



Solid Waste Management Strategy 2018 ANNUAL REPORT



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► Introduction

Waste management is a complex system encompassing many areas, including environmental protection, government regulation, waste collection, waste reduction and recycling, management of materials, and public education. The County's Solid Waste Management Strategy (Strategy), originally approved in 2010, provides a blueprint for our waste management system, a guide for current operations and long-term planning.

The first update commenced in 2015 – with County Council approving a series of final recommendations in late 2016. At a special meeting held in February 2017, six specific initiatives were approved for further consideration:

- Standard-size garbage containers
- Reduction in garbage limits
- Reduction of double-up days
- Expansion of the green bin program
- Implementation of a rewards program
- New curbside collection programs

All of the initiatives, with the exception of the standard-size garbage containers, were subsequently approved for implementation. Development of recommendations related to improving diversion at County facilities and curbside service enhancements include:

- the rewards program, “Green Bin to Win”, was implemented over the summer of 2017
- beginning in 2018, the overall garbage limit was reduced from a maximum of eight bags to four bags per property weekly and the number of double-up days were reduced
- new curbside diversion programs for textiles and electronics were added in 2018
- our green bin program was expanded to include pet waste in fall 2018.



Additional information on the Strategy Update recommendations was provided to County Council in the following:

- Item CCW 17-087 – Implementation of New Collection Programs (March 14, 2017)
- Item CCW 17-073 – Implementation of a Pilot Rewards Program for Participation in the Curbside Organics Program (March 28, 2017)
- Item CCW 17-113 – Implementation of Garbage Limit Reduction (April 11, 2017)
- Item CCW 17-114 – Implementation of Reduced Double-Up Days (April 11, 2017)
- Item CCW 17-175 – Implementation of Green Bin Expansion (June 13, 2017)
- Item CCW 17-243 – Implementation of Standard Size Garbage Containers (September 26, 2017)
- Item CCW 17-316 – Full Implementation of Standard Size Garbage Containers (October 24, 2017)
- Item CCW 17-363 – Results of Pilot Green Bin Rewards Program (November 28, 2017)

These reports are available at www.simcoe.ca

Waste-Free Ontario Act

Provincial changes that impact the way we manage waste are coming. The Waste-Free Ontario Act, proclaimed in late 2016, is enabling legislation comprised of:

- Resource Recovery and Circular Economy Act;
- Waste Diversion Transition Act; and
- Strategy for a Waste-Free Ontario: Building the Circular Economy

The details will be determined through future provincial regulations, policy statements, and Producer Responsibility programs related to the blue box program, tires, electronics, and hazardous waste. The province will also focus on reducing food waste and increasing organics management through the Food and Organic Waste Framework, released in April 2018.

