

Additional Information on Cart Size and Cart Fullness

Cart Size Background

In 2018, the Administration proposed that a medium sized 240 L (65 gal) green cart be used for the Curbside Organics Program.

At its January 10, 2022 meeting, the Standing Policy Committee on Environment, Utilities and Corporate Services received a report for information that provided an update on the Curbside Organics Program. The report indicated that a 360 L (96 gal) cart would be the standard cart size for the program. This was based on [additional analysis completed by the Administration](#), results of the subscription program and feedback from other municipalities. Considerations included:

- Maximizing diversion potential for peak tonnage due to yard waste;
- Maintaining net cart capacity across waste streams as black cart moved to bi-weekly year-round;
- Alignment with the subscription green cart size meant the 12,000 360L carts already deployed for the subscription program could continue to be used;
- Responding to resident engagement, where preference was materials in a single cart and very low interest in bagging materials separately; and
- Very few jurisdictions offer bi-weekly year-round collections.

At its regular business meeting on April 25, 2022, City Council received additional information on options for smaller carts to be offered to specific properties where yard waste generation was lower and resolved in part:

1. That the criteria outlined in the April 11, 2022 report of the General Manager, Utilities and Environment be used to determine which properties are eligible for a smaller cart size as part of the initial deployment of the Curbside Organics Program in 2023;
2. That Administration provide an interim report in quarter three of 2023 on consideration for variable green cart sizes.

The reporting estimated that there are approximately 3,500 curbside service addresses in 150 townhouse complex properties (unique sites) with no individual yard. This was about 4.7% of the total number of service addresses planned in the Curbside Organics Program. Criteria to qualify for a 240L cart included:

- Properties that have a property code that identifies it as a townhouse complex;
- All habitable units on the site must, upon visual inspection, have little or no yard area that individual habitable units are responsible for maintaining. If they do have a small yard, the average yard size of all units on the site would need to be less than 500 sq ft; and
- Proof of a service contract for yard maintenance of a communal yard will be used as supporting documentation.

Current Status

In May 2023 the initial deployment saw a total of 60,674 new green carts with the kitchen pail delivered and 13,568 additional kitchen pails for those that kept their green cart from the previous subscription program, for a total of 74,242 carts.

By the end of April 2024, 71,408 were 360L carts and 3,409 were 240L carts.

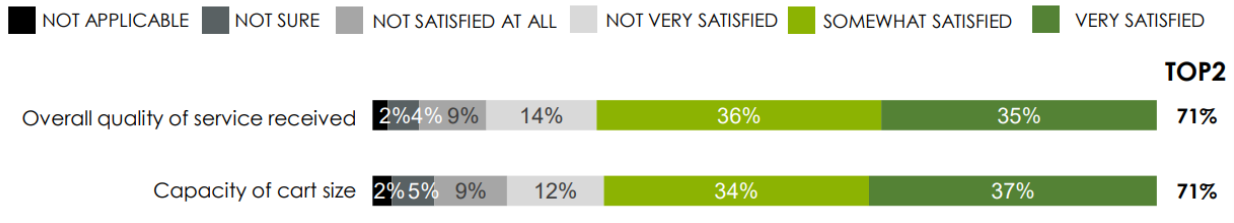
There are two ways for green carts to be removed from a property.

- Some habitable units such as basement suites can submit a declaration that indicating that the unit is uninhabited. There are 321 declarations currently which are exempt from billing and are not receiving the green cart service because their habitable unit is not occupied.
- A green cart refusal occurs when an inhabited unit requests to have their green cart removed. There are 989 units which have refused their green cart. These units are still paying the monthly utility fee; however, they do not have a green cart at their unit.

First Year Performance

Satisfaction

The Fall Waste and Recycling Survey found that residents were somewhat or very satisfied (71%) with the overall quality of the green cart program and the capacity/cart size (71%). For a comparison, the Blue Cart program had an overall quality satisfaction of 82% and a capacity/cart size satisfaction rate of 81%.



Cart Fullness

As identified in the Waste Characterization Study, there was a decrease in cart fullness (63% to 34%) from the fall to the winter audits and then an increase (50%) in the spring audit, which is expected due to seasonal fluctuations in yard waste. While there were decreases in cart fullness, approximately 30% of the material found in resident’s black cart was food waste, presenting an ongoing opportunity for diversion.

