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**From:** Van Dusen, Regina <[Regina.VanDusen@york.ca](mailto:Regina.VanDusen@york.ca)> **On Behalf Of** Regional Clerk  
**Sent:** October 26, 2020 2:07 PM  
**To:** Aurora Clerks General Inbox <[Clerks@aurora.ca](mailto:Clerks@aurora.ca)>; Aguila-Wong, Christine <[caguila-wong@markham.ca](mailto:caguila-wong@markham.ca)>; [clerks@newmarket.ca](mailto:clerks@newmarket.ca); EG Clerks General Inbox <[clerks@eastgwillimbury.ca](mailto:clerks@eastgwillimbury.ca)>; King Clerks General Inbox <[clerks@king.ca](mailto:clerks@king.ca)>; Rachel Dillabough <[rdillabough@georgina.ca](mailto:rdillabough@georgina.ca)>; Richmond Hill Clerks General Inbox <[clerks@richmondhill.ca](mailto:clerks@richmondhill.ca)>; Vaughan Clerks General Inbox <[clerks@vaughan.ca](mailto:clerks@vaughan.ca)>; WS Clerks General Inbox <[clerks@townofws.ca](mailto:clerks@townofws.ca)>  
**Subject:** Regional Council Decision - 2019 Annual Waste Management Report

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On October 22, 2020 Regional Council made the following decision:

1. The Regional Clerk circulates this report to the Clerks of the local municipalities and the Minister of the Environment, Conservation and Parks.

The original staff report is attached for your information.

Please contact Laura McDowell, Director, Environmental Promotion and Protection at 1-877-464-9675 ext. 75077 if you have any questions with respect to this matter.

Regards,

**Christopher Raynor** | Regional Clerk, Regional Clerk's Office, Corporate Services

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Our Mission: **Working together to serve our thriving communities – today and tomorrow**

# **The Regional Municipality of York**

Committee of the Whole  
Environmental Services  
October 8, 2020

Report of the Commissioner of Environmental Services

## **2019 Annual Waste Management Report**

### **1. Recommendation**

The Regional Clerk circulates this report to the Clerks of the local municipalities and the Minister of the Environment, Conservation and Parks.

### **2. Summary**

This report provides Council with a copy of the 2019 Annual Waste Management Report (Attachment 1) which summarizes the Region's waste reduction and diversion initiatives and provides an update on implementation of the SM4RT Living Integrated Waste Management Master Plan (SM4RT Living Plan). The report is part of the Region's enhanced approach to tracking, measuring and reporting on the performance of its waste management system. As a result of the work completed on the SM4RT Living Plan 5-year Review and Update, this new approach combines two previous annual reports:

- Annual Solid Waste Diversion Memo provided information on total material collected, processed and diverted
- Balanced Scorecard summarized progress toward goals set out in the SM4RT Living Plan

The new combined report will be submitted prior to the November 3<sup>rd</sup> deadline each year to the Ministry of the Environment, Conservation and Parks to satisfy the Durham York Energy Centre Environmental Assessment condition for diversion reporting.

Key Points:

- The Region and its local municipal partners achieved 94% diversion from landfill in 2019, exceeding the Official Plan goal of 90% waste diversion from landfill. This includes all tonnes collected through local municipal curbside programs, waste depot diversion programs and tonnes managed through energy-from-waste
- With the move to producer responsibility for the blue box program, reporting of waste generation rates now focuses on two key streams in curbside collection (organics and garbage)

- Organics and garbage generation rates have remained steady over the past five years
- York Region continues to prepare for full transition of the Blue Box Program to producer responsibility
- Although this is the 2019 report, COVID-19 impacts are introduced here as the pandemic has impacted the Region's waste management system and trends might look different in the 2020 report

### 3. Background

#### **New reporting approach will help the Region measure progress efficiently and inform strategic decisions**

As approved by Council in [April 2020](#), the updated SM4RT Living Plan establishes an aspirational vision and long-term targets to move towards a world without waste. The Plan identifies the following three objectives with relevant key actions:

- Successfully navigate legislative changes
- Use resources and infrastructure more strategically to achieve SM4RT Living
- Inspire people across the Region to embrace SM4RT Living and advance the circular economy

One outcome of the update is a streamlined approach to reporting which is achieved by combining the SM4RT Living Balanced Scorecard Report and Annual Solid Waste Diversion Memo. The 2019 Annual Waste Management Report (Attachment 1) provides an update on waste generation trends as it relates to new targets approved in the review and update, and meets reporting requirements to satisfy the Durham York Energy Centre Environmental Assessment condition for diversion reporting.

#### **Waste generation rate is now focused on organics and garbage streams only**

The waste generation rate has been the key metric used to measure progress toward the SM4RT Living waste reduction target of 289 kg/capita by 2031. This rate was previously calculated based on all of the material managed through local and Regional waste programs, including waste depots. Having a single metric that included many diverse sources of material made it challenging to interpret trends and inform decision-making. With the move to full producer responsibility, York Region will focus on two key streams (organics and garbage) that will continue to be municipally managed and which represent a significant portion of the net operating budget for waste management. These streams align with priority actions in the Plan, including food waste reduction, reuse and repair and minimizing single-use items. New targets were identified for these streams:

- Green bin generation rate: 71 kilograms per resident by 2031, a 15% reduction from the baseline of 84 kilograms in 2014

- Garbage generation rate: 66 kilograms per resident by 2031, a 20% reduction from the baseline of 82 kilograms in 2014

Blue Box generation will still be tracked at the York Region level however no target has been set due to the expected shift to full producer responsibility for that stream by the end of 2025.

## 4. Analysis

### **New and ongoing SM4RT Living Plan actions underway**

Since the SM4RT Living five-year update was approved in April, work on priority ongoing and new actions continues despite challenges created by the pandemic.

- Collaborating with community partners such as York Region Food Network, Longos and York Farm Fresh to share tips on reducing food waste while cooking more at home
- Working on eligibility requirements and selection criteria for the Circular Economy Initiatives Fund with program launch anticipated in 2021
- Developing procurement documents for contracted source separated organics processing with the projected release in Q1 2021

### **Continue to exceed the Regional Official Plan target with 94% diversion from landfill in 2019**

Together, York Region and its local municipal partners achieved 94% diversion from landfill in 2019 continuing to exceed the Official Plan goal of 90% waste diversion from landfill. The Region's diversion from landfill rate includes all tonnes collected through local municipal curbside programs, waste depot diversion programs and tonnes managed through energy-from-waste.

### **York Region leads large urban municipalities in the Resource Productivity and Recovery Authority (RPRA) diversion ranking**

This provincial diversion rate reported by the RPRA differs from the York Region diversion from landfill rate (referred to above), as energy-from-waste is not provincially recognized as diversion. York Region and its local municipal partners continue to be leaders in Ontario in sustainable waste management. Since 2012, York Region has ranked first in the large urban municipal diversion category, verified through the RPRA Annual Datacall. In 2018 (the latest year for which we have verified data) York Region continued this leadership with the highest verified diversion rate of 67.5% in the large urban municipal diversion category (Table 1). York Region's reported 2019 diversion rate of 66% has been submitted to the RPRA for verification. As outlined later in this report, the decreasing diversion rate is a result of increasing contamination in the blue box stream.