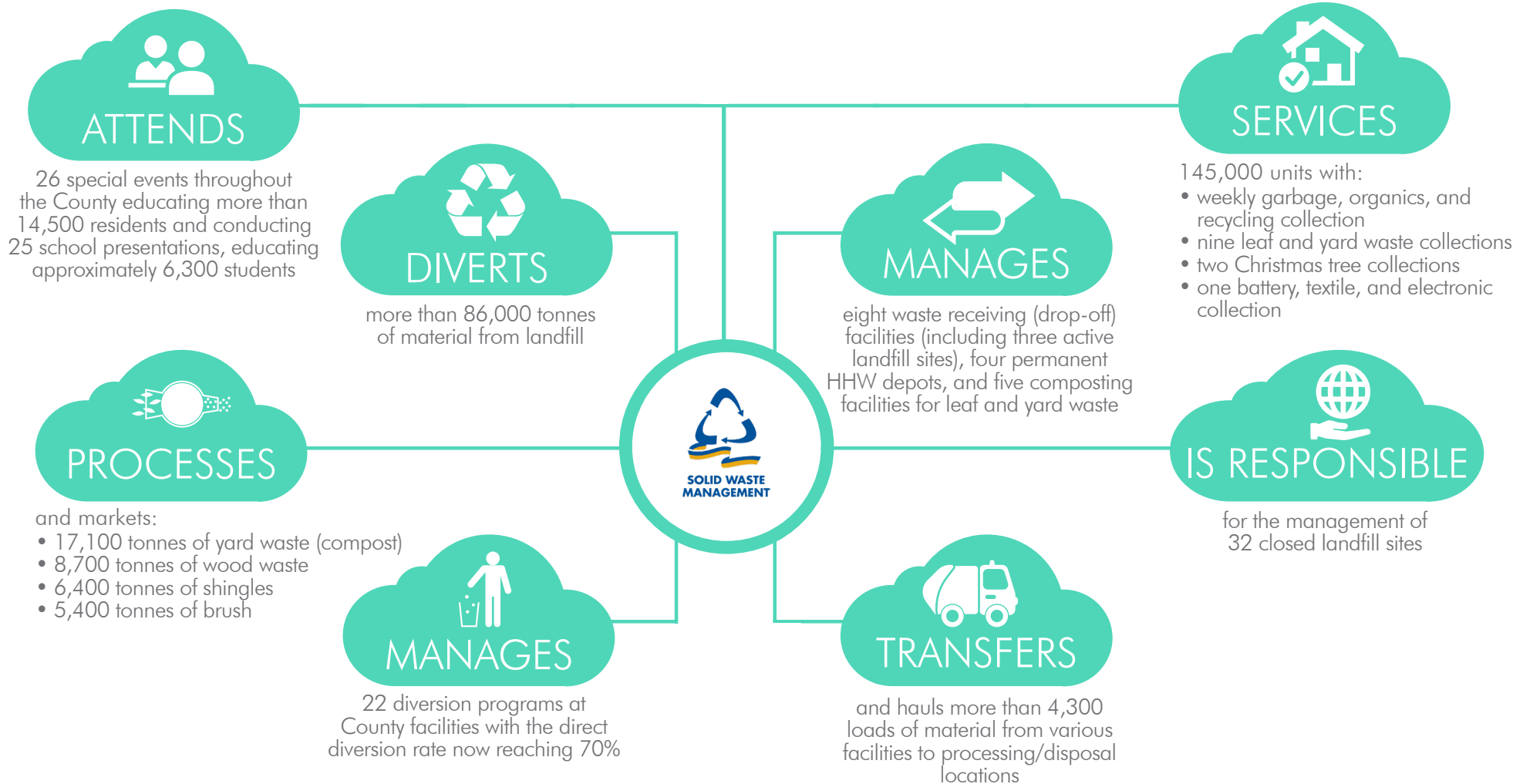
County staff have participated in numerous Ministry of the Environment, Conservation and Parks consultation sessions, Association of Municipalities of Ontario, and other industry information sessions to learn more about the potential impacts of the legislation. We have participated in the Municipal 3Rs Collaborative to further municipal interests related to the blue box program specifically, and have provided comments to various draft documents through the Environmental Bill of Rights Registry, as directed by County Council.

More information on the Waste-Free Ontario Act was provided to County Council in the following:

- Item CCW 17-037 – Provincial Final Draft Strategy for a Waste Free Ontario – Building a Circular Economy (January 24, 2017)
- Item CCW 17-232 – Update on the Waste Free Ontario Act – Early Transition of the Blue Box Program (September 12, 2017)
- Item CCW 18-047 – Update on the Amended Blue Box Program Plan (February 13, 2018)
- Item CCW 18-050 – Update on the Food and Organic Waste Framework (February 13, 2018)
- Item CCW 18-057 – Proposed Tire Regulation (February 13, 2018)

► By the Numbers

**We're working hard to manage your waste.
In an average year, the Solid Waste Management Department:**



► Improving Curbside Collection



Fashion
doesn't
expire

Textiles

In June 2018, a special curbside collection of used clothing and textiles collected more than 100 tonnes of material.

85% of unwanted textiles end up in the landfill. Studies show people are aware of clothing donation but only 15% of textiles are donated. Many believe only re-usable clothing can be recycled, however, imperfect textiles such as those that are torn, stained, or missing buttons may still be recoverable by recycling into rags or recycling of the fibres.