Fall 2023 Waste Audit – Cart Fullness

Neighbourhood	Set Out Location	Garbage (%)	Recycling (%)	Organics (%)	Average (%)
Eastview	Back Lane	76%	69%	98%	81%
Parkridge	Front Street	58%	54%	63%	58%
Rosewood	Front Street	86%	74%	20%	60%
Mount Royal	Front Street	64%	61%	64%	63%
Holliston	Back Lane	63%	83%	66%	71%
City Park	Back Lane	68%	Not collected	63%	65%
Nutana	Back Lane	63%	60%	69%	64%
Silverwood Heights	Front Street	79%	82%	62%	74%
Willowgrove	Front Street	92%	79%	58%	76%
Dundonald	Front Street	81%	92%	67%	80%
Average		73%	73%	63%	69%

Winter 2023 Waste Audit – Cart Fullness

Route	Set Out Location	Garbage (%)	Recycling (%)	Organics (%)	Average (%)
Eastview	Back Lane	54%	76%	46%	58%
Parkridge	Front Street	51%	59%	50%	53%
Rosewood	Front Street	73%	89%	18%	60%
Mount Royal	Front Street	62%	75%	40%	59%
Holliston	Back Lane	67%	79%	29%	58%
City Park	Back Lane	75%	64%	38%	59%
Nutana	Back Lane	52%	67%	24%	47%
Silverwood Heights	Front Street	61%	75%	10%	49%
Willowgrove	Front Street	80%	79%	55%	71%
Dundonald	Front Street	78%	84%	33%	65%
Average		65%	75%	34%	58%

Spring 2024 Waste Audit – Cart Fullness

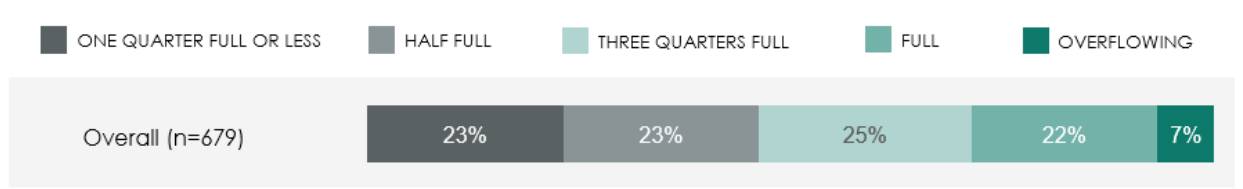
Route	Set Out Location	Garbage (%)	Recycling (%)	Organics (%)	Average (%)
Eastview	Back Lane	74%	50%	55%	60%
Parkridge	Front Street	51%	71%	64%	62%
Rosewood	Front Street	81%	69%	40%	63%
Mount Royal	Front Street	65%	77%	78%	73%
Holliston	Back Lane	84%	70%	38%	64%
City Park	Back Lane	60%	80%	NA	70%
Nutana	Back Lane	48%	80%	27%	52%
Silverwood Heights	Front Street	76%	76%	76%	76%
Willowgrove	Front Street	76%	77%	22%	58%
Dundonald	Front Street	91%	83%	47%	73%
Average		70%	73%	50%	65%

In Survey 2, residents were asked two questions about cart fullness.

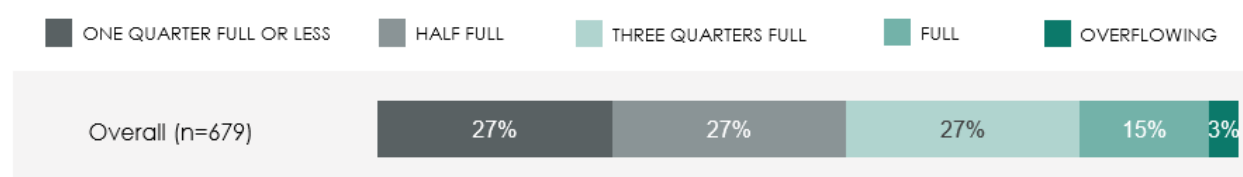
1. Think about the time when you have had the most organic waste since the green cart program began in May 2023, such as during peak yard waste season. At that time, how full was your green cart when you put it out on collection day?
2. Generally speaking, how full is your green cart when you put it out on collection day?

As shown in the responses below, there is some seasonal variation. However, as collection tonnages by month shown in Appendix 2 show, up until October 2023 tonnages were consistently high and this data collection was carried out in October.

Cart Fullness – Peak Yard Waste Season



Cart Fullness – Typical collection



Resident Level of Support for Variable Green Cart

In Survey 2, respondents were asked about their support for smaller green cart sizes, 67% support the City providing smaller green cart sizes with 23% and 42% indicating they would choose the small (120 L) or medium (240L) cart, respectively.

Support for Smaller Green Cart Sizes

Overall, 2 in 3 residents (TOP2: 67%) support the City of Saskatoon providing smaller green cart sizes. Support is greater (TOP2: 76%) from residents that put their green cart out once every second collection period.

