

Detailed Options Analysis

Option 1- Status Quo: Contract Out Curbside Processing Services and Continue Depot Operations

This option proposes the City enter a long-term contract with a third-party waste management organization to establish and operate an organics processing facility. This is like the current operation, with the exception that the contract would be for a long-term duration. The facility would be responsible for processing and converting organic waste into beneficial compost materials. The procurement process would be like the 2019 Request for Proposal (RFP) process that awarded the original organics processing contract to GPE in 2020.

Depot operations would continue, yard waste materials would be accepted and processed at the City run compost depot. Compost and mulch would be available for public pickup and bulk sales.

The following will be some of the proposed expectations of the processor for inclusion in the RFP:

- The City will not prescribe a processing technology.
- The proposed facility will be capable of handling expected tonnages from the residential curbside organics program, including peak season.
- The proposed facility will be capable of handling the current list of acceptable items in the Program.
- Background information will be provided about the development of the multi-unit organics program that is underway and the recently introduced Industrial, Commercial, and Institutional (ICI) sectors regulation requiring diversion of food and yard waste when it is generated as part of operations.
- The third-party contractor will be responsible for receiving, inspecting, and taking ownership of the material supplied by the City; processing material in a facility with an operating permit and incurring all resulting costs and risks.
- The maximum driving distance to the receiving site from Saskatoon's City Hall is 20 km (one-way).
- The quality of finished compost is required to meet or exceed Canadian Council of Ministers of the Environment Ensure (CCME) Category 'A' quality and all Canadian Food Inspection Agency (CFIA) requirements for soil supplements.
- Marketing the compost product is the responsibility of the third-party contractor.
- Education is City-led and supported by the processor.

Financial Implications:

As seen in Table 8, Option 1 is the second most favourable option financially, resulting in total 2026 processing fees paid by the City of \$4.6 million. The financial implications for 2026 (Year 1) under this option include the following:

- \$1.3 million net non-utility funding required to operate the compost depot.
- \$3.3 million utility funding required to process curbside organics program tonnes.

Compost Depot Financial Implications

This option assumes that the existing Depot or an equivalent site will continue to be operated by the City for the public to drop off yard waste and pick up compost. The operations of the compost depot would be funded through non-utility funding and revenues earned from seasonal permit and bulk compost sales. Net non-utility operating funding required to maintain this facility in 2026 is estimated to be \$1.3 million. Table 10 outlines the 5-year projected funding required for this option using annual inflationary rate increases of 1.5%-2% for operating costs.

Although the Depot will need to be relocated in the future, these costs were not included as a part of the analysis for this option, as the timing of the relocation costs is dependent on the development of the Blairmore neighbourhood.

Curbside Organics Financial Implications

Based on tonnages estimated to be collected through the curbside organics program, Administration expects processing costs to be \$3.3 million in 2026. This would be funded through utility fees charged to residents. This estimate is based on a contractor rate per tonne of \$135 in 2026. Assuming a 1.5% annual increase in contractor rates, the total cost of a 5-year processing contract is estimated to be \$18.3 million.

Administration estimates this would result in a utility rate of \$9.20 per cart per month in 2026 which includes processing per cart per month of \$3.57. When compared to processing under the GPE contract (estimated to be \$2.15 per cart per month in 2026), this option would result in a 66% increase in processing costs. Table 9 outlines the 5-year projected impacts of this option on the utility rates charged to residents.

Advantages:

- Minimal City involvement, liability, and operational risks for processing curbside organics.
- No immediate capital costs are required.

Disadvantages:

- Limited competition in Saskatoon area could lead to higher than anticipated costs.
- Increased risk of utility price fluctuations as processing may be subject to unknown price increases upon contract expiration.
- Efficiencies from combined processing of public drop off and curbside organics materials not realized.

Option 2 - Third Party Processor for Curbside and Depot Materials

This option proposes to use a third-party organics processor for Program materials, while keeping service levels the same as the other options. Like Option 1, the City would issue an RFP and enter a long-term contract for organics processing. The RFP

would require that the service provider process both Depot and Program materials. The current Depot operations would cease, and materials would instead be received at the Material Recovery Centre.

For residents bringing small quantities of materials to the Material Recovery Centre, it is anticipated that these materials will be dropped off at the “Sort and Go” area. Compost would be purchased back from the contractor and available for “Dig Your Own” compost at the Material Recovery Centre. Bulk sales of compost and mulch would not be available from the City in this option.