**Table 1**

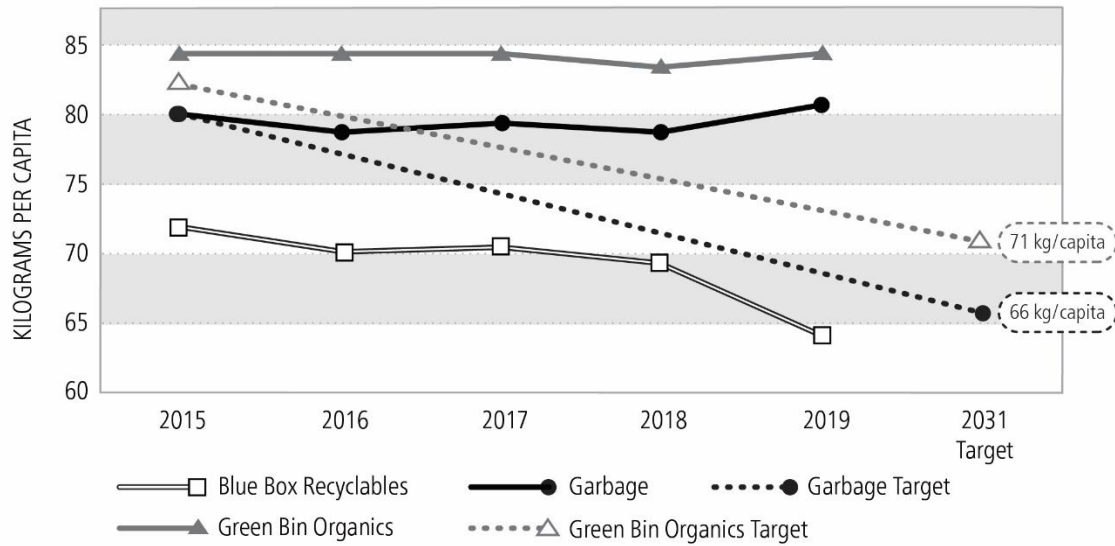
**2018 Large Urban Municipal Verified Diversion Rankings**

Rank	Municipality	Diversion Rate
1	<i>Regional Municipality of York</i>	67.5%
2	<i>Regional Municipality of Halton</i>	55.4%
3	<i>City of Toronto</i>	50.7%
4	<i>Regional Municipality of Peel</i>	50.3%
5	<i>City of London</i>	44.1%
6	<i>City of Hamilton</i>	35.9%

**Five year trends show that green bin generation rates are steady but blue box contamination is impacting the garbage generation rate**

As shown in Figure 1, green bin generation rates demonstrate a steady trend in the Region. Further analysis of green bin generation rates shown in Attachment 1 (pages 6 – 7) reveals a downward trend in some cities and towns which can be attributed to efforts to reduce avoidable food waste. Although the garbage generation rate is demonstrating a similar trend, it is showing a slight increase in 2019. This was the result of efforts to control contamination from inbound blue box loads. In April 2019, measures were put in place at the Earl Turcott Waste Management Centre in the City of Markham to address growing contamination issues in the blue box stream. Approximately 1,880 tonnes of contaminant material was removed from single family and multi-residential blue box loads received from the southern three local municipalities and placed directly into the garbage. The redirected material is equivalent to a 1.6 kg/capita increase in the Region’s overall garbage generation rate.

**Figure 1**  
**Waste Generation Rate from 2015 - 2019**



### **Two-stream waste collection for multi-residential units is also affecting Vaughan's garbage generation rate**

In 2019, the six northern municipalities had a garbage generation rate that was lower than their 2015 rate while the southern three municipalities all recorded an increase in their garbage generation rates (consistent with the Region's rate). The City of Vaughan had the most notable increase of all the municipalities. Between 2015 and 2018, Vaughan's garbage generation rate was consistent, hovering between 87 kg/capita (2015) and 88 kg/capita (2018). In 2019, the generation rate increased significantly to 94 kg/capita. Some of this was due to blue box contamination reduction measures as mentioned previously, however, even if these measures were not implemented, Vaughan's garbage rate would be 92 kg/capita, a large increase when compared to the Cities of Markham and Richmond Hill.

In 2019, eight multi-residential buildings with a total of 2,539 units were added to Vaughan's two-stream multi-residential collection program and this may have contributed to this increase. Waste generation rates are based on total population so the population of these buildings was counted in past waste generation rates however the tonnage they produced was not being collected by Vaughan and processed by York Region. As these buildings were added to the system, they added to the tonnage managed but did not increase the population, resulting in an increase in the per capita waste generation rate. These buildings do not receive organics collection, so the impact on the garbage generation rate is amplified as it includes both organics and garbage.

## **York Region makes program changes to align with Ontario's move to extended producer responsibility**

The evolving recycling landscape in Ontario impacted operations in some areas of the Region's waste management system in 2019. In January 2019, the Used Tire Collection Program transitioned to full producer responsibility. York Region partnered with the Regions of Peel and Halton on a co-operative agreement to jointly procure the services of Evolve Recycling for the pick-up, transportation, processing and recycling of tires collected at the Region's depots. Joint procurement helped reduce costs and leverage total tonnages of tires collected by the three Regions. This contract was initially for a 12-month term with allowances for four additional one-year extensions.

There was a 51% increase in tonnage of tires collected at the Region's depots in 2019. This increase can be attributed to changes the depots have made due to the new Regulation. Previously, the depots collected a maximum of four tires per day from residential customers only. Under the new regulation, they accept up to ten tires per day per customer from both residential and small business customers.

Single-use batteries fully transitioned to producer responsibility in June 30, 2020. Staff have been actively involved in consultations on the development of the regulation and program plans for the transitioned battery program. As the program rolls out, the Region will continue to monitor and report on program impacts.

## **York Region has remained flexible in its response to COVID-19 system impacts**

During the COVID-19 pandemic, staff continue to demonstrate flexibility and innovation as the Region continues to serve and engage its residents. In addition to service level changes, staff leveraged relationships with community partners to share waste reduction messaging and continued to explore new ways to stay connected with residents. It is important to note, while garbage and green bin generation reported for 2019 is encouraging, impacts from COVID-19 will undoubtedly influence trends moving forward.

A significant waste impact relating to COVID-19 is higher than typical tonnages at the curb. Between January and July 2020, garbage and green bin tonnage increased by 10% and 11% respectively over the same period last year with most of the increase happening at the onset of the state of emergency between March and July. Increases, mainly due to population growth, between 2018 and 2019 were 5% for garbage and 1.5% for green bin. COVID-19 related increases are more than double and likely result from more people cooking, working and studying at home during the pandemic. This trend is also seen in the blue box stream, where tonnages increased by 1% between January and July 2020. When compared with the same period in 2019 this is significant growth compared to the 4.5% reduction in tonnage in the previous year.

The full magnitude and duration of this impact is unclear at this time and will be monitored closely by both Regional and local municipal staff. The Region has been conducting audits and is developing a survey to understand the long-term impacts of COVID-19. Results of these initiatives will be shared with Regional Council in the Annual Waste Management Report in 2021.

## 5. Financial

### **The Region's waste services provide great value to residents for less than \$1 per day**

The cost for delivering all waste management services in York Region, including the SM4RT Living Plan, curbside collection, processing, depot operations and education services is approximately \$300/household per year or less than \$1 per day. This is substantially less than comparable utilities such as energy and natural gas therefore demonstrating great value to residents.

The SM4RT Living Plan also recommends capital investments to improve the efficiency and sustainability of the integrated waste management system. In 2019, a total of \$1.4 million was invested in capital upgrades at the Materials Recovery Facility to reduce contamination within the mixed paper bales, allowing more material to be recovered and marketed. The long term capital outlook includes funding to support expanded processing capacity for organics and residual waste that maximizes resources and energy recovery and reduces greenhouse gas emissions.

### **Council's environmental leadership emphasizes waste reduction and reuse as well as maximizes current diversion programs**

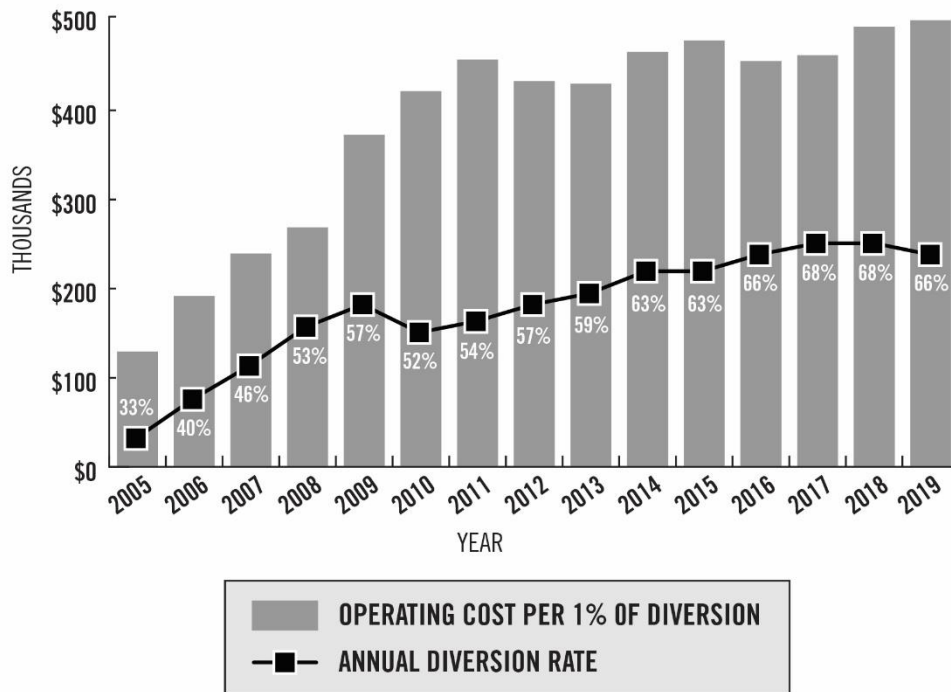
A key reason the Region emphasizes waste reduction and reuse is the growing cost and complexity of waste diversion. Staff will continue to drive diversion programs to maximize the Region's diversion standing in the province. Due to various end market challenges and restrictions, it has become increasingly difficult to divert recyclables. While the green bin program is well established in the Region, it is also costly to manage given the magnitude of the tonnes and the cost per tonne to process. Council's environmental leadership combines cost-effective diversion with waste prevention to leverage and extend the life of waste management infrastructure and also to reduce operating costs.