Green Bin to Win

In the summers of 2017 and 2018, the County implemented a successful pilot rewards program to increase awareness and motivate green bin participation. The “Green Bin to Win Tour” ran from May to August at randomly selected neighbourhoods on scheduled collection days. Households participating received a gold star sticker on their green bin and a small prize pack. Households not participating in the green bin program received a message highlighting the importance of green bin usage to encourage participation.



Pet Waste

Starting October 2018, the green bin program began accepting pet waste, kitty litter, and animal bedding (such as material from bird or hamster cages).

Diversion of pet waste is another great step to reducing waste as more than 6,000 tonnes of this material is sent to landfill every year.

Electronics



A new special curbside collection of electronics and small electrical items occurred in September 2018. Ever-evolving technology has not only altered the way products are designed and manufactured, but also how they are sold and consumed. Many devices are considered obsolete soon after leaving the store and are often quickly replaced with a newer model, resulting in significant quantities of electronics ending up in our garbage. This new curbside program makes it easy to keep electronics out of the landfill.

► Serving You Better at Our Facilities



Site 13 – Tosorontio Improvements (pictured above)

In 2016, Site 13 – Tosorontio underwent significant changes with improvements to the site entrance, expanded diversion areas, and the addition of new vehicle scales. The re-design elements have improved safety through better access and egress, increased vehicle queuing space, created more efficient drop-off areas, and resulted in positive response from users. These modifications have improved efficiency and decreased wait times, ultimately encouraging greater participation in drop-off diversion programs, and improving service levels.

Site 16 – Bradford New Household Hazardous Waste Facility

In 2017, construction was completed on a temporary HHW drop-off area at Site 16 - Bradford. The new drop-off area is located to the west side of the site with a separate exit from the site.

The new site layout was designed to alleviate traffic congestion within the site and to improve service levels and safety. Long-term solutions for this site are being developed to better utilize existing space.

Extended Operating Hours at Sites 13 and 16

Effective August 2016, the operating hours have been extended at Site 13 – Tosorontio and Site 16 – Bradford. Both sites are now open Mondays from 8:30 a.m. to 4:30 p.m. These hours are consistent with most of the County's other drop-off facilities which operate six days per week, improving access and convenience.

New Diversion Program – Cooking Oil

A used cooking oil diversion program was initiated at six of the County's drop-off facilities to increase acceptable organic material, including liquid cooking oil, grease, and fats.

Site 11 – Oro Improvements

Site 11 – Oro benefited from the addition of new dual vehicle scales and scale house in 2017. This upgrade was necessary to improve efficiency and decrease wait times, helping encourage greater participation in drop-off diversion programs and improving service levels.

► Managing Garbage

The County now has three remaining operating landfills. In the later part of 2017, the landfill at Site 13 – Tosorontio, reached capacity. However, the site will continue to operate as a public drop-off facility.

Landfill surveys are completed annually to measure the County's remaining landfill capacity. Based on 2018 landfill surveys, projected population growth, and tonnage data, remaining capacity is estimated as follows:

- Site 2 – Collingwood (dry waste) is anticipated to have a remaining lifespan of approximately 6 years (2025 closure).
- Site 10 – Notawasaga and Site 11 – Oro, have a combined remaining lifespan of 9 years (2028 closure).

Preparations are currently underway to prepare for closure of the County's remaining active landfills. This includes development of transfer capacity at the proposed Materials Management Facility (MMF) and, in the interim, seeking short-term options related to transfer, haulage, and disposal/processing. Currently, approximately 60% of the County's curbside-collected garbage is exported.