For bulky materials and materials brought on trucks and trailers with a mechanical lift, a separate area will be required to receive these materials. It is anticipated that most of this material would be bulky organic material (branches and logs) and would need to be shredded prior to processing. Tipping fees would be charged to commercial haulers, like Option 3.

For this option, the Material Recovery Centre public drop off would require:

- Attendants to monitor incoming materials for contaminants.
- Trucks and trailers to haul the material to the processor.
- A wheeled loader to manage site materials and to load out bound trucks.
- Logs and branches would need to be shredded prior to loading due to their bulky nature.
- Compost would be purchased back from the processor for public pick up at the Material Recovery Centre.

Financial Implications:

As seen in Table 8, Option 2 is the least favourable option financially, resulting in total 2026 processing fees paid by the City of \$4.7 million. The financial implications for 2026 (Year 1) under this option include the following:

- \$1.4 million net non-utility funding required to contract out processing of public drop off tonnages, and operate the transfer/public pick up station at the Material Recovery Centre
- \$3.3 million utility funding required to process curbside organics program tonnes

Compost Depot Financial Implications

Operating costs for the Depot include the costs associated with operating a transfer station, contracted processing costs, and compost purchase costs for the “Dig Your Own” program. Administration assumes that in 2026, the City would be charged a rate of \$80 per tonne from the contractor for processing public tonnes collected at the Material Recovery Center. Operating expenses will be offset by revenues collected from commercial haulers. Net non-utility funding required for this option in 2026 is estimated to be \$1.4 million.

Administration assumes the contractor processing rate will increase by 1.5% annually, while all other operating costs will increase by 1.5%-2% annually. Table 10 outlines the 5-year projected funding required under this option.

Curbside Organics Financial Implications

From the curbside organics program perspective, this option is identical to Option 1.

Advantages:

- Minimal City involvement, liability, and operational risks for processing organics
- No up-front capital costs are required to build a facility.
- Convenience increased by locating Depot services at the Material Recovery Centre.

Disadvantages:

- Limited competition in Saskatoon area which could lead to higher than anticipated costs.
- Risks for the facility's construction would be out of the City's control.
- Subject to unknown price increases upon contract expiration
- Bulk compost sales are not available through this option
- This model results in "double hauling" Depot materials (customers haul to the Material Recovery Centre, City hauls to processor), which increase transportation GHG emissions compared to other options.

Option 3 - Build a City Owned Organics Processing Facility

This option proposes to build a City owned organics processing facility. The facility would accommodate all curbside organics and the organics materials currently going to the West Compost Depot. The facility would be built to a 40,000-tonne capacity to accommodate current needs and estimated future capacity. The facility would be able to process all materials currently accepted in the Program. Residential drop off for yard waste, bulk sales of compost and mulch, and "Dig Your Own" compost would occur at the Material Recovery Center's "Sort and Go" area and would continue to be subsidized from the tax base for non-commercial customers. Commercial haulers would be accepted at the proposed organics processing facility and would be charged at a weight-based rate instead of a seasonal permit. It is expected that the facility could be ready in 2026, at which point Depot operations at the existing location would wind down.

Administration's current estimate of the capital cost required to develop this facility are \$22.1 million. The proposed site is located south of the landfill and is already owned by the City and has the proper zoning designation. The capital estimate includes:

- Receiving hall with negative ventilation and air treatment.
- Concrete bunkers for compost processing.
- Compost process control equipment.
- Mobile and stationary equipment for processing.
- Graded and environmentally protected site.

- Storm water management pond.
- Scale and office (reused from landfill).

The analysis in Table 8 shows the estimated operating revenues and expenses for processing both the Program and public drop off tonnes. Operating costs are based on 7.5 expected FTEs for the site, equipment maintenance, and includes capital replacement funding. Operating costs also include debt repayment as there are no appropriate capital reserves with funding sufficient for this project.

Financial Implications:

As seen in Table 8, Option 3 is the most favourable option financially, resulting in total 2026 processing fees paid by the City of \$3.1 million. The financial implications for 2026 (Year 1) under this option include the following:

- \$0.6 million net non-utility funding required to operate the compost depot and repay long term debt.
- \$2.5 million utility funding required to process curbside organics program tonnes.

This option has applied for the Low Carbon Economy Challenge funding, as detailed in the January 2024 EUCS report. If funding were granted for the construction of the facility, it is expected that both the required tax support and utility rates would be reduced, as up to 50% of construction costs may be eligible for the Low Carbon Economy Challenge funding. For the purposes of this decision report, the analysis did not include any federal funding as there is no guarantee the City's application will be successful and the decision to build a facility should not be dependent on this funding.

