

Waste & Recycling

Led by: Waste & Recycling Services

Description:

The Waste & Recycling service collects waste, manages landfills, operates waste diversion programs and facilities for waste generators and haulers in Calgary and the region. We enable Calgarians to reduce waste generated and remove waste safely from their homes, businesses and communities to protect public health and the environment. Through participation in waste reduction and diversion programs and education, customers are empowered to properly dispose of materials. We work collaboratively with customers and stakeholders to lead the community toward zero waste while achieving the Council approved target of 70 per cent diversion across all sectors by 2025.

Customers:

Our customers are waste generators and haulers in Calgary and the surrounding region. This includes residents, businesses and organizations. We support our customers to reduce waste generated and safely dispose of garbage, recyclables, food and yard waste, and household hazardous waste to protect public health and the environment.

What is delivered to customers:

We provide customers the opportunity to responsibly manage waste through garbage, recycling, and food and yard waste collection and processing. We also provide access to waste management facilities and participation in waste reduction, diversion and educational programs to protect public health and the environment.

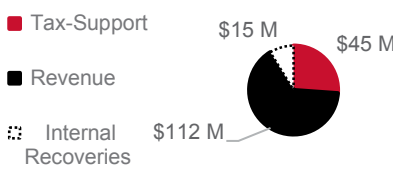

Partners:

Customers (waste generators and haulers in Calgary and the region).
 Government (federal, provincial, municipal).
 Other City services.
 Waste Organizations (Recycling Council of Alberta, Green Calgary, Compost Council of Canada, National Zero Waste Council, Alberta Recycling Management Authority).
 Education and Community Organizations (universities, school boards, community associations).

Service need (value proposition):

Calgarians and the region need waste safely removed from their homes, businesses and communities to protect public health and the environment. Customers can expect their waste will be collected on their collection day by a competent and committed team that's part of their community. Customers have access to information on how to reduce waste or properly dispose of garbage, recyclables, household hazardous waste and compostables. Once The City has received waste, it is managed in compliance with regulatory requirements to protect public health and the environment. The City is the primary service provider to over 325,000 single-family homes. Non-residential customers select The City as a service provider when their properties are difficult to service and they value customer service. We continually improve services and find efficiencies to keep costs affordable for customers.

Current state service value

<p>40 Million # of Customer Interactions Per Year</p> <p>91% Satisfaction with Residential Garbage</p>	<p>93% Satisfaction with Blue Cart Recycling</p> <p>1,055,389 Total Tonnes of Waste Managed</p>	<p>2018 Budgeted Gross Operating Expenditures Funding Breakdown (\$ Millions)*</p> <p>\$160 Total Cost of Managed Waste per Tonne</p>  <p>* Gross operating budget and the service cost ratio may include internal recoveries that are also included in other services gross operating budget.</p>
<p>Connections to Citizen Priorities</p> 		<p>What the service includes (\$000s) Residential Cart Programs (\$114,833), Waste Management (\$35,993), Container Collection (\$11,997), Community-Wide Programs and Strategic Initiatives (\$8,570).</p> <p>Key Capital Investments Capital investments in infrastructure to operate waste management facilities and programs, manage landfill gas, leachate, stormwater, post closure care, and information technology, to maintain compliance and protect public health and the environment.</p>



What we've heard and service outlook

What we heard: Research & Engagement Results

Citizen satisfaction surveys rank Waste & Recycling as a strength for The City of Calgary. Despite changes in 2017 with the introduction of the Green Cart Program and changes to black cart collection frequency, satisfaction remains high. Engagement with waste management facility customers indicated a need to offer predictable service to residents and commercial customers resulting in schedule improvements in 2018. Customers want choice for services they receive and to be engaged on service changes. Through One Calgary engagement, citizens identified environment, affordability and accessibility as the top value characteristics for our service.

