

Waste Plan Regina

2017 Update



Year in Review

2017 Accomplishments

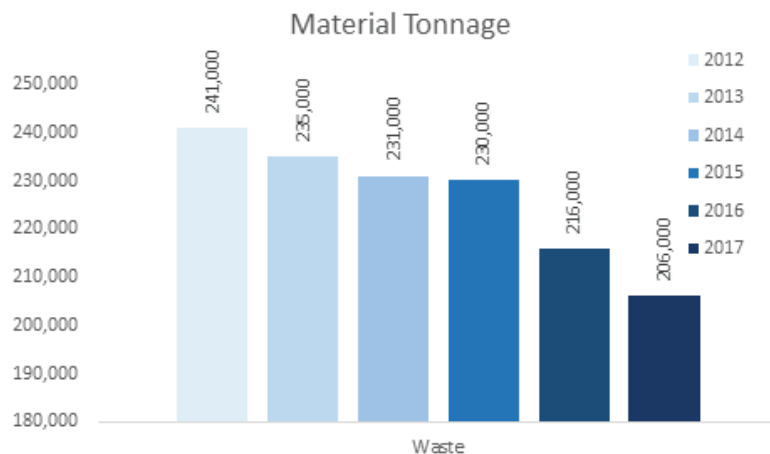
- Reduced overall waste landfilled by four per cent.
- Piloted biweekly garbage collection.
- Demonstrated commitment to waste diversion by moving beyond residential diversion to include recycling for refundable bottles and cans in public spaces.
- Exceeded the 90 per cent waste diversion target for the stadium demolition project reaching a diversion rate of 99 per cent.
- Members of key waste associations such as the Saskatchewan Waste Reduction Council and Solid Waste Association of North America to remain in tune with the changing waste industry.
- Opened the Landfill Gas to Energy Facility which uses waste gas from the Landfill to generate electricity.
- Provided solid waste collection services to over 65,000 single-family households.
- Introduced the Waste Wizard tool and increased the number of household waste items searched by 40 per cent.
- Increased page views to Regina.ca/waste by 57 per cent.
- Produced the Waste Education Video Series on proper cart placement, waste sorting, visiting the Landfill and flattening recyclables which were viewed approximately 77,800 times.
- Added the garbage collection schedule into the online reminder system.
- Increased recycling and garbage cart collection reminder sign ups by 51 per cent.

Regina residents continue to generate less waste.

In January 2011, City Council adopted Waste Plan Regina's (WPR) Enhanced Residential Service Option and set a target to divert 40 per cent of residential waste by 2015; 65 per cent by 2020. This update summarizes accomplishments in 2017 and provides the priorities and work plan for 2018-2022.

Landfill Tonnage Trend

The amount of garbage being disposed of at the Landfill has reduced by approximately 15 per cent from 2012.

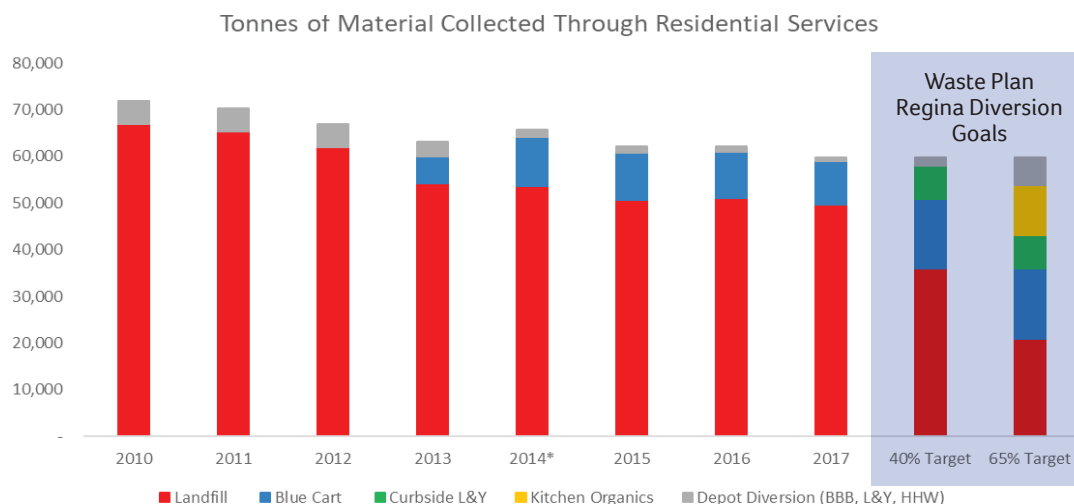


Did you know?