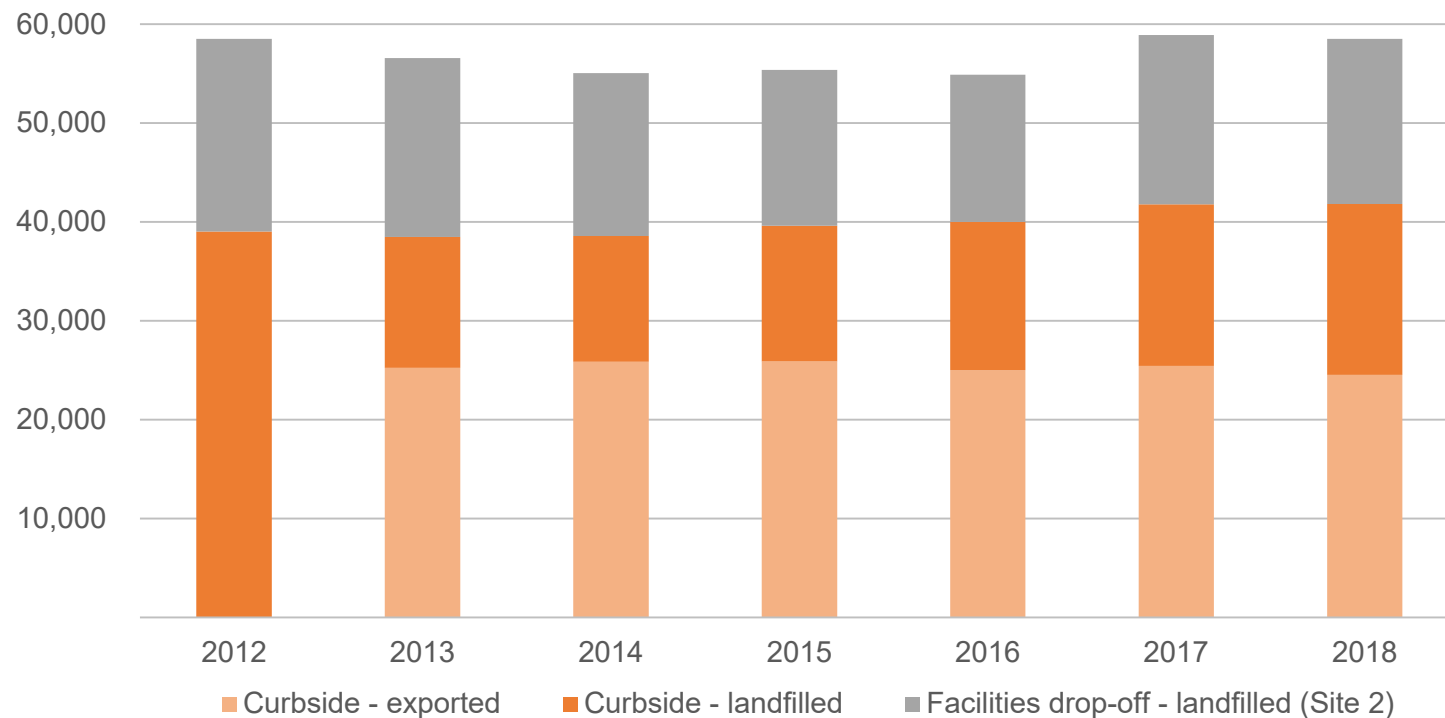
In 2017, our waste export contract with Walker Environmental Group was renewed, with County Council directing that garbage be sent to their Niagara-area landfill, saving approximately \$275,000 annually over an energy-from-waste option.

More information on managing garbage was provided to County Council in the following:

- Item CCW 17-330 – Management of Garbage (November 14, 2017)
- Item CCW 18-108 – 2017 Waste Tonnage Review and Landfill Remaining Capacity Report (April 10, 2018)