Figure 2 shows that over the past 14 years with increased diversion performance we have become a leader in waste management; along the way the cost of increasing the diversion rate by one percentage point has gone from \$129,000 to \$494,000.

This underscores the need to focus on reduction and reuse in addition to maximizing current diversion programs to strive for economic sustainability over the long term. Reducing the tonnage of waste that must be processed is the best way to ensure cost-effectiveness in the Region's waste management system.



**Figure 2**  
**Cost per percent of diversion**



### **York Region continues to invest in contamination reduction measures in the Blue Box Program**

Increasing blue box contamination and stricter quality requirements of overseas end markets are driving up Blue Box Program costs and risk. As reported to Council [in June](#), the Region and its local municipalities have indicated a preference to transition to full producer responsibility in 2025. Until then, the Region and its local municipal partners will continue efforts to reduce contamination in the blue box stream. In addition to the capital investment mentioned above, more staff were hired to remove and reject contaminated recyclables.

In the 2019 Potential Service Adjustment report to Council, the Region committed to working with local municipalities, particularly the southern cities, to consistently implement curbside enforcement to help reduce contamination rates. It was estimated that such efforts could help the Region realize savings of approximately \$600,000 annually. As outlined below, efforts are underway however it is unclear whether the Region will achieve these savings as COVID-19 has led to PPE related waste in the blue box and a pause in staff screening of blue box recyclables at the Earl Turcott Waste Management Facility due to safety concerns.

## **Financial Impacts of COVID-19 still unknown**

The increased waste tonnage during the state of emergency that was declared in York Region during the COVID-19 pandemic has impacted the waste management budget in 2020. As of the end of July, the impact of COVID-19 to blue box, garbage and green bin tonnage is approximately \$1 million on net operating costs. The COVID-19 impact by the end of 2020 is estimated to be \$2.1 million. Waste depot programs and implementation of some of the SM4RT Living programs have also been impacted. It is uncertain how tonnage and blue box contamination will change as schools and workplaces reopen and mandatory mask policies take effect. COVID-19 pressures will continue to be identified throughout the 2021 budget process with staff continuing to monitor the situation and assess the associated financial impacts.

## **6. Local Impact**

### **Continued combined efforts between the Region and local municipalities is key to reducing Blue Box contamination**

In 2019, York Region continued to collaborate with its local municipal partners to manage blue box contamination. A targeted effort was made to ensure clear and consistent messaging across cities and towns regarding top contaminants of the blue box stream. Local municipalities worked with the Region to share this message through their communication channels such as social media, roadside signs and Recycle Coach.

A significant focus in 2019 was to increase curbside enforcement and education. The Town of Newmarket led a campaign in which it conducted random spot checks of blue bins at the curb and provided homeowners with door hangers congratulating them on recycling correctly or providing reminders on materials that should not be placed in the blue box. Several other local municipalities are looking at similar tactics.

In 2020, COVID-19 related waste such as masks and gloves began appearing in the Blue Box. Local municipalities continue to work with their collection contracts to sticker and leave behind blue boxes with visible contamination. York Region is sharing data from contamination audits to guide messaging and track impacts. The Region is working with its local municipalities on an ongoing strategy to address contamination from COVID-19 related changes and broader ongoing contamination concerns.

Regional staff continue to engage local municipal partners requesting a boosted effort, particularly in the southern three municipalities where blue box contamination is highest; these communication efforts are focused on garnering more support and alignment of efforts in curbside enforcement. More information will be shared in the 2020 Annual Waste Management Report in Q2 2021.

## **Collaboration with local municipal and community partners continues to drive reduction and reuse programs**

The Region remains committed to educating and motivating residents to make informed decisions about waste reduction and reuse. Through collaboration with municipal and community partners, expansion of successful programs continues. The Town of Newmarket officially launched a municipal textile program in 2019 with bins at three municipal facilities to help collect and divert textiles from the garbage stream. Textile collection bins were added at the McCleary Court and Elgin Mills Community Environmental Centres (CECs) and the Georgina Transfer Station, making textile diversion easily accessible across all of York Region. The 2019 Annual Waste Management Report (Attachment 1- pages 24 - 25) showcases program efforts across the Region, including the opening of the first Lendery in Markham Public Library, new partnerships to support food waste reduction, a highly successful backyard composter sale and a growing number of Repair Cafés hosted by libraries across the Region.

All waste events and programs requiring in-person interactions have been on hold since March 2020 due to social distancing guidelines instituted to prevent the spread of COVID-19. With restrictions being lifted, staff are working with local municipal and community partners to safely restart programs such as Curbside Giveaway days, the Lendery and Repair cafes as these programs play an important role in reducing tonnes entering the system.

## **7. Conclusion**

### **York Region 2019 results show progress toward SM4RT Living targets**

Performance of the Region's integrated waste management system in 2019 reveals that York Region remains a leader in the field. Based on diversion rates as well as the commitment to waste reduction and reuse efforts, the Region and its local municipal partners are well placed to move towards its visionary goal of a world with no waste. COVID-19 has had some impacts on 2020 tonnages and may impact waste generation trends in the short to medium term; results will be shared with Council in 2021.

New reporting parameters outlined in the updated SM4RT Living Plan will result in a more efficient reporting process with more meaningful and useful data for Council, the Ministry of Environment, Conservation and Parks, local municipal partners, residents and stakeholders. Shifting how the Region reports on waste generation rates will make it easier to monitor progress towards the new green bin and garbage generation targets. Generation rates have already recorded a stable or downward trend in most local municipalities and this is encouraging as the Region moves towards its 2031 targets.

For more information on this report, please contact Laura McDowell, Director, Environmental Promotion and Protection at 1-877-464-9675 ext. 75077. Accessible formats or communication supports are available upon request.

Recommended by: **Erin Mahoney, M. Eng.**  
Commissioner of Environmental Services

Approved for Submission: **Bruce Macgregor**  
Chief Administrative Officer

September 19, 2020  
Attachments (1)  
eDocs#11052403

# 2019 ANNUAL WASTE MANAGEMENT REPORT



## **PARTNERSHIPS DRIVING**

REDUCTION  
REUSE  
RECYCLING  
RECOVERY

# The Regional Municipality of York

## Waste Facilities

- 1 Public Yard Waste Drop-off
- 2 Regional Household Hazardous Waste Depot
- 3 Regional Recycling Depot
- 4 Transfer Station
- 5 Local Municipal Recycling Depot
- 6 Community Environmental Centre
- 7 Waste Management Centre (not open to public)

### WASTE DEPOT HOURS

- 1 **Bloomington Yard Waste Depot**  
 April 1 to November 30  
 Monday to Saturday: 7:30 a.m. to 5 p.m.  
 Sunday: Closed

December 1 to March 31  
 Monday to Friday: 8 a.m. to 4 p.m.  
 Saturday and Sunday: Closed

- 4 **Earl Turcott Transfer Station**  
 Monday: 8 a.m. to 7 p.m.  
 Tuesday to Friday: Closed  
 Saturday: 8 a.m. – 5 p.m. (Year Round)  
 Sunday: 10 a.m. – 3 p.m. (Closed December – April)

- 2 **East Gwillimbury Household Hazardous Waste and Recycling Depot**

- 3 Monday: 8:30 a.m. to 4:30 p.m.  
 Tuesday and Wednesday: Closed  
 Thursday to Saturday: 8:30 a.m. to 4:30 p.m.  
 Sunday: 8:30 a.m. to 3:30 p.m.

- 2 **Elgin Mills and McCleary Court Community Environmental Centres**

- 6 Monday and Tuesday: Closed  
 Wednesday to Saturday: 8:30 a.m. to 4:30 p.m.  
 Sunday: 8:30 a.m. to 3:30 p.m.