A program to divert organic material would contribute to Waste Plan Regina's diversion goal.

Residential Services

Regina residents continued to generate less waste in 2017. Overall waste generated by residents was down four per cent from 2016.



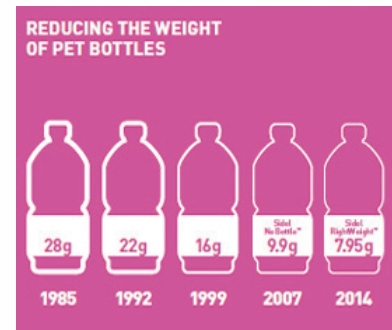
*RECYCLING EXPERIENCED A ONE-TIME INCREASE IN 2014 AS A RESULT OF THE BLUE CART RECYCLING PROGRAM.

Residential Waste Diverted from the Landfill

	2015	2016	2017
City Program Diversion	18%	20%	18%
(Reported in tonnes)			
Blue Cart	7,914	8,074	7,796
Big Blue Bin	1,069	868	806
Leaf and Yard Depots	312	411	0
Household Hazardous Waste	54	91	0
Treecycle	76	44	27
Diversion at the Landfill	4,422	6,293	4,994
Total Diversion	13,847	15,781	13,623
Garbage	64,601	63,439	62,149

Regina's diversion rate decreased in 2017 due to:

- Residential construction permits slowed, resulting in less construction material being diverted at the Landfill.
- The cancellation of the Leaf & Yard and Household Hazardous Waste Depots had a small impact on the diversion rate.
- Christmas trees disposed if at the Treecycle Depots decreased as more residents are opting for artificial trees.
- Recycling tonnage in the Blue Cart and the Big Blue Bin programs has decreased as packaging materials is getting lighter.



Did you know?

$$\% \text{ waste diversion} = \frac{\text{Total tonnes of waste diverted}}{\text{Total tonnes garbage + total tonnes waste diverted}} \times 100$$

Curbside Collection Services

The City of Regina provides solid waste collection services to approximately 65,000 single-family residential properties. At each property, a 360-litre or 240-litre rollout cart is used for garbage collection and a 360-litre cart for recycling collection. Approximately 4,500 residents use the smaller 240-litre garbage cart.

- Garbage carts are **69%** full on collection day
- Garbage cart set out rate is **80%**
- Recyclables placed in garbage carts decreased by **2%**
- Hazardous waste placed in garbage carts increased by **1%**

What's in Your Garbage Cart?

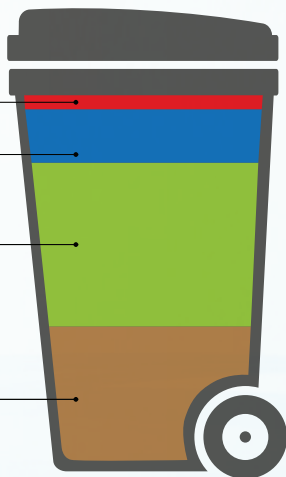
2016

Hazardous Waste 1%

Recyclables 14%

Organics 50%

Garbage 35%



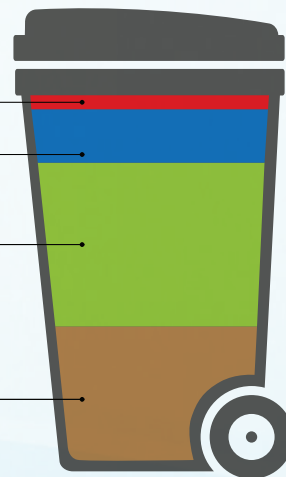
2017

Hazardous Waste 2%*

Recyclables 12%**

Organics 50%

Garbage 36%



* This may be related to the cancellation of Household Hazardous Waste Days in 2017.