Tonnes of Garbage Managed - 2012 to 2018



**Approximately
60%**
of the County's curbside garbage is exported

**Collingwood
Landfill**
is anticipated to have a
remaining lifespan of 6 years

**Nottawasaga
and Oro Landfills**
have a combined remaining
lifespan of approximately 9 years

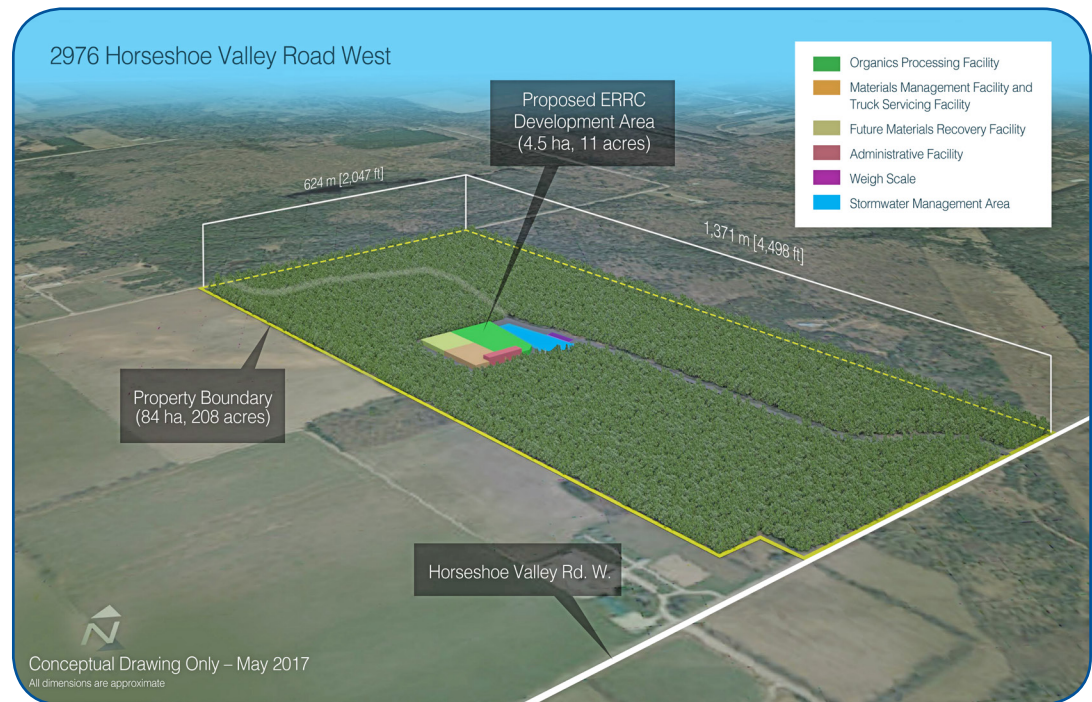
► Environmental Resource Recovery Centre

Waste management in Ontario is changing.

Our Environmental Resource Recovery Centre will allow us to securely manage our own waste, control transfer, haulage and processing costs, and provide greater flexibility to adjust programs to divert more organics from our garbage stream. This facility will primarily house the Materials Management Facility (MMF) and the Organics Processing Facility (OPF). Additional space is allocated for potential truck servicing, public education, and space to potentially sort blue box recycling in the future.

The siting process was completed in March 2016 with direction provided by County Council to develop a co-located facility at 2976 Horseshoe Valley Road West, Springwater. The project is now moving through the land use planning process at the County and local municipal levels. Technical studies were circulated and reviewed by agencies as well as made available to the public. On June 26, 2018, County Council adopted County Official Plan Amendment No. 2, and on January 2, 2019, provincial approval of the amendment was received.

Work will continue with the Township of Springwater on the required local land use changes and additional studies required to support development. This includes plans for compensation planting and fire protection.



For more information, visit
simcoe.ca/ERRC

In fall 2017, business case reports for both the MMF and OPF were presented to County Council.

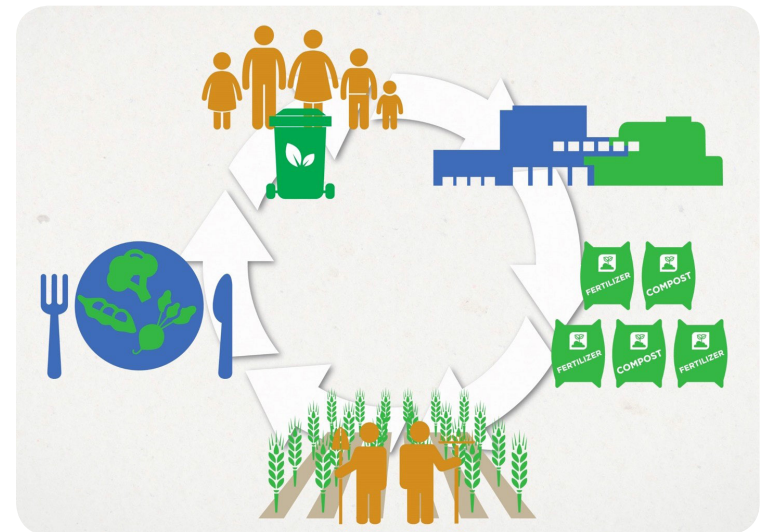
The MMF business case detailed that development of a County facility to manage the long-term transfer of garbage and blue box recycling until 2022 had the lowest total costs over a 20-year period. This report noted that continued reliance on outside contracts for transfer brings risk associated with cost increases, long-term availability, and control over our waste management operations. With limited transfer options in this region, the MMF would provide for secure, long-term management of our garbage.