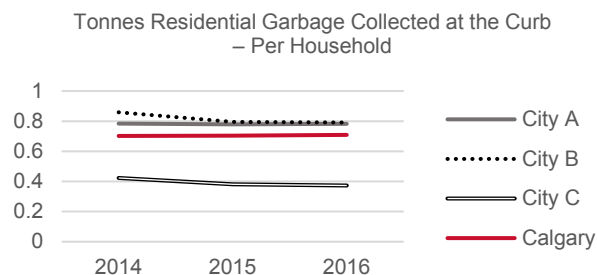
What Council has directed

The Council approved waste diversion target of 70 per cent by 2025 is a key step in leading the community toward zero waste. Our service primarily contributes to the Healthy and Green City priority by extending the life of existing landfill assets, reducing greenhouse gas emissions, and recognizing waste as a resource to promote a healthy environment. Our service also contributes to Council's priority of A Well-Run City by focusing on financial sustainability through efficiency, value-for-money, continuous improvement, innovation and learning from Calgarians. Customer engagement is a priority for this business cycle to identify and respond to waste and recycling customer needs. Our service collaborates on the Prosperous City priority by providing waste management at city festivals and events.

What are we watching

The primary trends and risks affecting Waste & Recycling relate to financial sustainability and customer relationships. Global changes to recycling markets, reduced waste tonnages to landfill, and service changes in response to customer needs affect the cost of service we deliver. We're aligning revenues with cost of service to create a cost structure for residential services that's more transparent and supports increased customer choice. Efforts to improve financial sustainability by moving toward a cost of service model also impacts our customer relationships. Engagement of customers after the significant service changes introduced in 2017-2018 will enable better customer service and increased participation in programs. These efforts support our shared responsibility to conserve and protect public health and the environment.

Benchmarking



Source: National Solid Waste Benchmarking Initiative 2017 Report

This graph shows residential garbage collected per household. 2016 results do not include Calgary's introduction of a city-wide Green Cart Program or the change to every-other-week garbage collection. City A does not offer any curbside diversion programs, City B offers curbside recycling only, and City C offers curbside recycling and organics. Best practices indicate that reduced frequency of garbage collection and a variable pricing policy can lead to improved results. Calgary should trend towards City C as we realize the results of existing programs and further diversion efforts.

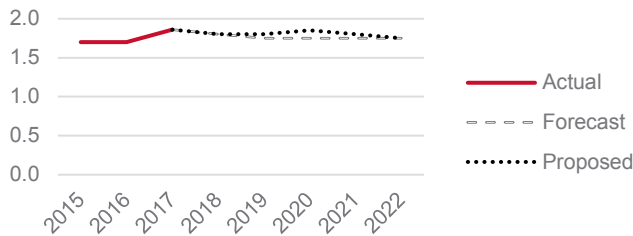
What matters to Calgarians

VALUE DIMENSION	DESCRIPTION
Environmental	Calgarians act on waste reduction and diversion. We meet all regulations to protect health, safety and the environment.
Affordability	Rates and user fees are transparent and fair.
Accessibility	I can find the information I need to properly dispose of garbage, recyclables, food, yard and household hazardous waste.
Reliability	Schedules for services and access to facilities is reliable and my questions are answered in a timely manner.
Safety	All waste & recycling activities are performed safely. Everyone is safe at City work sites and facilities.

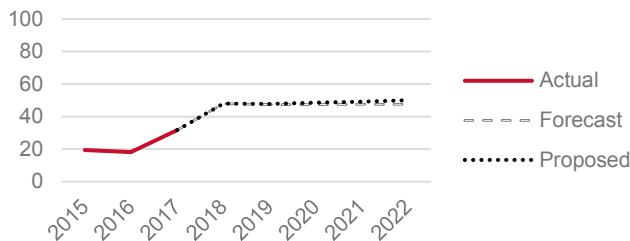


How is the Service performing? Where we are headed and where do we want to go?

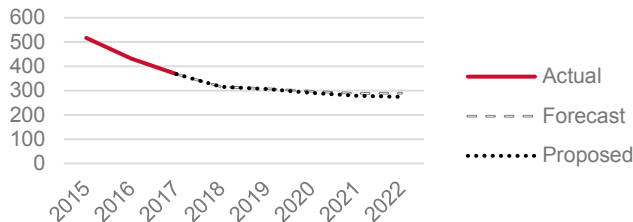
Average Response Time for a Waste & Recycling Service Request (Days)



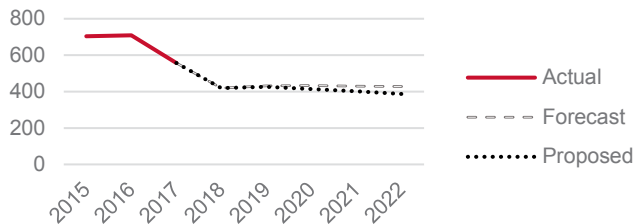
Per cent of Residential Waste Diverted from Landfill Through Blue and Green Cart Programs (Per cent)