- 1 **Georgina Transfer Station, Household Hazardous Waste and Recycling Depot**

- 3 Monday to Saturday: 8 a.m. to 5 p.m.  
 Sunday: Closed  
 4 HHW Depot Open Tuesday and Saturday

- 2 **Markham Household Hazardous Waste Depot**

Monday: 8:30 a.m. to 4:30 p.m.  
 Tuesday and Wednesday: Closed  
 Thursday to Saturday: 8:30 a.m. to 4:30 p.m.  
 Sunday: 8:30 a.m. to 3:30 p.m.

- 5 **Markham Unionville Depot**

Monday: 10 a.m. to 6 p.m.  
 Tuesday: 12 p.m. to 8 p.m.  
 Wednesday: Closed  
 Thursday: 12 p.m. to 8 p.m.  
 Saturday: 8 a.m. to 4 p.m.  
 Sunday: Closed

- 5 **Markham Village Depot**

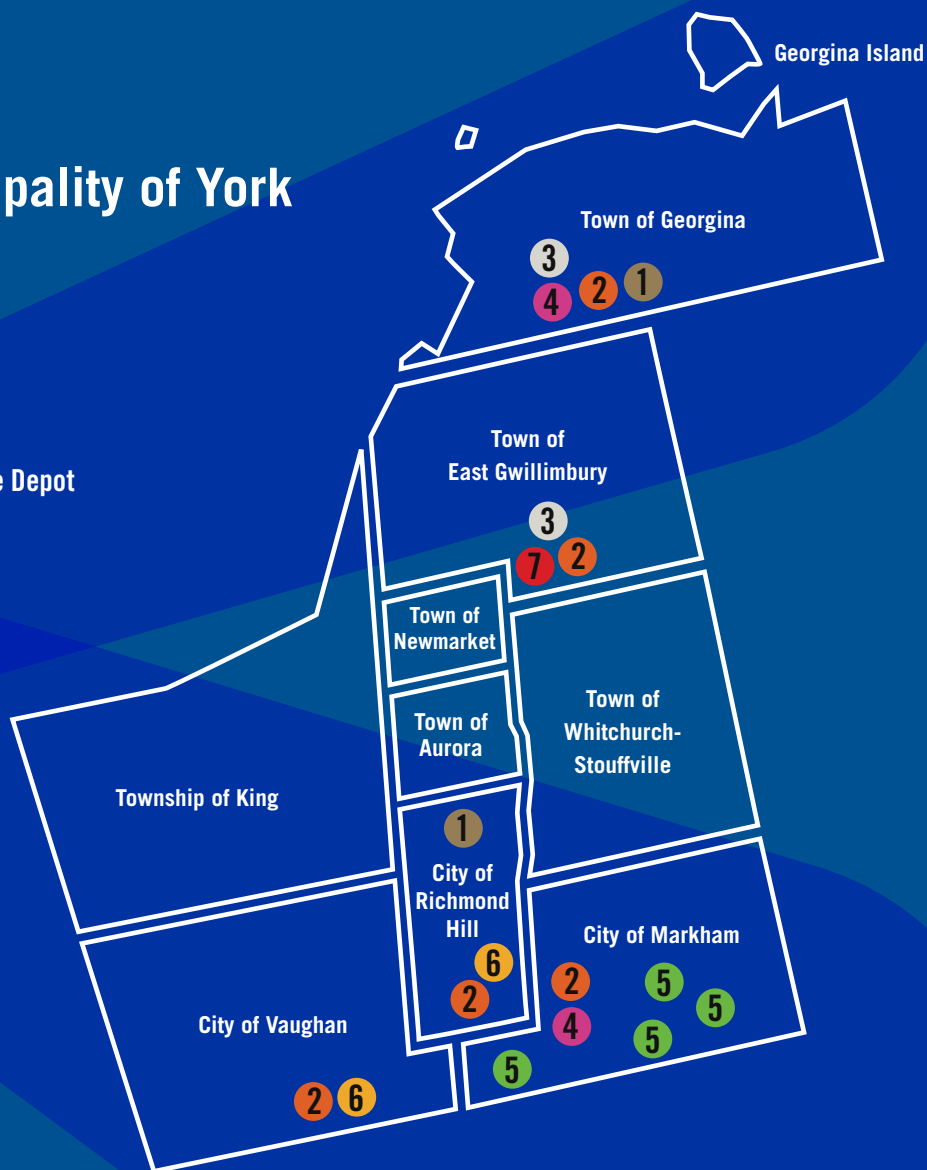
Monday: 8 a.m. to 4 p.m.  
 Tuesday: Closed  
 Wednesday: 8 a.m. to 4 p.m.  
 Thursday: 12 p.m. to 8 p.m.  
 Friday: 8 a.m. to 4 p.m.  
 Saturday: 8 a.m. to 4 p.m.  
 Sunday: Closed

- 5 **Milliken Mills Depot**

Saturday: 9 a.m. to 3 p.m.

- 5 **Thornhill Depot**

Monday: Closed  
 Tuesday: 12 p.m. to 8 p.m.  
 Wednesday: 8 a.m. to 4 p.m.  
 Thursday: 12 p.m. to 8 p.m.  
 Friday: Closed  
 Saturday: 8 a.m. to 4 p.m.  
 Sunday: 9 a.m. to 3 p.m.







# INTRODUCTION

The Regional Municipality of York's 2019 Annual Waste Management Report summarizes York Region's integrated waste management system and reports on progress of the Region's SM4RT Living Integrated Waste Management Master Plan (SM4RT Living Plan).

Over the past few years, York Region has provided two annual reports for waste management performance:

1. The Annual Solid Waste Diversion Report which provided information about the amount of overall material collected, processed and diverted
2. The Balanced Scorecard which summarized progress toward goals set out in the SM4RT Living Plan

These two reports will now be combined and shared with York Regional Council and submitted annually to the Ministry of the Environment, Conservation and Parks to satisfy the Durham York Energy Centre Environmental Assessment condition for diversion reporting.

York Region consists of nine local cities and towns and provides a variety of programs and services to almost 1.2 million residents and 54,000 businesses with 650,000 employees.

York Region, in partnership with its local cities and towns, continues to implement innovative waste reduction, diversion and disposal programs to meet the needs of our growing communities. Waste management services are delivered to residents through a two-tier structure where local cities and towns manage curbside waste collection and York Region processes and disposes of waste.

As reported in 2019, the Region has achieved the highest diversion rate for a large urban municipality in the Resource Recovery and Productivity Authority data call every year since 2012. Starting in 2016, the Region has surpassed the Regional Official Plan target with over 90% of waste diverted from landfill.

In 2019, the Region consulted with various stakeholders to review and update the SM4RT Living Plan. The Plan was first developed in 2013 and included an update cycle once every five years to check progress, evaluate successes and consider key learnings to enhance future approaches. During the

update process, experiences of local municipal partners along with global scans of current waste challenges and innovations helped shape objectives for the next five years. The updated Plan was approved by York Regional Council in April 2020 with the following key objectives:

- Successfully navigate legislative changes
- Use resources and infrastructure more strategically to achieve SM4RT Living
- Inspire people across the Region to embrace SM4RT Living and advance the circular economy