The OPF preliminary business case, completed by Ernst & Young, recommended that development of a County-owned facility continue – noting the OPF could provide a solution that is advantageous, comparably low risk, financially viable, and in alignment with the County's objectives. Following the planning process, procurement of technology will continue with a final business case presented for County Council's consideration and direction.

More information was provided to County Council in the following:

- Item CCW 17-038 – Environmental Resource Recovery Centre
- Project Update (January 24, 2017)
- Item CCW 17-174 – Environmental Resource Recovery Centre
- Project Update (June 13, 2017)
- Item CCW 17-222 – Environmental Resource Recovery Centre
- OPF Business Case (September 26, 2017)

- Item CCW 17-223 – Environmental Resource Recovery Centre
- MMF Updated Business Case
(September 26, 2017)
- Item CCW 2018-320 – Request for Adoption of County Official
Plan Amendment No. 2 for the
Environmental Resource Recovery Centre
(June 12, 2018)



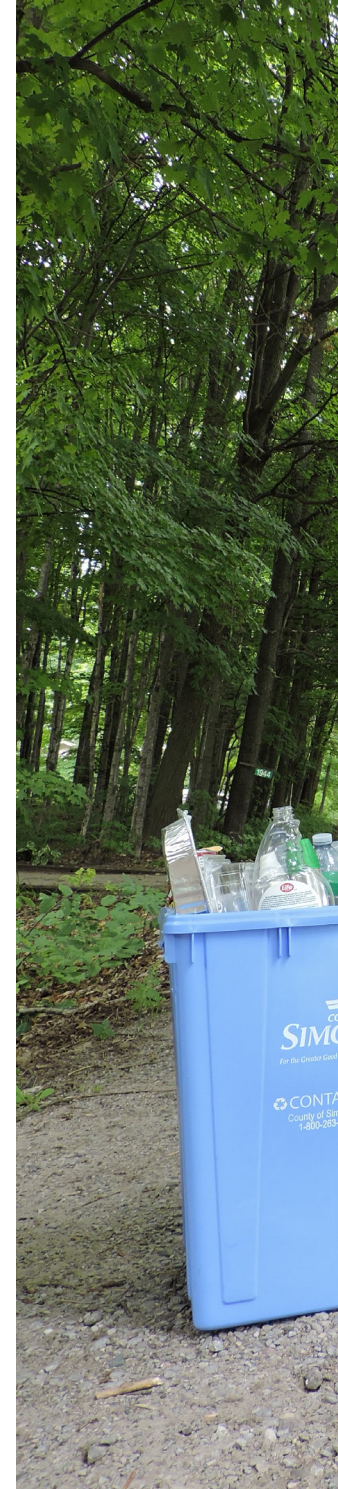
► System Performance — Diversion

53% Curbside Diversion Rate **and** **70%** Facilities Diversion Rate

Material	2013	2014	2015	2016	2017	2018 ¹
Curbside Garbage	38,470	38,575	39,630	39,997	41,776	41,697
Curbside Diversion Tonnes	40,444	41,299	43,533	43,893	44,657	47,148
Total Curbside Tonnes Collected	78,914	79,874	83,162	83,889	86,433	88,846
Direct Curbside Diversion Rate	51%	52%	52%	52%	52%	53%
Facility Garbage	18,100	16,485	15,760	14,902	17,126	16,694
Facilities Diversion Tonnes	30,474	36,149	39,830	39,830	44,895	39,311
Total Facilities Tonnes Collected	48,575	52,633	55,588	55,588	62,021	56,005
Direct Facilities Diversion Rate	63%	69%	72%	72%	72%	70%

Notes:

1. All material categories are inclusive of residuals (where applicable), residual percentages will be reported and applied for the RPRA Datacall process.
2. 2018 Facilities Diversion tonnage considers some fourth quarter projections given timing of report preparation.