Annual Waste Disposed at City of Calgary Landfills per Person (Kilograms per Person)



Annual Black Cart Waste Collected per Household (Kilograms per Household)



Story behind the curve

Average Response Time for a Waste & Recycling Service Request is the average days a customer waits to receive an initial response after submitting a service request. This measure can be affected by factors such as extreme weather and changes to programs. In 2017, there was an increase in service requests which were related to the rollout of the Green Cart Program. If nothing new or different is done, it is anticipated that results will return closer to pre-2017 levels throughout 2019-2022. With the shift from tax support to user fees, and potential introduction of a pay-as-you-throw program for residential black cart collection in 2020, response time may increase.

Per cent of Residential Waste Diverted from Landfill through Blue and Green Cart Programs represents the per cent of residential waste that is diverted from landfill through the Blue Cart and Green Cart programs out of the total waste generated by single-family households. The Green Cart Program, implemented in 2017, increased residential waste diversion.

Annual Waste Disposed at City of Calgary Landfills per Person monitors the total amount of garbage disposed of at the waste management facilities managed by The City of Calgary, including waste from private haulers. This measure does not capture waste that is generated in Calgary and disposed of at facilities not managed by The City of Calgary. This measure is reported on a per person basis, as waste is generated across all sectors of the population. Calgary receives waste from other regional communities, and we are aware that the full population generating waste is not captured. This measure is affected by improvements in waste diversion, changes in customer behavior, the economy, and waste flow within the province.

Annual Black Cart Waste Collected per Household monitors the amount of garbage collected from single-family homes through the Black Cart Program. Waste collected decreased significantly in 2017, due to the implementation of the Green Cart Program. If nothing new or different is done, it is anticipated that results will improve in 2018 with a full year of the Green Cart Program in place, and stay consistent throughout 2019-2022.

Additional improvements are expected with our proposed strategies, which include optimizing existing diversion programs, a focus on waste reduction, education and enforcement, and potential introduction of a pay-as-you-throw program for residential black cart collection.



What do we propose to do?

What we propose to continue doing

STRATEGY
Focus on efficiency and effectiveness of the Waste & Recycling service to reduce costs and optimize customer service.
Invest in and operate waste management facilities to comply with regulatory requirements and protect public health and the environment.
Provide safe and reliable collection for residential cart based programs.
Provide safe and reliable container collection to multi-family, businesses and organizations.
Educate, communicate and engage with customers to optimize existing programs and design and implement new waste management programs.
Advance provincial and regional waste management solutions.
Provide community-wide waste management programs for the benefit of Calgarians.

Why?

Customers need waste management to protect public health and the environment. We maintain compliance with regulatory requirements to operate waste management facilities. We engage with customers to maximize program participation. We continue to optimize capital investments, programs and facilities to reduce climate impacts and provide value for customers. These initiatives support customer expectations for services and achievement of our waste diversion target.

What we propose to do less of

STRATEGY
Residential cart programs' dependency on tax support (to create a more transparent cost structure for customers).
Green Cart Program collection frequency (by adjusting to every-other-week in the winter months).
Community-wide waste management programs (by adjusting to reflect changing customer needs).

Why?

Implementation of financial changes to reduce dependency on tax support are required to create transparency, sustainability, affordability and alignment in cost of services for customers. With appropriate funding for programs and services, customers can understand value for service. We'll also look for opportunities to optimize program delivery to reduce program costs, greenhouse gas emissions and increase collection system efficiency.

What we propose to do more of or include as a new offering

STRATEGY
Engage the community and explore best practices for waste reduction.
Implement financial changes to improve transparency of service costs.
Engage customers to understand priorities for services and service levels.
Enhance education and enforcement to maintain high participation and low contamination for programs.
Consider options for energy production at waste management facilities, and energy efficiencies in fleet and facilities.

Why?

We're responding to emerging trends and opportunities. We'll support climate resilience by exploring options for energy production, waste reduction and diversion. We'll engage customers to understand expectations and provide options for services where costs are transparent and residents are supported to reduce garbage and divert materials. We'll implement targeted education, communication and enforcement to support program success.



What Operating Budget do we need to achieve these results and strategies?