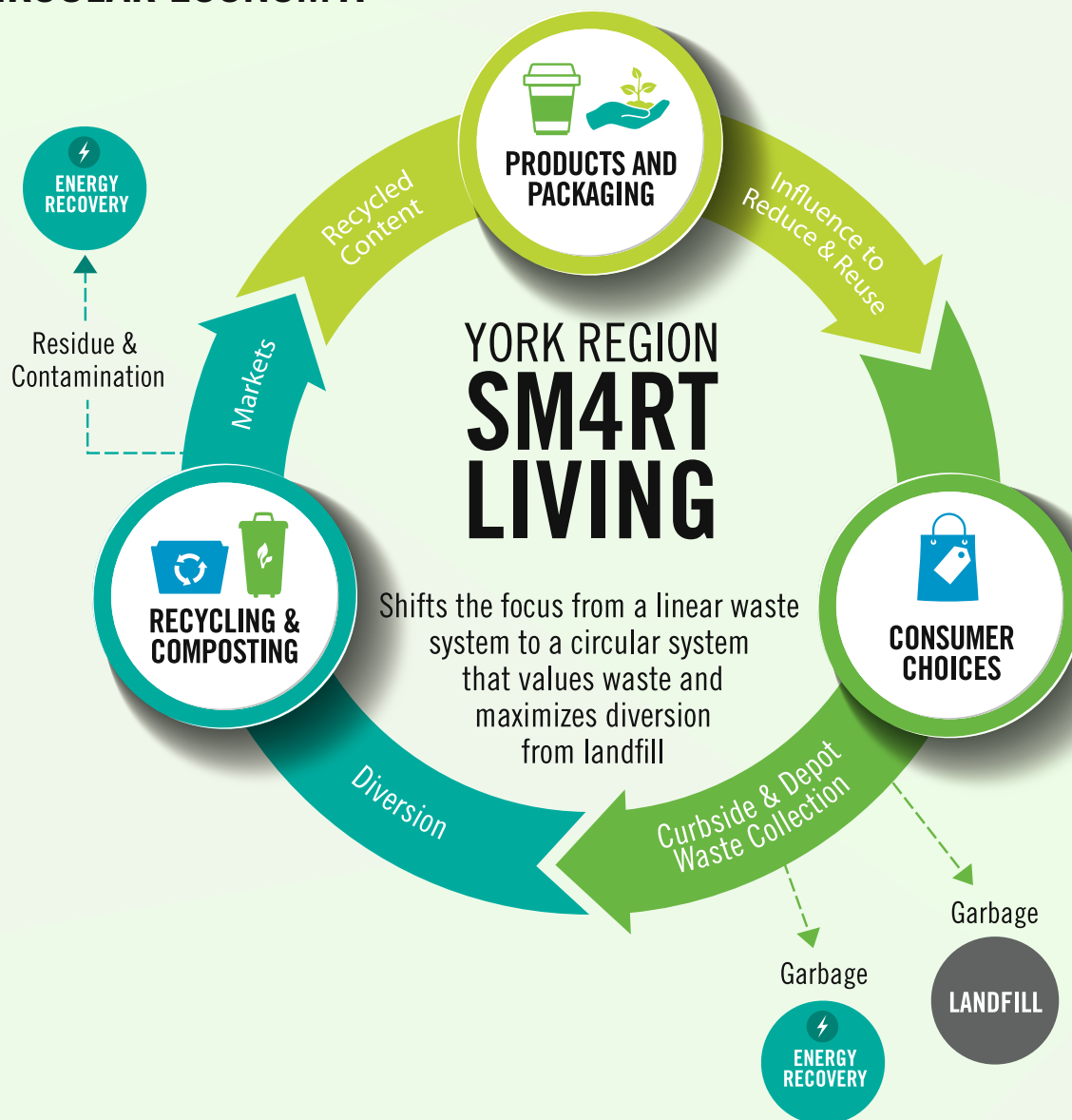
These newly developed objectives and accompanying priorities will help guide the Region through an evolving waste management landscape in Ontario; most notably, the upcoming transition of Ontario's Blue Box Program to full producer responsibility. The Plan emphasizes collaborative decision-making, compliance with changing legislation, continuous improvement of the waste management system, commitment to partnerships and support for community-led action. These key actions are important for the Region's success as it continues to improve the integrated waste management system's sustainability.

**York Region, in partnership with its local municipalities, continues to implement innovative waste reduction, diversion and disposal programs to meet the needs of our growing communities.**

## LINEAR ECONOMY:



## CIRCULAR ECONOMY:





# THE SM4RT LIVING PLAN

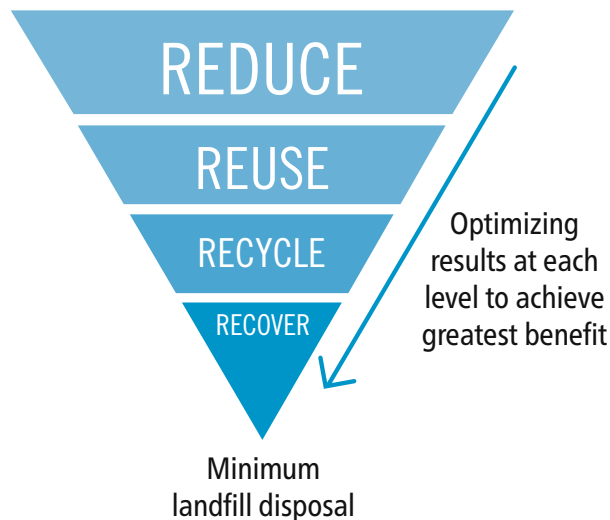
## Moving Toward a World with No Waste

York Region's SM4RT Living Integrated Waste Management Master Plan (SM4RT Living Plan) outlines strategies to achieve a visionary goal of a world where nothing goes to waste. With the emphasis on expanding the focus of policy and programming from diversion to waste reduction, the SM4RT Living Plan commits to '4Rs':

1. Reduce the amount of waste generated in York Region
2. Reuse items instead of discarding them
3. Recycle as many materials as possible into new products
4. Recover energy-from-waste that cannot be managed in other ways

With the mission of leading the way through partnering, innovating and inspiring change, the SM4RT Living Plan combines successful diversion programs with efforts to prevent waste. The SM4RT Living Plan is moving York Region away from the traditional linear model of waste management to a more sustainable circular economy approach.

Additionally, the SM4RT Living Plan prioritizes the need to support future growth efficiently by maximizing the value of current infrastructure. The cost for delivering all waste management programs and services in York Region, including SM4RT Living initiatives, curbside collection, processing, depot operations and education services is about \$300 per household per year. This represents great value provided to residents for less than \$1 per day, substantially less than comparable utilities such as energy and natural gas.



**The cost for delivering all waste management programs and services in York Region, including SM4RT Living initiatives, curbside collection, processing, depot operations and education services is about \$300 per household per year.**



## Building on Success: SM4RT Living Plan Objectives and Actions

As approved by Regional Council in April 2020, the updated SM4RT Living Plan outlines a revised visionary goal and a mission to guide the Region towards its long-term targets. The priorities included in the Plan are organized into three objectives and several key actions which are summarized in the table that follows. These key actions will be monitored and results will be reported to Council on an annual basis beginning in 2021.

### VISIONARY GOAL:

**A world in which nothing goes to waste.**

### MISSION:

**The local municipalities and the Region lead the way through partnering, innovating and inspiring change.**



## The SM4RT Living Plan: Objectives and Actions

Objective 1	2020	2021	2022	2023	2024
<b>Successfully navigate legislative changes</b>  This is about responding flexibly and using legislative changes to continually improve SM4RT Living.	Region and local municipalities leverage existing framework for collaborative decision-making to navigate legislative changes				
	Region and local municipalities ensure compliance with changing legislation (e.g., Food and Organics Waste Policy Statement and Resource Recovery and Circular Economy Act), including reviewing Official Plan and bylaws				
	Local municipalities and Region together explore legal mechanisms to ensure producers manage their waste as required in the Region				
	During the transition to full producer responsibility, Region and local municipal partners continue to monitor and address blue box contamination and Region ensures the Materials Recovery Facility performs as needed				
Objective 2	2020	2021	2022	2023	2024
<b>Use resources and infrastructure more strategically to achieve SM4RT Living</b>  This is about focusing efforts, innovating and improving coordination to create a more seamless, cost-effective system and do more with available resources.	The Region and local municipalities leverage technology to improve data collection, analysis and information sharing from facilities and operations, in support of greater efficiency and more strategic decisions				
	Region and local municipalities maintain leadership in waste diversion by researching and sharing best practices, approaches and technologies, particularly for multi-residential buildings		Local municipalities take the lead in testing and applying new approaches and sharing lessons learned		
	Local municipalities include standards for waste diversion and material storage and collection in the approval process for new multi-residential developments				
	The Region contracts for anaerobic processing capacity to diversify its portfolio and inform future investment decisions				
	Region and local municipalities work towards consistent messaging and education to reduce food waste, including promoting backyard composting to help manage SSO pressures and costs				
	Local municipalities and Region apply best practices and tools to work towards consistency in waste collection services, messaging, enforcement and performance monitoring				
	Region works with other Ontario municipalities to standardize record-keeping and data reporting across the province to provide consistent evidence for advocacy positions				
	Region secures long-term contracts to recover energy from residual materials				
Objective 3	2020	2021	2022	2023	2024
<b>Inspire people across the Region to embrace SM4RT Living and advance the circular economy</b>  This is about the value of partners and pioneers in igniting the uptake of SM4RT Living and the circular economy across our communities.	Region and local municipalities celebrate and encourage grassroots community initiatives that align with the SM4RT Living philosophy				
	Region improves support for partnerships, including establishing a \$100,000 Circular Economy grant program that would help community partners, new social enterprises and businesses advance SM4RT Living Plan goals				
	Region identifies and promotes how SM4RT Living connects to broader Regional initiatives around healthy communities and social well-being and builds linkages where appropriate				
	Through strategic partnerships, the Region and local municipalities support opportunities for residents to repair, share, reuse and repurpose items				
	Region and local municipalities work to implement an "Ask First" voluntary program across the Region to reduce single-use items, and show leadership by reducing consumption at their own facilities		Region and local municipalities assess results of "Ask First" program, review federal and provincial policies if available, and determine if a mandatory approach is needed		
	Region and local municipalities advocate for provincial and/or federal policies and legislation that advance the circular economy				
Region researches, consults and shares findings to build understanding of the circular economy in York Region and how it connects to SM4RT Living		Region encourages residents, not-for-profit groups, businesses and others in York Region to move to the circular economy			



