide savings of \$162,000 annually or \$0.17 per cart per month.

Option 2 in Appendix 5 discusses the opportunity to reduce the level of service for 5 or 6 months. However, the set-out rate data, the total material collected, and warmer temperature during those additional months indicate that the level of service would be best reduced for only 4 months.

Option 3: Weekly Summer Collection

This option is to increase summer collection frequency to weekly during the six summer months from April to November. Winter collections would remain bi-weekly. The most cost-effective way to implement this option would be to hire 10 additional seasonal staff and use the existing fleet to perform green cart collections later into the day. This option would reduce the complaints about odour and pests and is expected to increase the participation and diversion in the program. There may be concerns with collections being completed later in the evening, potentially till 10:00pm depending on how operations are reconfigured. It is estimated to cost \$806,000 annually to increase this level of service which would be an increase of \$0.91 per cart per month.

Option 4: Combination

This option is a combination of Options 2 and 3. It both reduces the winter collection frequency to once every 4 weeks and increases summer collections to once every week. As discussed earlier, it is only recommended that winter collections decrease to once every 4 weeks from December 1 to March 31. Summer collections would increase to weekly from May 1 to October 31. Therefore, April and November would have bi-weekly collections. These frequent schedule changes might get confusing and could cause a decrease in satisfaction of the service.

Alternate Options Considered

An option to eliminate collection of green carts throughout the winter was considered but not presented because food waste is created year-round and should be disposed of in the green cart. The waste audits have shown that there is still a considerable amount of food waste that residents are throwing into their black carts. To continue to improve waste diversion and improve on capturing organic waste in the green cart, year-round collection service is recommended.

An option to allow residents to select different green cart sizes (current 360L, 240L, 120L) was also considered but not presented. The current size of green cart was provided based on a bi-weekly year-round collection schedule with the intent to capture as much eligible material as possible in the green cart to divert that waste from the landfill. Jurisdictions that offer smaller green cart sizes or a choice of green cart sizes typically provide weekly summer collections to provide the necessary capacity during peak yard waste generation. It is understood that there is a desire for some residents to have a smaller green cart that would appropriately meet their organic disposal needs. However, with the recent deployment of smaller black carts and garbage being charged as a utility, and the fact that the green cart program has only been in service for one year, it is not recommended to make additional changes to the green cart program at this time or without the increase in summer collection frequency.

RECOMMENDATION

That the Environment, Utilities, and Corporate Services Committee recommend to City Council that the Administration pursue Option 2 – Reduce the winter collection frequency to once every four weeks from December 1 to March 31.

RATIONALE

The considerable difference between the cart set-out rate during summer and winter indicates that many residents who utilize their green cart for their organic waste disposal needs are only rolling their cart out for collection on an as-needed basis. This indicates that the current collection frequency in the winter is greater than it needs to be to meet the majority of residents' organics disposal needs. Saskatoon's climate during winter also reduces the nuisances or pests and odour during these months.

Being mindful that this Program has only operated for 12 months, there is still a lot of opportunity to educate residents on all the materials that are accepted in the green cart. The results of the waste audits show that there is a large quantity of organic material that is still being disposed of in the black carts. With nearly 16,000 residents already swapping to a smaller black cart, and more swaps happening in the fall, it is expected that the amount of organics disposed of in green carts will continue to increase. Within this context, there is still the capacity to capture all the organic materials disposed of in the winter with collections occurring once every four weeks.

Increasing the collection frequency in the summer would either come at a considerable cost or with significant changes to how the collections are completed (i.e., collected in the evening.) Though we do not yet have the data from a summer waste characterization audit, based on the survey results, anecdotal evidence, and the fact that the set-out rate in the summer has been between 60% and 70%, there appears to be the appropriate capacity to meet the current needs of the majority of residents with bi-weekly collection.

ADDITIONAL IMPLICATIONS/CONSIDERATIONS

Reducing the collection frequency in the winter may reduce the total amount of organic material captured in the green cart during those months. However, continuing to educate and promote the program, particularly about placing food waste in the green cart and how to do it successfully, should eventually increase the green cart usage.

Should Option 2 be selected, there would be a reduction in the costs to provide the green cart program. Due to the savings being relatively small in comparison to the total budget which has been approved for 2024 and 2025, and how this service has only been provided for one year, it is recommended that the savings be returned to the stabilization reserve rather than adjusting the rates for 2025. Savings from reduced winter collections will be incorporated as part of the 2026 rates presented at the 2026/27 Multi Year Business Plan and Budget Deliberations.

Less frequent collections in winter may impact the ability of some residents to roll-out their carts on collection day, due to the combination of the weight of food waste and

winter conditions (snow and ice). The Assisted Collections program is available and may see an increase in enrollment.

COMMUNICATION ACTIVITIES

The seasonal change in collection schedule will be handled in a similar manner to previous seasonal collection schedule changes. It will be posted in the collection calendar, communicated through the Waste Wizard app, on collection reminders, and in a news release.

As identified in this report and its appendices there is still significant diversion potential for food waste that remains in the black cart following the first year of the program. Communications and education program development will be targeting proper disposal as well as food waste reduction over the next couple of years.

NEXT STEPS

The next phase is to effectively monitor the Green Cart Program performance to ensure its success and make continuous improvements through data collection and analysis, stakeholder feedback, waste characterization audits, and beneficial product testing and analysis.

City Council can expect additional reporting on certain aspects of the Program over the next year including:

- Further reporting on planning for organics processing; and
- Results of the multi-organics pilot.

APPENDICES

1. Green Cart Decision-Making History
2. First Year Green Cart Program Performance
3. Organics Collection Level of Service
4. Jurisdiction Scan
5. Collections Frequency Options and Analysis
6. Additional Information on Cart Size and Fullness

Report Approval

Written by: Brock Storey, Environmental Operations Manager
Jamie Leugner, Environmental Coordinator, Sustainability
Katie Burns, Community Leadership and Program Development Manager

Reviewed by: Dan Gauthier, Environmental Projects and Protection Manager
Gabriella James, Accounting Coordinator
Brendan Lemke, Director of Water and Waste Operations

Approved by: Angela Gardiner, General Manager, Utilities and Environment