Compost Depot Financial Implications

Facility operating costs of \$3.7 million are anticipated in 2026 which includes principal and interest repayments of \$1.8 million and material processing costs of \$1.9 million. These costs will be offset by revenues earned from bulk sales (\$0.3 million), tipping fees from commercial haulers (\$0.3 million), and fees charged to the curbside organics utility (\$2.5 million), resulting in a projected net non-utility cost of \$0.6 million.

Under this model, the compost depot would charge the organics program an assigned rate based on the Program's estimated share of tonnage. Table 10 outlines the 5-year projected non-utility funding required for this option.

Curbside Organics Financial Implications

It is estimated that the curbside organics program would be charged \$2.5 million for organics processing in 2026. This would be funded through utility fees charged to residents. Based on estimated tonnes, and inflationary increases assuming 1.5% - 2% increase in costs, the 5-year processing cost paid to the City compost depot would be approximately \$12.7 million.

Administration estimates this option would result in a utility rate of \$8.32 per cart per month in 2026, which includes processing per cart per month of \$2.69. When compared to processing under the GPE contract (estimated to be \$2.15 per cart per month in

2026), this option would result in a 25% increase in processing costs. Table 9 outlines the 5-year projected impacts of this option on the utility rates charged to residents.

Advantages:

- Brings long term price stability to utility, as utility processing costs will be City controlled, and the risk of potential price fluctuations that can occur through the tendering process is removed.
- Most favourable option from a financial perspective, including the impact on the utility and ability to increase cost recovery from the commercial sector.
- City will own a facility that will be able to be used for the duration of the organics program.
- Efficiencies are gained by combining Depot and Program material processing at one facility.
- Facility will have capacity to process organics from a potential multi-unit residential program.
- Convenience increased by co-locating organics diversion drop-off near the Material Recovery Centre.

Disadvantages:

- High upfront capital cost to build a facility.
- Operational risks are the responsibility of the City.
- Marketing of compost material is the responsibility of the City.

Processing - Financial Implications in Year 1 (2026) by Option (in \$000s)			
	Option 1 - Status Quo - Maintain Depot Operations & Contract Curbside Organics Program Processing	Option 2 - Contract both Curbside Organics Program and Depot Processing	Option 3 - Build a City Owned Facility for both Curbside Organics Program & Depot Tonnage Processing
	Capital Requirement : \$0	Capital Requirement : \$0	Capital Requirement : \$22.1M
Non-Utility Funded Operating Budget			
Revenues - Permit Sales ¹	26	-	-
Revenues - Bulk Compost ^{2,3}	70	-	300
Revenues - Fees Charged per Tn to Commercial Haulers ¹	-	265	265
Revenues - Fees Charged to Organics Utility ⁴	-	-	2,472
Total Revenues	96	265	3,037
Operating expenses:			
Processing Costs ^{5,6,7}	1,376	1,665	1,914
Long Term Debt Repayments ⁸	-	-	1,761
Total Operating Expenses	1,376	1,665	3,675
Total Non-Utility Funding Required	1,280	1,400	638
Utility Funded Processing Costs			
Program Processing Costs - Paid to Contractor ⁹	3,285	3,285	-
Program Processing Costs - Internally Charges	-	-	2,472
Total Utility Funding Required	3,285	3,285	2,472
Total Organics Processing Costs in 2026	4,566	4,685	3,110
Assumptions/Notes:			
1) In Option 1, the current model for commercial hauler seasonal permits will be used as there are no scales to charge by weight. In Options 2 & 3, is it planned that commercial haulers will be charged a per tonne rate currently assumed at \$50/tonne instead of a seasonal permit fee.			
2) Under Option 1, bulk sales of compost are expected to remain consistent with the current budget as additional marketing resources are not currently funded.			
3) In Option 3 where the City will own a processing facility, there will be additional emphasis and resources dedicated to the marketing and sale of bulk compost, which is expected to increase bulk sales revenue.			
4) In Option 3 where the City owned facility is constructed, the organics utility will be charged a cost per tonne proportionate to the Program's estimated percentage of total inbound tonnages.			
5) Figures included in Options 1 and 2 represent the costs of processing public drop off tonnes only. Option 3 includes processing costs for both public drop off tonnes and curbside organics program tonnes.			
6) Option 2 assumes amounts paid for delivery of materials and processing paid to the contractor. Also included in this are costs buying back processed compost for the Dig Your Own program available to residents.			
7) Included in Options 3 are additional FTEs to run the facility. Option 3 includes 7.5 FTEs. If this option is selected, further analysis will be completed to assess if the facility should be ran through internal resources or contracted out.			
8) All borrowing assumes a 20 year loan with a 5% interest rate and semi-annual repayments. This will change once the loan is issued.			
9) Options 1 and 2 assume a rate of \$135/tonne from the contractor for all curbside organics program tonnes.			