# WASTE GENERATION

## DID YOU KNOW?

★★★★★

*The COVID-19 pandemic will impact waste generation rates in 2020.*

*Tonnages collected for curbside garbage, blue box and green bin all showed a higher than typical increase during the COVID-19-impacted period compared to tonnages collected in 2019.*

*This is expected to impact curbside waste generation rates for 2020.*

## Waste Generation At-A-Glance

Waste generation rate is a tonnage per person measurement (kg/capita) used to track progress toward the SM4RT Living Plan waste reduction targets. The original SM4RT Living Plan included an overall waste generation target of 289 kg/capita by 2031 based on all waste managed through the York Region system. This included curbside garbage, green bin, blue box, yard waste and depot programs, materials collected through local municipalities' special events and programs as well as non-residential sources such as business improvement areas (BIAs) and municipal facilities.

With the move to producer responsibility for the Blue Box Program, the SM4RT Living Plan update recommends reporting focus shifts toward two key streams of collected curbside waste – green bin organics and garbage – which will remain as mandated municipal responsibilities. New targets were identified for these streams. Yard waste generation rate is not included as this waste stream is the most unpredictable, with yard waste tonnage greatly influenced by weather, not York Region's program efforts.

SM4RT Living initiatives will continue to drive long-term behaviour change to help reduce waste generation and move the Region closer to its targets. Annual reporting will include an overall green bin and garbage generation rate for the Region and an individual rate for each local city and town as shown on the next few pages.

## NEW TARGETS



### GREEN BIN

The new target is 71 kilograms per capita by 2031, down 15% from the baseline of 84 kilograms in 2014.



### GARBAGE

The new target is 66 kilograms per capita by 2031, a 20% reduction from the baseline of 82 kilograms in 2014.

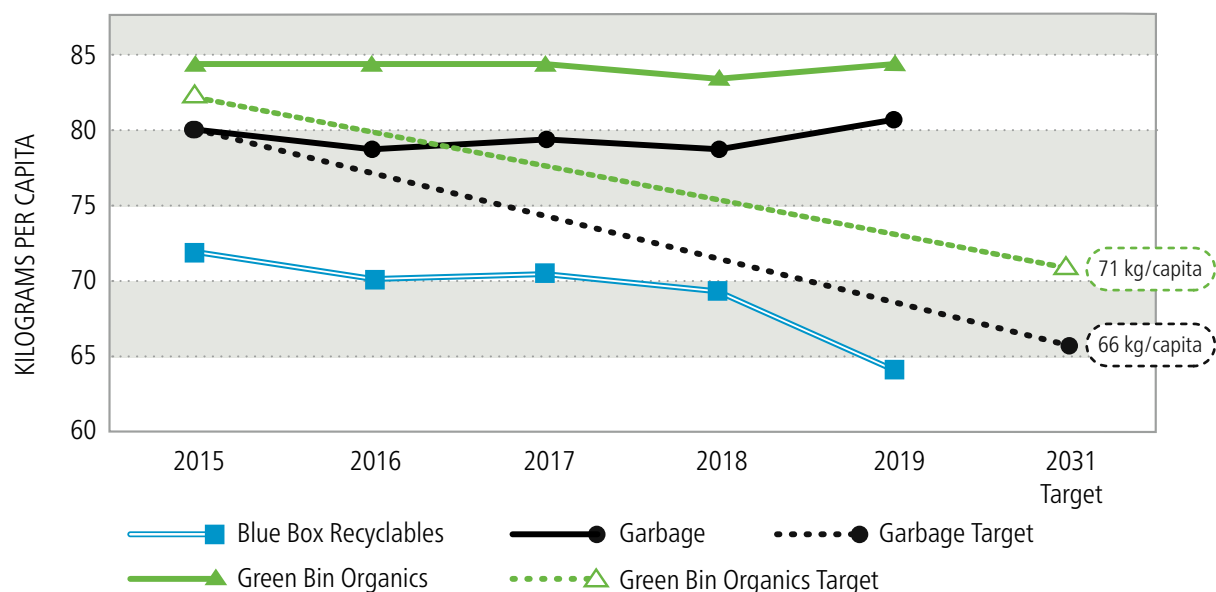


## Region's Green Bin and Garbage Generation Rates Remain Steady

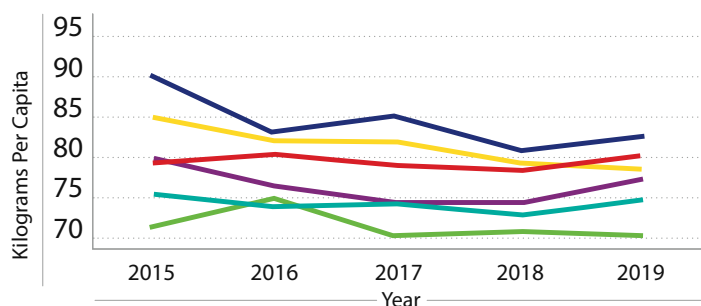
In York Region, green bin and garbage generation rates have been steady over the past five years. The garbage generation rate increased slightly, with a rate of 78 kilograms per person in 2018 and 81 kilograms per person in 2019. This increase was mainly due to removal of contaminant materials in the recycling stream. In 2019, a process was implemented at the Earl Turcott Waste Management Centre in the City of Markham to assess incoming blue box loads and redirect those with heavy contamination directly to energy-from-waste instead of processing. Consequently, the curbside blue box generation rate saw a more significant downward trend in 2019 compared to past years, moving from 69 kilograms per person in 2018 to 64 kilograms per person.

**SM4RT Living initiatives will continue to drive long-term behaviour change to help reduce waste generation and move the Region closer to its targets.**

York Region Residential Curbside Waste Generation Rate (kg/capita)



## Northern Towns' Green Bin Waste Generation Rate (kg/capita)

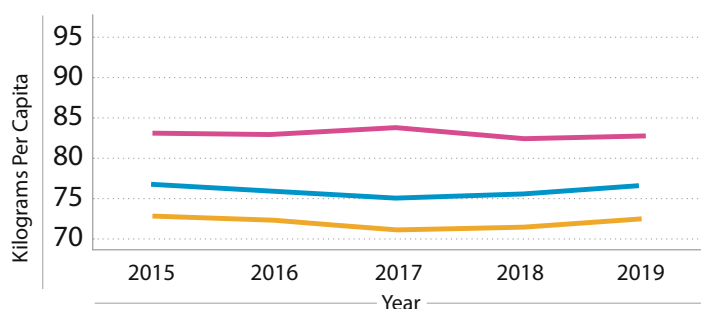


Local Town or City	2015	2016	2017	2018	2019
<span style="color: red;">—</span> Aurora	79	80	78	77	80
<span style="color: purple;">—</span> East Gwillimbury	80	76	74	74	77
<span style="color: green;">—</span> Georgina	72	75	70	71	71
<span style="color: blue;">—</span> King	90	83	85	81	83
<span style="color: teal;">—</span> Newmarket	76	74	74	73	75
<span style="color: yellow;">—</span> Whitchurch-Stouffville	85	82	82	79	77

The green bin generation rate has typically been higher among the southern cities than it has been for the northern towns. The five-year trend analysis reveals the southern three cities had little or no change from their 2015 green bin generation rates. The green bin generation rate for all northern towns trended downward in 2019 when compared to the generation rate they recorded in 2015, with the exception of one town. A similar pattern is observed for the garbage generation rate, where the southern cities have generally remained more stable while the northern towns have experienced more peaks and valleys throughout the years. Two of the three southern cities have experienced an increase in their 2019 garbage generation rate when compared to their 2015 rate. In 2019, the northern towns had a garbage generation rate that was lower than their 2015 rate.