In order to receive blue box program funding, municipalities are required to report annually their managed tonnages to the Resource Productivity & Recovery Authority (RPRA).

For the **2017** reporting year, the County ranked **sixth in the province**, with a **diversion rate of 59.6%**, making it the **ninth year in a row** to achieve a place in the **top 10**.

Year	Diversion Rate (%)	Ranking Out of Ontario Municipalities - Diversion	Ranking Out of Ontario Municipalities - kg/capita Disposed
2018	2018 Datacall results not available at time Annual Report was prepared		
2017	59.6	6 of 109	31 of 109
2016	60.7	2 of 105	25 of 105
2015	60.5	5 of 243	50 of 243
2014	59.0	5 of 237	48 of 237
2013	55.7	7 of 226	51 of 226
2012	57.6	7 of 230	54 of 230
2011	56.9	4 of 231	23 of 231
2010	58.4	2 of 223	15 of 223
2009	57.1	2 of 216	15 of 216
2008	46.9	14 of 216	22 of 216
2007	40.5	42 of 206	59 of 206

Promotion and Education

The Solid Waste Management Strategy highlights the value of promotion and education and indicates that sustained communication programs are a best practice. Over 2018, the Solid Waste Management team:

- attended 26 events throughout the County with the Mobile Education Unit;
- visited 23 schools to talk about diversion and our Learning & Living Green program;
- presented to various community groups and summer camps;
- communicated with residents via our web page (with more than 471,300 views annually), social media, and our waste reminder tool for relaying waste management information; and
- as per the Strategy recommendation, spent approximately \$5.30 per household on our communications programs. Expenditures included print material such as the waste management calendar, newsletters, battery, clothing and electronics bags, and radio/television advertising.

The “Grow Your Green Bin, Not Your Garbage” campaign was initiated in 2018 to promote our green bin organics program – our greatest opportunity for reducing garbage. With a BIG message to keep food and organic waste from the landfill, our BIG green bin travelled throughout the County over the summer raising awareness about the importance of diversion.

Highlights of the campaign included:

- various social media which resulted in an impressive 200,000 Facebook video views, 134,000 social impressions and more than 950,000 digital impressions
- outreach through the summer and early fall at 17 events (many over multiple days) across the County.



► Performance Targets

Residential Waste Diversion

Subsequent to County Council direction on various Strategy initiatives and recommendations presented in the 2016 Strategy Update, the 2010 diversion targets of 71% by 2020 and 77% by 2030 were revised to **62% diversion rate by 2020**.

Long-term targets (2030) will be addressed through future Council workshops and the next Strategy Update when it is anticipated that the implications of the Waste-Free Ontario Act will be better understood. Additional information on the diversion targets was provided to County Council in the following:

- Item CCW 18-166 - Waste Diversion Target (May 22, 2018)

Per Capita Waste Reduction

In 2011, County Council approved a minimum 1% annual decrease be established as the per capita waste reduction target. Based on the results of the 2017 Datacall submission, the overall waste generation rate per capita has increased from 394 to 476 kg/capita (21%) - an increase of 2.6% per year since the Strategy's inception in 2010.

The Strategy outlined further restrictions on curbside garbage set-outs would be necessary to increase diversion rates and reduce waste generation.

► Room for Improvement

Results from the 2017/2018 curbside seasonal audits indicate more than 65% of the material found in a typical residential garbage bag could have been diverted through the County's existing curbside blue box recycling and green bin programs. The illustration below presents the composition of a typical bag of garbage destined for disposal from a County of Simcoe household.

The greatest opportunity for improvement remains the green bin program with 39% of the average garbage bag being food waste and other divertible green bin materials, such as tissues, paper towels, paper cups, and plates.





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