5 Year Projected Processing Cost and Curbside Organics Utility Rate Impacts by Option

	Processing Cost/Cart/Month (\$)					Est. Utility Rate/Cart/Month (\$)				
	2026	2027	2028	2029	2030	2026	2027	2028	2029	2030
Option 1 - Status Quo - Maintain Depot Operations & Contract Curbside Organics Program Processing	3.57	3.73	3.90	4.08	4.26	9.20	9.40	9.61	9.83	10.05
Option 2 - Contract both Curbside Organics Program and Depot Processing	3.57	3.73	3.90	4.08	4.26	9.20	9.40	9.61	9.83	10.05
Option 3 - Build a City Owned Facility for both Curbside Organics Program & Depot Tonnage Processing	2.69	2.70	2.71	2.72	2.73	8.32	8.37	8.42	8.47	8.52

Assumptions/Notes:

- 1) All figures presented above are estimates based on the best information available at the time this report was completed
- 2) Estimated rate of growth for tonnages in the green cart program is 4% per year
- 3) Estimate rate of growth for carts in the green cart program is 1% per year.
- 4) For Option 3 the green cart program is charged a rate per tonne proportional to the Program's estimated percentage of total inbound tonnages
- 5) For Options 1 and 2, the estimated contractor rate in 2026 is \$135/tonne and an estimated inflationary rate increases for contractor processing is 1.5% per year
- 6) Increases in non-processing costs were estimated using an annual inflationary rate increases of 2% for staff compensation and 1.5% for all other expenses.

5 Year Projected Non Utility Processing Cost by Option (in \$000s)															
	Projected Revenues					Projected Expenses (Incl LT Debt Repayments)					Total Projected Non-Utility Funding Required				
	2026	2027	2028	2029	2030	2026	2027	2028	2029	2030	2026	2027	2028	2029	2030
Option 1 - Status Quo - Maintain Depot Operations & Contract Curbside Organics Program Processing	96	96	96	96	96	1,376	1,398	1,420	1,442	1,465	1,280	1,302	1,324	1,347	1,370
Option 2 - Contract both Curbside Organics Program and Depot Processing	265	271	276	282	287	1,665	1,706	1,748	1,792	1,837	1,400	1,435	1,472	1,510	1,550
Option 3 - Build a City Owned Facility for both Curbside Organics Program & Depot Tonnage Processing	3,037	3,077	3,117	3,158	3,199	3,675	3,706	3,737	3,769	3,801	638	629	620	611	602

Assumptions/ Notes:

- 1) Option 1 assumes no growth for commercial permit revenue consistent with historical data.
- 2) Option 1 assumes that without a city-owned facility where commercial haulers can weigh in, the current seasonal permit model will be used.
- 3) Options 3 will charge the curbside organics program a rate sufficient to cover the Program's proportional amount of inbound tonnages processed, and charge commercial haulers a per tonne rate currently assumed at \$50/tonne.
- 4) Option 3 assumes higher bulk sales than status quo as there will be advertising and marketing efforts put in place to sell compost.
- 5) Option 2 assumes commercial tonnages will be accepted at the Material Recovery Centre, and will charge commercial haulers a per tonne rate currently estimated at \$50/tonne.
- 6) Projected Expenses displayed in Options 1 and 2 represent the costs of processing public drop off tonnes only. Option 3 includes processing costs for both public drop off tonnes and curbside organics program tonnes. Costs of curbside organics program tonnes are offset by revenues from the curbside organics program.
- 7) Options 1 and 3 assume annual inflationary rate increases of 2% for staff compensation and 1.5% for all other internal expenses.
- 8) Option 2 estimates annual inflationary rate increases for contractor processing of 1.5% per year.
- 9) All options assumed growth in depot tonnages of 2% per year and growth in curbside organics tonnages of 4% per year.
- 10) Included in Option 3 are additional FTEs to run the facility. Option 3 includes 7.5 FTEs. If this option is selected, further analysis will be completed to assess if the facility should be ran through internal resources or contracted out.
- 11) In Option 3 borrowing assumes a 20 year loan with a 5% interest rate and semi-annual repayments. This will change once the loan is issued.