The steady or downward trend (from 2015 to 2019) in both streams for most cities and towns suggests promotion and education work being done by the Region and local towns and cities is impacting residents and knowledge gained is actually being translated into meaningful behaviours. A review of audit data reveals improper sorting of waste is impacting generation rates for some municipalities. Based on this data, there is an opportunity to reduce waste generation in all municipalities by reducing the amount of avoidable food waste. Additionally, in some municipalities, residents in multi-residential buildings do not have access to green bin collection and this could also impact the garbage generation rate of the municipality.

## Southern Cities' Green Bin Waste Generation Rate (kg/capita)



Local Town or City	2015	2016	2017	2018	2019
<span style="color: pink;">—</span> Markham	91	91	92	91	91
<span style="color: orange;">—</span> Richmond Hill	81	81	80	80	81
<span style="color: blue;">—</span> Vaughan	85	84	83	84	85

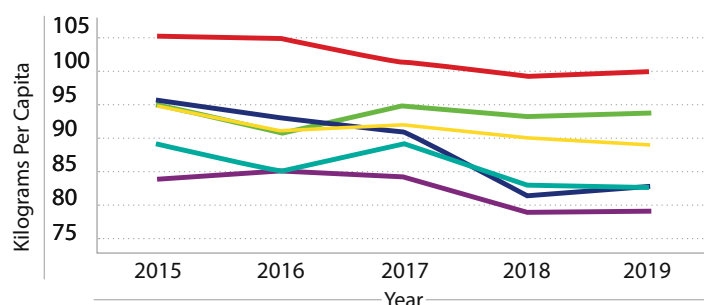




Promotion and education work is having an impact on residents and knowledge gained is being translated into meaningful behaviours.

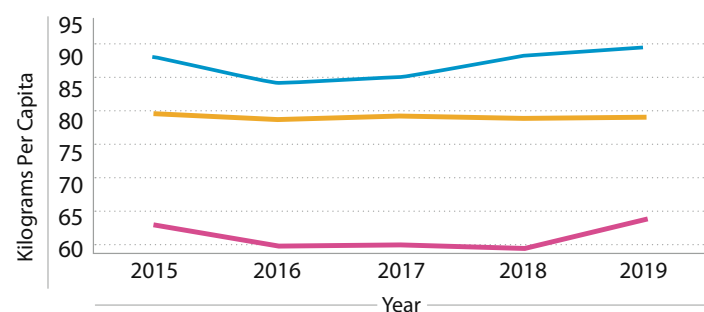


Northern Towns' Residual Waste (Garbage)  
Generation Rate (kg/capita)



Local Town or City		2015	2016	2017	2018	2019
<span style="color: red;">—</span>	Aurora	105	105	101	99	100
<span style="color: purple;">—</span>	East Gwillimbury	84	85	84	78	77
<span style="color: green;">—</span>	Georgina	95	91	95	93	94
<span style="color: blue;">—</span>	King	96	93	91	82	83
<span style="color: teal;">—</span>	Newmarket	88	85	88	83	83
<span style="color: yellow;">—</span>	Whitchurch-Stouffville	95	91	92	90	89

Southern Cities' Residual Waste (Garbage)  
Generation Rate (kg/capita)



Local Town or City		2015	2016	2017	2018	2019
<span style="color: pink;">—</span>	Markham	63	60	60	59	64
<span style="color: orange;">—</span>	Richmond Hill	80	77	78	77	78
<span style="color: blue;">—</span>	Vaughan	87	84	85	88	94

NOTE: Increase in Markham primarily due to contaminant materials that were pulled from the blue box stream and moved to the garbage stream.

# PARTNERSHIPS FOR SUCCESS



## Collaboration Drives Innovative Approaches to Reduction, Reuse and Diversion

York Region and its nine local cities and towns collaborate to provide integrated waste management services and programs focusing on reduction, reuse and recycling initiatives. Together, we deliver innovative programming to our communities including repair cafés, curbside giveaway days, battery, electronic waste and textile diversion programs and regular curbside collection.

Various community partners also work with the Region on innovative programs that combine waste prevention efforts with community building. These partnerships drive policy and program changes, deliver progress on the SM4RT Living Plan, share information and develop metrics to measure success.



## Collaboration is a key theme of York Region's SM4RT Living Plan.







## Waste Reduction and Collection Programs Provided by Local Cities and Towns

COLLECTION TYPE	WASTE TYPE	Aurora	East Gwillimbury	Georgina	King	Markham	Newmarket	Richmond Hill	Vaughan	Whitchurch-Stouffville
Curbside Collection	Garbage	•	•	•	•	•	•	•	•	•
	Recycling	•	•	•	•	•	•	•	•	•
	Green Bin	•	•	•	•	•	•	•	•	•
	Leaf and Yard Waste	•	•	•	•	•	•	•	•	•
	White Goods	•	•	•	•	•	•	•	•	•
	Bulky Items	•	•	•	•	•	•	•	•	•
Special Programs	Textile Diversion	•			•	•	•	•	•	•
	Education and Outreach	•	•	•	•	•	•	•	•	•
Multi-Residential Collection	Garbage	•		•		•	•	•	•	•
	Recycling	•		•		•	•	•	•	•
	Green Bin			•		•		•		
	Electronic Waste	•				•				
	Batteries	•				•				
School Collection	Recycling	•				•				
	Green Bin	•				•				
Municipal Facilities	Recycling	•	•	•	•	•	•	•	•	•
	Green Bin	•	•	•		•	•	•	•	
	Batteries	•			•	•	•	•	•	
Public Spaces (parks, BIAs, etc.)	Garbage	•	•	•	•	•	•	•	•	•
	Recycling	•	•			•	•	•	•	•
	Green Bin						•			








"The Earth is what we all have in common."  
— Wendell Berry

# DIVERSION ACHIEVEMENTS

## York Region Remains a Leader in Ontario with Verified Diversion Rate of 68% in 2018

York Region, in partnership with our local cities and towns, submits waste management program data to the Resource Productivity and Recovery Authority (the Authority) through the annual Datacall. The information is used to determine blue box costs and allocate funding from producers to assist with the cost of operating the Blue Box Program. The Datacall produces a ranking of municipal diversion rates across the province. York Region continues to be a leader with the highest verified diversion rate of 68% in 2018 in the large urban category.

### Resource Productivity and Recovery Authority Annual Waste Diversion

<b>2015</b>	1st for Large Urban Municipalities		<b>63%</b>
<b>2016</b>	1st Overall in the Province		<b>66%</b>
<b>2017</b>	1st for Large Urban Municipalities		<b>68%</b>
<b>2018</b>	1st for Large Urban Municipalities		<b>68%*</b>
<b>2019</b>	Pending Verification		<b>66%**</b>

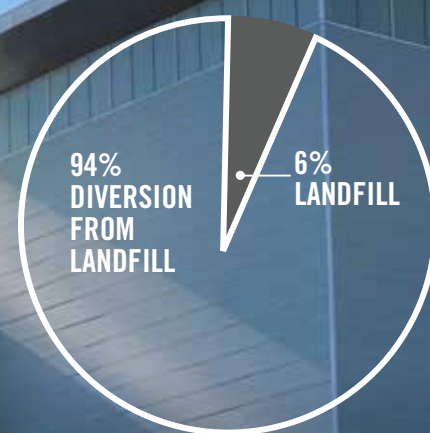
All values are rounded. The Authority does not recognize energy-from-waste as diversion. \*Updated to reflect finalized 2018 RPRa diversion rate.

\*\*2019 diversion rate impacted by high contamination in the blue box stream. The 2019 diversion data presented is pending verification by the Authority at the time of printing.

TONNES COLLECTED					
Material	2015	2016	2017	2018	2019
Residual Waste	128,148	130,400	134,249	124,319	129,144
Organics	96,593	97,044	97,877	99,065	100,874
Blue Box	85,335	84,468	85,298	83,526	78,243
Leaf and Yard Waste	44,370	37,407	39,477	42,287	42,814
Other Diversion - Depots	5,944	6,196	5,061	2,580	2,659
Household Hazardous Waste	1,305	1,268	1,256	1,219	1,297
Electronics	1,554	1,460	1,344	1,124	1,117

York Region continues to exceed the Regional Official Plan goal of 90% waste diversion from landfill.

