

Curbside Organics Program Collection Options

ISSUE

The City of Saskatoon (City) is working towards a 70% waste diversion target, and part of the strategy is to develop and implement a City-wide curbside residential organics program by spring 2023. The purpose of this report is to obtain direction on the method of collection for year-round bi-weekly organics program.

The City currently operates an optional seasonal Curbside Organics Collection Program with over 11,000 subscribers in 2020. This report also provides financial information about the current seasonal subscription Green Cart Program.

BACKGROUND

History

On May 21, 2021, the Governance and Priorities Committee received an information report summarizing key decisions and resolutions on the Curbside Organics Program. A table showing these resolutions is available in Appendix 1.

On October 22, 2018, 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.

In August of 2020, a contract was established with Green Prairie Environmental LTD (GPE) for the processing of the collected organics. The contract does not include collections.

At its meeting in November 2019, City Council allocated \$10 million to the Curbside Organics Program for procurement of green carts and for the development and implementation of the City-wide curbside organics collection program. This funding was provided through reallocation of Federal Gas Tax funding.

Green Cart Program

The City has operated the seasonal organics collection program since 1999. There have been gradual increases in the subscription rate. In 2020, there were 11,182 subscribers (approximately 15% of single-family households). The financials associated with the current subscription Green Cart Program are shown in Appendix 2. Since its inception, the subscription rates have not been sufficient to fully fund the cost of the Green Cart Program, with the exception of 2020.

Approaches in Other Jurisdictions

The table below outlines the organic curbside residential collection services offered in other jurisdictions.

Curbside Organics Program Collection Options

Municipality	Population	Residential Households	Collection Equipment	Collection Service Provider
City of Calgary	1,285,711	489,062	Automated	City
City of Edmonton	927,223	402,880	Automated	Part City; Part-Contracted
City of Surrey	517,887	169,970	Automated	Contracted
City of Barrie	149,964	54,661	Manual	Contracted
Cape Breton Municipality	94,285	45,742	Automated	Part City; Part-Contracted
City of Beaumont	19,236	5,789	Automated	Contracted

OPTIONS

Administration has developed three options for the organics collection services and a decision is required to continue planning the implementation of the curbside organics program.

Option 1 – In-source city-wide collection of organic waste.

Option 2 – Out-source city-wide organic waste collection to a third party for a fixed term.

Option 3 – In-source organic waste collection for a portion of the City and out-source the balance to a third party for a fixed term.

The 3 options were compared using the following factors:

- Cost: represents the average cost per household per month over the period of the decision horizon.
- Cost stability: represents the rate of change in the cost over the decision horizon period. This measure estimates risks of future cost inflation after the decision horizon period.
- Life Cycle Cost: this is the summation of costs for the decision horizon period.
- Span of Control: based on City Council's ability to make decision and influence change related to customer service and service levels.
- Labour Relations: impact of decision on current workforce.

Further details of the estimated costs of each option is shown in Appendix 3.

Option 1: In-Source City-Wide Collection of Organic Waste

The City currently collects garbage on a weekly basis during the summer months. With the new organics program, garbage collection and organics collection will both be bi-weekly year-round.

With this Option, during the summer season effectively City crews would collect the black bin one week and the green bin the second week, instead of the current summer schedule of collecting the black bin every week. During the winter season, the black bin/green bin alternating collection schedule would continue, resulting in a year-round, weekly tip of either the black or green bin.

Curbside Organics Program Collection Options

The recycling blue bins, for all options, will continue to be collected by a private service provider every second week.

Because the new service level effectively extends the current summer service frequency provided by the City, the existing fleet of City collections trucks is sufficient to perform both organics and garbage collection on a bi-weekly basis resulting in no need for additional equipment. The City would also see increased efficiencies by utilizing the entire garbage collection fleet year-round and potential savings by coordinating the two programs.

To meet service levels, it is anticipated nine existing seasonal collection staff positions would be converted into full time positions. Considering the magnitude of the new organics program partially offset by the reduced summer garbage collection frequency, a total of two additional collections support staff would be required to oversee the program and provide the customer service and oversight associated with a full city-wide organics collection program.

Routes for the curbside organics program would need to be planned and coordinated with existing garbage routes. The Customer Care Center would provide support for resident enquiries for the organics program. The City would be able to adjust service levels at the request of City Council with this option.

The risks to the City for this option are relatively low, as the City already performs garbage collection and possesses the equipment and expertise to complete organics collection. Whether the program is delivered by City forces or a contractor, a risk would be an inefficiently run program. To mitigate this risk for Option 1, annual financial reporting could be made to City Council and the public, and periodic program audits could be performed. The City would continue with its approach to using GPS and route optimizing technology to ensure it is delivering the most optimal program possible.