■ NOT SURE ■ NOT SUPPORTIVE AT ALL ■ NOT VERY SUPPORTIVE ■ SOMEWHAT SUPPORTIVE ■ VERY SUPPORTIVE



The following groups are most likely to **support (TOP2)** the City providing smaller green cart sizes:

- Residents ages 35-54 (74%)
- Residents in Ward 4 (78%)
- Female residents (31%)
- Residents that rent their home (77%)
- Households with 3 occupant (79%)
- Residents that did move to Canada in the past 5 years (77%)
- Residents that make a household income less than \$60K (72%)

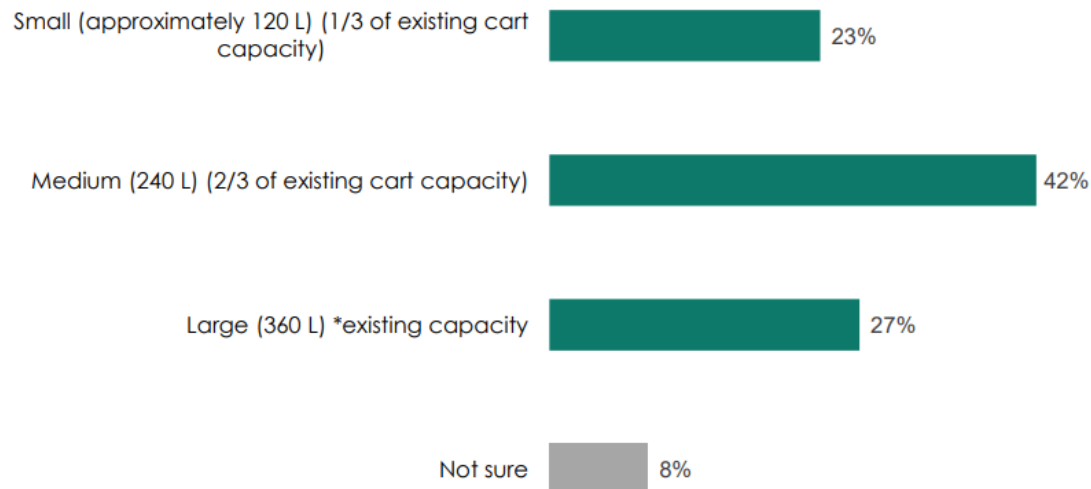
The following groups are most likely **not to support (BTM2)** the City providing smaller green cart sizes:

- Residents ages 55+ (30%)
- Residents in Ward 3 (35%)
- Male residents (26%)
- Residents that own their home (28%)
- Households with 1 occupant (30%)
- Residents that did not move to Canada in the past 5 years (27%)
- Residents that make a household income of \$120K or more (26%)

*Small sample, interpret with caution
Q5. Currently, green carts hold 360 L of organic waste. The City will be reporting back on providing households options for smaller sized green carts that could be 2/3 or 1/3 of the existing cart capacity. What is your level of support for the City providing smaller green cart sizes?
Sample Size: Shown in chart above
Base: Respondents that have a green cart

Preferred Green Cart Size if Given the Choice

Of the residents that have a green cart, 2 in 5 of them (42%) would choose to have a medium sized green cart approximately two-thirds of the existing cart capacity.



The following groups are significantly more likely to choose the:

Small (120L) green cart:

- Residents ages 55+ (29%)
- Residents in Ward 8 (43%)
- Male residents (26%)
- Residents that own their home (25%)
- Households with 1 occupant (33%)
- Residents that did not move to Canada in the past 5 years (25%)
- Residents that make a household income less than \$60K (30%)

Medium (240 L) green cart:

- Residents ages 35-54 (54%)
- Residents in Ward 5 (54%)
- Female residents (43%)
- Residents that rent their home (50%)
- Households with 3 occupants (56%)
- Residents that did move to Canada in the past 5 years (57%)
- Residents that make a household income of \$60K to just under \$80K (49%)

Large (360 L) green cart:

- Residents ages 55+ (29%)
- Residents in Ward 6 (36%)
- Female residents (29%)
- Residents that own their home (29%)
- Households with 4+ occupants (30%)
- Residents that did not move to Canada in the past 5 years (29%)
- Residents that make a household income of \$120K or more (36%)

Q6. If offered the choice of green cart sizes, which would you choose?