** This may be related to an increase in public education and outreach.

Did you know?

On November 20, 2017, the City launched a biweekly garbage collection pilot project during the winter months, as garbage volumes decrease by 30 per cent during this time. Many cities and surrounding communities have successfully moved into biweekly garbage collection. Results from this pilot project will be reported on in 2018.

The City of Regina continued to study what material was being placed in garbage and recycling carts each week. Information from this study is used to inform future services and identify education and outreach opportunities.

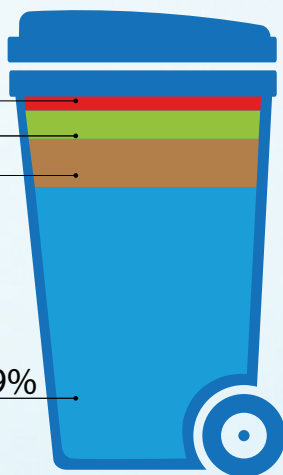
- Recycling carts are **81%** full on collection day
- Recycling cart set out rate is **74%**
- Organics placed in recycling carts increased by **1%**

What's in Your Recycling Cart?

2016

Hazardous Waste 1%
Organics 2%
Garbage 8%

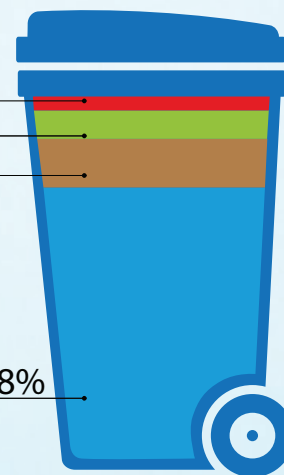
Recyclable Material 89%



2017

Hazardous Waste 1%
Organics 3%*
Garbage 8%

Recyclable Material 88%



** This may be related to the cancellation of the Leaf and Yard Waste Depots in 2017.*

Milk Containers Added to Provincial Program

Milk containers were added to the provincial recycling program, allowing residents to return them to SARCAN depots for a refund. Due to the program change, 34.04 tonnes of refundable milk containers are being taken directly to SARCAN by residents.



Municipal Waste Diversion Across Canada

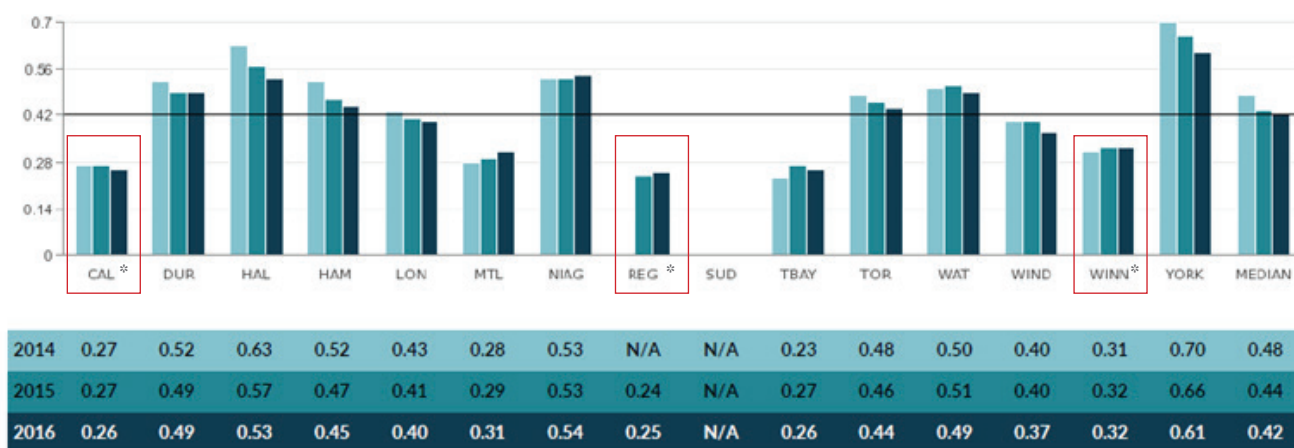
The Municipal Benchmarking Network (MBN) of Canada provides a framework for measuring municipal efficiency and effectiveness on a wide range of services. In comparison to other MBN municipalities, Regina has the lowest diversion rate. The gap between Regina and other municipalities can be attributed to the absence of a curbside collection program for organic material.