For Council Approval

SERVICE PERFORMANCE RESULTS FOR 2019-2022	CURRENT	TREND
Average Response Time for a Waste & Recycling Service Request (Days)	1.80	↔
Per cent of Residential Waste Diverted from Landfill Through Blue and Green Cart Programs (Per cent)	48	↔
Annual Waste Disposed at City of Calgary Landfills per Person (Kilograms per Person)	315	↓
Annual Black Cart Waste Collected per Household (Kilograms per Household)	419	↓

Breakdown of net operating budget (\$000s)

	2019	2020	2021	2022
Previous Year's Budget	44,579	20,789	20,216	19,836
Less Previous Year one Time	(3,217)	-	-	-
Base	41,362	20,789	20,216	19,836
Revenue Changes	(24,215)	(1,536)	(1,491)	(2,480)
Internal Recovery Changes	150	(12)	(17)	(18)
Inflation	1,295	3,168	3,219	3,484
Operating Impact of Previously Approved Capital	(760)	(914)	(1)	(1)
Operating Impact of New Capital (Incremental)	541	305	5	820
Efficiencies	(592)	(252)	(216)	(243)
Service Reductions	(6,038)	(579)	(386)	(386)
Service Increases	9,046	(753)	(1,493)	(1,556)
One Time	-	-	-	-
Realignments	-	-	-	-
Total	20,789	20,216	19,836	19,456

Total Operating Budget (\$000s) for Approval

	2018 Budget	2019			2020			2021			2022		
	At Mar 31	Base	One-Time	Total	Base	One-Time	Total	Base	One-Time	Total	Base	One-Time	Total
Expenditure	171,393	172,484	-	172,484	173,459	-	173,459	174,587	-	174,587	176,705	-	176,705
Recoveries	(15,130)	(14,980)	-	(14,980)	(14,992)	-	(14,992)	(15,009)	-	(15,009)	(15,027)	-	(15,027)
Revenue	(111,684)	(136,715)	-	(136,715)	(138,251)	-	(138,251)	(139,742)	-	(139,742)	(142,222)	-	(142,222)
Net	44,579	20,789	-	20,789	20,216	-	20,216	19,836	-	19,836	19,456	-	19,456



Recommended Capital Investment to Support Service Delivery

For Council Approval

Capital Budget for Council Approval

ACTIVITY	DESCRIPTION	2019 REQUEST (\$000s)	2020 REQUEST (\$000s)	2021 REQUEST (\$000s)	2022 REQUEST (\$000s)	2023+ REQUEST (\$000s)	Total REQUEST (\$000s)
Annual Investment Program(s)		-	-	-	-	-	-
Project(s)		-	-	-	-	-	-
Program(s)		21,663	29,347	29,937	29,656	-	110,603
451799	Landfill/Treatment Infrastructure	6,354	6,190	8,794	8,329	-	29,667
452299	Facilities & Equipment	15,309	23,157	21,143	21,327	-	80,936
Sub-Total (New Budget Requests)		21,663	29,347	29,937	29,656	-	110,603
Previously Approved Budget Remaining		7,579	-	-	-	-	7,579
Total Capital Investment		29,242	29,347	29,937	29,656	-	118,182

Explanation of Capital Budget Requests

Program(s)

Activity 451799: Landfill/Treatment Infrastructure

New Budget Request of \$29,667 thousand for infrastructure required to manage waste in accordance with regulatory compliance to protect public health and the environment.

Funding from Federal Gas Tax Fund (\$25,314 thousand) and Capital Reserves (\$4,353 thousand)

Operating Impact of Capital: This request requires \$415 thousand base funding of operating costs starting in 2019, \$230 thousand base funding of operating starting in 2020, \$5 thousand base funding of operating costs starting in 2021 and \$20 thousand base funding of operating starting in 2022.

Activity 452299: Facilities & Equipment

New Budget Request of \$80,936 thousand for waste management facility maintenance; landfill gas and stormwater management; and infrastructure to support growth and diversion of waste materials.

Funding from Federal Gas Tax Fund (\$27,390 thousand) and Capital Reserves (\$53,546 thousand)

Operating Impact of Capital: This request requires \$126 thousand base funding of operating costs starting in 2019, \$75 thousand base funding of operating starting in 2020 and \$800 thousand base funding of operating costs starting in 2022. This request also requires \$360 thousand one-time funding of operating costs in 2020 and 2022.