Fleet needs will change slightly, as the current summer peak usage will be slightly lower, but maintenance requirements will increase because trucks will be utilized all year with no winter downtime for a portion of the fleet.

The estimated cost of this option ranges from \$3.0 million to \$3.3 million annually.

Option 2: Out-Source City-Wide Organic Waste Collection to a Third Party for a Fixed Term

This option proposes that the City enter a fixed term contract with a third party organics collection provider to perform year-round bi-weekly organics collection. All equipment purchases and ownership will be the responsibility of the third-party provider, with the procurement and deployment of the green carts to be completed by the City prior to program launch in 2023.

The main advantage to this option is the potential that from a financial perspective, a private proponent may be able to provide the service for less cost than City forces, particularly if they are able to pay lower wages to collections staff. This reality would only become known once the tender closes and is awarded, and then over the long term. The Administration's research has shown that the cost of contracted services could be estimated to be between \$3.0 million and \$4.5 million annually.

The risks to the City for this option would be managed through the procurement phase and contract management. If the selected collections service provider ran into financial hardship and was unable to continue collections, the City would seek an alternative provider with potential loss of organics collection for a period of time. The collection of organics by a third party varies from that of the curb-side recycling program in that the organics collection contractor would not be processing the organics or be the owners of the roll-out carts. The integration between the collections contractor, the processor, and the City would need to be managed properly through procurement, and for the duration of the contract.

As with any contract with a third party, changing service levels during the duration of the contract would be difficult and requires renegotiation of the contract, likely resulting in increased costs. Regarding impact to civic forces, nine existing permanent seasonal collection staff positions may be eliminated with this option.

Option 3: In-Source Organic Waste Collection for a Portion of the City and Out-Source the Balance to a Third Party for a Fixed Term

This option blends Option 1 and Option 2 by proposing to split the city into service zones and distribute organic waste collection between the City and one or more third party providers for a fixed term.

This option does provide opportunity for both private and public sectors to complete the collections work, however, the risks listed in Option 2 would remain. This option will generate high complexities to program deployment and implementation and have reduced flexibility to adjust collections schedules if needed. It will also create increased management risk to the City and may result in inconsistent quality of service delivery to residences.

The estimated cost of this option ranges from \$4.2 million to \$5.65 million annually.

RECOMMENDATION

That the Governance and Priorities Committee recommend to City Council that the City of Saskatoon in-source city-wide collection of organic waste as provided in Option 1.

RATIONALE

Appendix 3 provides a summary of the comparison of the 3 options, with further details provided below.

Considering all factors, the Administration recommends that the City undertake city-wide collection of organic waste (Option 1) in-house. Option 1 provides the following benefits:

- utilizes existing City resources to maximum efficiency, including collections equipment and customer service infrastructure;
- provides the highest level of span of control to adjust routing and service levels;

Curbside Organics Program Collection Options

- minimizes risks associated with a third party provider, including disruption to service and ability to maintain a high level of customer service and public relations;
- minimizes overall life cycle cost when considering both waste and organics programs and provides highest level of certainty of costs over the long term; and
- minimizes impact to current workforce engaged in organics collections.

In addition to the benefits related directly to the organics collections program, performing the collections in-house provides an opportunity to improve waste program efficiencies and economies of scale by coordinating the two programs.

Another advantage through this option is that it can be implemented with little risk and evaluated over time. Because of the reduced black-bin collection in the summer season, this option is effectively akin to the City extending the summer resources to year-round service.

FINANCIAL IMPLICATIONS

At this time, there is no additional financial implication associated with approval of the recommended option. The phased in mill rate funding of 0.87% in 2020-2022 and 0.80% in 2023 are sufficient to cover the costs of collections for all options.

The previous estimates for the collections portion of the organics program was up to \$5.9 million annually, including not only the collections service, but all supporting resources and activities to manage the program. As planning for the curbside organics program continues and costs are refined, further financial reporting will be provided.

COMMUNICATION ACTIVITIES

The upcoming changes to the Curbside Organics and Waste Management Programs will require an extensive communication and education strategy. These plans will be part of the Organics Program development and implementation framework. Residents will be informed through media outreach programs throughout the implementation stages.

APPENDICES

1. Appendix 1 - Key Decisions and Resolutions on the Curbside Organics Program
2. Appendix 2 - Green Cart Subscription Program Financials
3. Appendix 3 –Comparison of Options

Report Approval

Written by: Michelle Tomasiewicz, Engineer II
Akinniyi Akinpelu, Senior Project Management Engineer

Reviewed by: Dan Gauthier, Environmental Projects and Protection Manager
Brock Storey, Environmental Operations Manager
Brendan Lemke, Director of Water and Waste Operations

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