Waste management is also heavily influenced by provincial regulations and stewardship programs. The western provinces have relatively high waste disposal and low waste diversion, which is reflective of new waste management strategies on a provincial level.

Figure 34.3 shows 2016 waste diversion results as the 2017 results are not yet available.

Fig. 34.3 Tonnes of Residential Solid Waste Diverted per Household

In 2016, several municipalities reported a decrease in the amount of solid waste (or garbage) diverted from landfills.



Source: SWST235 (Service Level)

*THESE MUNICIPALITIES DID NOT REPORT CURBSIDE COLLECTION PROGRAMS FOR ORGANIC MATERIAL.

Public Outreach and Education

The City continued to educate residents about proper waste and recycling practices in 2017. Approximately 7,500 residents were engaged through face-to-face public education and outreach initiatives including information booths and corporate, community and school presentations. New education material developed in 2017 included a waste and recycling activity book and bean bag toss sorting game.

Increased Social Media Presence

With the growing number of residents following the City of Regina social media channels, the City expanded the use of this communication medium in 2017. Social media is a cost-effective way to educate and engage with Regina residents.

Throughout the year, monthly “Waste Wednesday” and weekly “Unrecyclable Item of the Week” posts were used to provide waste diversion tips to the public. The City also produced an entertaining and educational video series that provides homeowners with key information about the City’s waste services and best practices. These videos have been a very successful way to share waste management tips with residents.

VIDEO SERIES REACH ON SOCIAL MEDIA:

1. Four Easy Steps to Using Your Cart – **Reached 69,500 people**
2. Outdoor Sorting Tips – **Reached 41,100 people**
3. John Goes to the Landfill – **Reached 41,500 people**
4. Flatten Your Recyclables - **Reached 13,800 people**





Waste Wizard

Throughout 2017, the Waste Wizard online search tool was promoted to increase awareness about the tool and how it can help residents put their household waste in the right place. Educating residents how to properly sort their waste will ensure they are only putting acceptable items in their carts and using other disposal options to divert waste from the Landfill.

In summer 2017, a media campaign was launched to promote the search tool. The campaign included print ads, online banners, Facebook ads and five short videos for social media.



FUN FACT

In 2017, 66,200 items were searched on Waste Wizard. The most commonly searched items included leaves, plastic bags, Styrofoam, batteries and motor oil.

Moving Beyond Residential Waste

In 2017, the City of Regina continued to focus on residential waste diversion and began moving forward to divert waste from the industrial, commercial and institutional (IC&I) and construction and demolition (C&D) sectors as well.

Mosaic Stadium Demolition

The City demonstrated its commitment to waste diversion by setting a waste diversion target of 90 per cent for the stadium demolition project. Approximately 29,000 tonnes of waste was diverted from the Landfill, including concrete, asphalt, steel, wood, and memorabilia such as benches and turf that were auctioned off. The City exceeded the 90 per cent diversion target, reaching a diversion rate of 99 per cent.



FUN FACT

The total tonnes diverted is equivalent to the weight of approximately 255,700 professional football linebackers.





City-Owned Facilities Recycling Pilot Project

In 2017, the City kicked off a recycling pilot project at City-owned facilities, which will form the basis of recommendations to Council on a recycling program for non-residential properties. Advancing recycling and waste diversion initiatives into the non-residential sector, supports the City's goal to divert waste from the landfill and aligns with goals outlined in Waste Plan Regina. The City is committed to priorities outlined in *Design Regina: The Official Community Plan* to promote conservation, environmental stewardship and sustainability through the adoption of leading practices in waste management.

Introduction of Public Space Recycling

Currently, 18 per cent of deposit beverage containers sold in Saskatchewan are not being recycled.

The City of Regina received a SARCAN Public Space Recycling Grant in July 2017, which was used to retrofit 26 existing waste containers with recycling bottle baskets throughout the Downtown core and along 13th Avenue in the Cathedral neighbourhood.