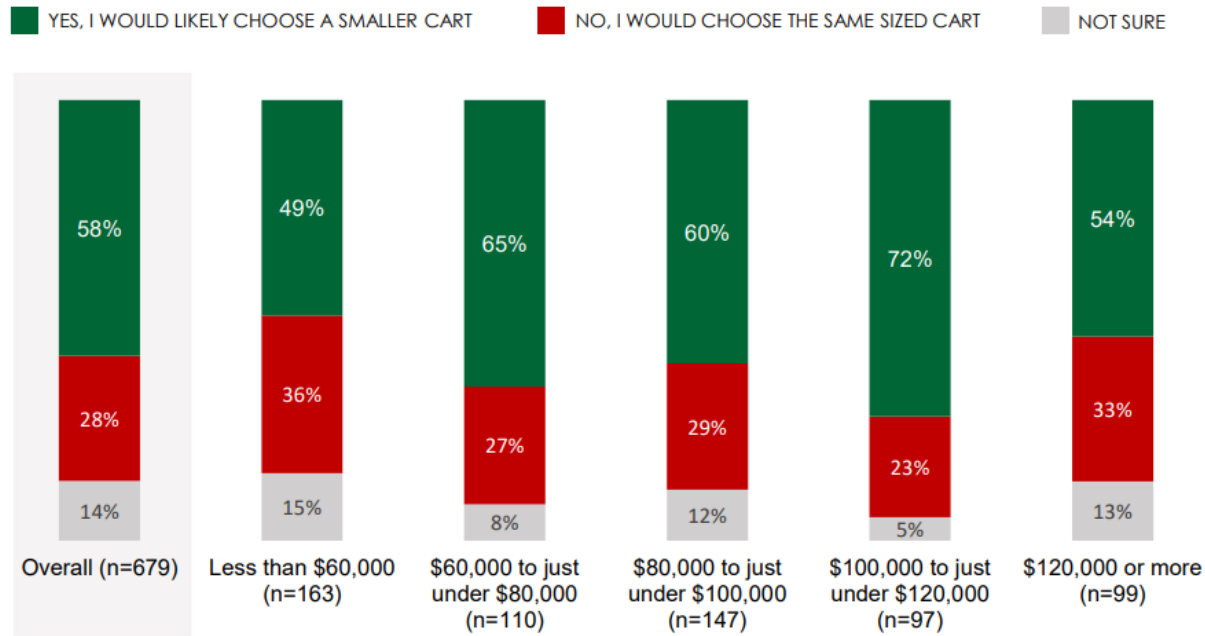
Sample Size: n=679

Base: Respondents that have a green cart



Utility Fees Affect on Choice of Green Cart Size

Overall, more than half of the residents (58%) would likely choose a smaller cart if different utility fees were charged for different sized green carts.



The following groups are most likely to choose a smaller cart:

- Residents in Ward 8 (76%)
- Residents that own their home (61%)
- Households with 3 occupants (66%)
- Residents that moved to Canada in the past 5 years (61%)
- Residents that make a household income of \$100K to just under \$120K (72%)

The following groups are most likely to choose the same sized cart:

- Residents ages 35-54 (31%)
- Residents in Ward 6 (41%)
- Female residents (32%)
- Residents that rent their home (31%)
- Households with 4+ occupants (34%)
- Residents that moved to Canada in the past 5 years (35%)
- Residents that make less than \$60K (36%)

Q7. If different utility fees were charged for different sized green carts, would that affect your choice of green cart size?

Sample Size: Shown in chart above

Base: Respondents that have a green cart



Implications of Offering Variable Green Cart Sizes

- Offering smaller green cart sizes reduces the capacity residents have for diverting their organic waste. The results from the waste characterization study indicate that there is still a considerable amount of waste that can be captured in the green cart that is currently being disposed of in the black cart. The large cart size combined with the current level of service of bi-weekly collections in the summer provides the capacity to meet the organics disposal needs of the majority of residents during peak periods. Most municipalities that offer smaller cart sizes also offer weekly collections in the summer months.
- Offering smaller green cart sizes would have an upfront cost which has not been budgeted for purchasing new carts and the staff to swap them. Existing carts that are fully functional would then be put back into inventory.
- A reduction in the utility fee for a green cart if a smaller size was offered does not align with the goal of maximizing waste reduction and diversion or the recent decision to proceed with a City-owned processing facility. Because the green cart program is designed to divert organic waste, a financial incentive to provide less capacity would encourage reduced use of the program. With approval for the City to build organics processing, there also would be no per-tonne savings expected since the costs to process materials does not increase significantly with tonnage. This is different than the black cart since airspace at our current landfill is finite or with contracted organics processing where greater tonnages result in greater costs.
- The green cart program has been operating for only one year. There are considerable opportunities to capture more organic waste. With the deployment of smaller black carts, it is expected that residents' waste behaviours are still changing. As such, there is no recommendation to provide different cart sizes at this moment.