These baskets require little to no maintenance as they are intended to be self-servicing, meaning that a passerby can collect the beverage containers from the baskets and bring them to SARCAN for a refund. Results to date show that the bottle baskets are working as intended.



What's Going on at the Landfill?

Converting Landfill Gas to Energy

In January 2017, the City of Regina began selling electricity to SaskPower through the Landfill Gas to Energy Facility. Landfill gas, which is primarily methane, is produced from the decomposition of organic waste in the landfill.

The facility ran for approximately 4,217 hours and produced 4,323.06 megawatt of electricity that was sold to SaskPower in 2017. The electricity generated is enough to power approximately 600 homes. The first year gross revenue was \$393,000.

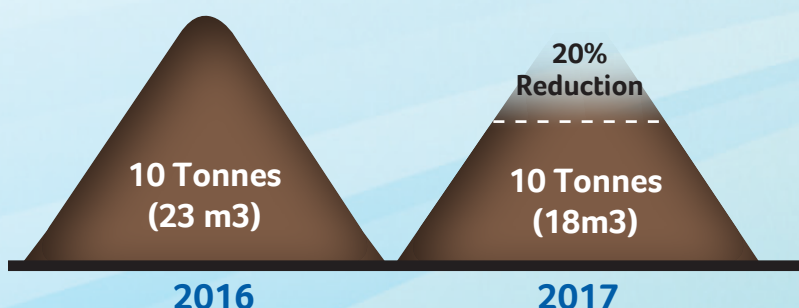


Did you know?

It is estimated that the Landfill Gas to Energy Facility has the potential to reduce greenhouse gas emissions by about 30,000 tonnes per year. This is the equivalent of taking approximately 8,000 cars off the road.

Extending the Life of the Landfill

Operational efficiencies implemented at the landfill have increased landfill space by 20 per cent.



Did you know?

The estimated life remaining in the landfill is 28 years with current programming.

Regina is Adapting

The City of Regina is keeping an eye on upcoming changes to the waste industry. These changes will have an impact on the City's waste management programs going forward.

Changes to the Recycling Market

China, North America's primary importer of recyclable material, imposed a strict new purity standard on materials received in 2017. They are still accepting recyclables from Canada however, they are more stringent on the amount of contamination (unwanted materials) allowed in the recyclables. This will guide the future of processing for material collected through the Blue Cart Recycling Program and Big Blue Bin Program.

Provincial Solid Waste Management Strategy

The Ministry of Environment is developing a strategy that will provide the overarching framework to facilitate and encourage long-term waste management in Saskatchewan. This will guide the City's Solid Waste Master Plan to provide a future roadmap for waste management in Regina.

Provincial Household Hazardous Waste Stewardship Program

The Government of Saskatchewan is consulting on the development of household hazardous waste product stewardship and recycling regulations. The regulations are expected to be finalized in 2018-2019. This will guide the future of household hazardous waste programming in Regina.

Green House Gas Regulation

The Federal Government announced carbon pollution pricing that will be implemented across Canada by 2019. The Provincial Government is developing a plan called "Prairie Resilience: A Made-in-Saskatchewan Climate Change Strategy" to replace the Federal requirement. The City is working with the Provincial Government to determine how emissions from the Landfill will be regulated in the future.

Moving Forward

Over the next few years, the City of Regina will focus on completing the roll out of residential services and develop diversion initiatives for non-residential properties. The City will also continue to provide consistent waste management programming and initiatives.

	2018	2019	2020	2021	2022
UPCOMING INITIATIVES	Curbside Waste Services Funding Policy				
		Organic Waste – Permanent solution service recommendation and implementation*			
		Solid Waste Master Plan			
		Household hazardous waste service assessment and recommendation			
					Waste diversion opportunities at the landfill
	City Facility Recycling Pilot				
		Industrial, commercial and institutional waste diversion service development			
			Construction and demolition waste diversion service development		
	Operate Leaf and Yard Waste and Household Hazardous Waste depots				
	Public education and outreach diversion programming				
CONTINUED INITIATIVES	Monitoring and evaluation of diversion programming				

■ Residential Services ■ Non-Residential Services

*Based on the outcome of the Curbside Waste Services Funding Policy.

City of Regina