In 2019, York Region achieved 94% waste diversion from landfill, which includes all tonnes collected through curbside and depot diversion programs and tonnes managed through energy-from-waste.







# BLUE BOX RECYCLING

## DID YOU KNOW?



*In August 2019, the Ministry of the Environment, Conservation and Parks announced the Blue Box program would transition starting January 1, 2023 and ending December 31, 2025.*

*Municipalities led by Association of Municipalities of Ontario are self-nominating their preferred transition timing through Council resolutions. This process will help inform the transition mechanism in the regulations. York Region and its local municipalities have identified 2025 as its preferred transition timing.*

## Focus on Tackling Contamination and Managing Impacts of End Market Challenges

In 2019, 78,243 tonnes of blue box recyclables was collected, accounting for 22% of the total material collected in York Region. There were increased levels of contamination in the blue box stream, which resulted in a decline in York Region's marketable blue box tonnes from 2018 to 2019.

Changing composition of products and packaging creates confusion for residents and challenges for municipal programs. Newer, lighter-weight packaging such as drink pouches and coffee cups often mix two or more materials; they have no viable end markets and can end up contaminating bales of other materials during sorting.

Bagged recyclables and organics are two major sources of contamination in the blue box stream. York Region continues to emphasize promotion and education efforts along with enforcement at the curb, as such efforts are necessary to re-establish diversion success and realize cost efficiencies.

In addition to contamination, more stringent end market restrictions continue to pose a challenge. A total of 4,311 tonnes of collected mixed paper that could have been shipped under previous market criteria could not be marketed in 2019 due to contamination from a high level of food waste and was instead managed through contracts with privately owned energy-from-waste facilities.

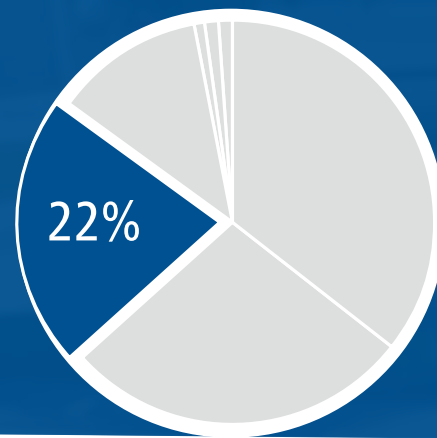
Between 2015 and 2017, around 60% of the blue box tonnage was marketed in overseas markets, with a large portion attributed to

paper bales. However, with stricter quality requirements imposed by overseas paper markets and increased levels of contamination received at York Region's Material Recovery Facility (MRF) in the Town of East Gwillimbury, it became more challenging to find paper end markets. To address this issue, the Region invested \$6.9M in capital upgrades in 2018 to reduce contamination within paper bales, which reduced the total tonnage of paper sent to end markets. Coupled with a decline in paper received at the MRF, there were fewer blue box tonnes marketed in general. For these reasons, only 31% of the blue box tonnage was managed overseas in 2019, while the remaining materials like plastics, metal cans, glass, and cardboard were sent to North American destinations for processing.

There was a significant reduction in tonnages of paper marketed by the Region in 2019 due to contamination. The Region and local cities and towns remain committed to improving the current system and have collaborated on a working group addressing blue box challenges. Eight additional staff were hired at the MRF in 2019 to remove contaminants to improve overall quality. In addition, the Region completed a \$1.4M capital upgrade in late 2019 to reduce contamination within the mixed paper bales and is now able to market all mixed paper bales as of mid-January 2020.

## NOT THIS.



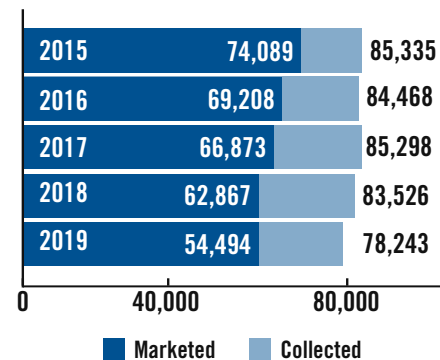


## Preparing for a New Blue Box Program

The Ontario Ministry of the Environment, Conservation and Parks is moving ahead with a new provincial framework that makes producers fully responsible for the Blue Box Program. In 2019, the Ontario Government announced the timeline for transition of the program. Operations and costs for blue box materials will move from municipalities to producers beginning in January 2023 with all transfers expected to be complete by the end of 2025.

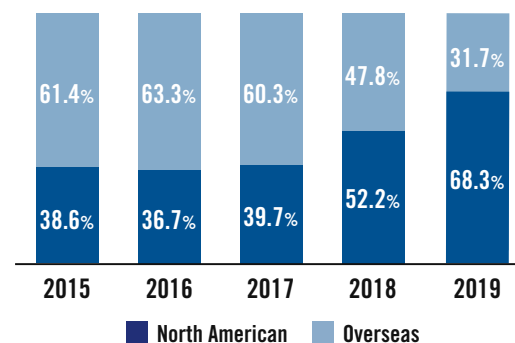
During transition, an important role for the Region, and its local cities and towns, will be ensuring the shift is seamless for residents. Collaboration at the local and Regional levels will help identify potential impacts of transition for the Region's integrated waste management system and prepare York Regional Council to make informed decisions as the process moves forward. During the lead up to transition, the Region and local cities and towns will continue to manage the current system, working to significantly reduce contamination in the blue box. As the process continues, York Region will remain engaged through the Association of Municipalities of Ontario and the Municipal Resource Recovery and Research Collaborative (Municipal 3Rs Collaborative), actively participate in consultations and continue to align current and future programs with the shift to full producer responsibility.

## Blue Box Tonnes Collected and Marketed

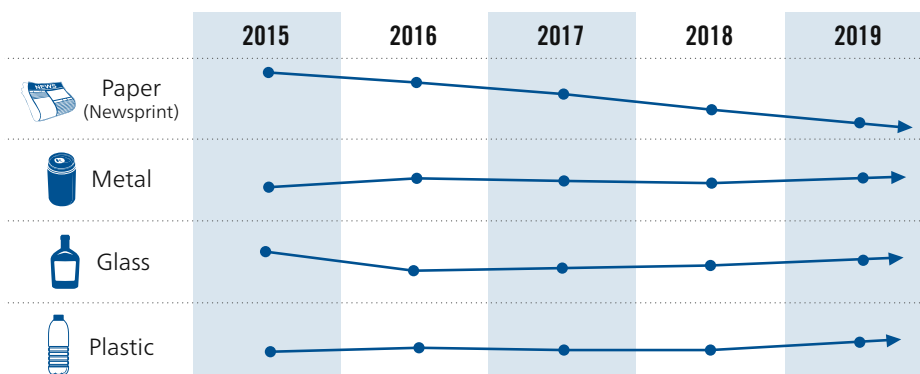


**Note:** 2019 Blue Box Residue Rate - 23% of collected blue box material was rejected during processing. This excludes the 4,311 tonnes of mixed paper recovered but not marketed due to contamination from leakage of organic material in collection trucks.

## End Market of York Region Blue Box Material

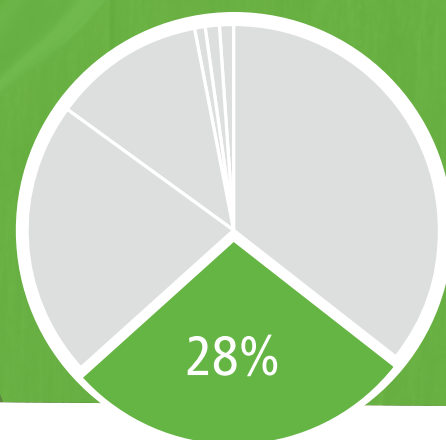


## Trend of Marketed Blue Box Tonnes





# ORGANIC WASTE



## DID YOU KNOW?

★★★★

Two main types of technology are used to process diverted organic waste:

### Aerobic Processing

In aerobic processing, organic material decomposes in the presence of oxygen, releasing carbon dioxide and leaving behind a dark, crumbly, soil-like substance that may be directly applied to farm fields. Modern processing typically occurs indoors and the air is treated to reduce odours before release to the environment.

### Anaerobic Digestion

Anaerobic digestion takes place in a contained vessel under carefully controlled conditions. It excludes oxygen from the decomposition process and produces biogas, largely made up of methane, that can be harvested for fuel and leaves a mix of solid and liquid material called "digestate" that is rich in nutrients and has value as soil conditioner or fertilizer.

## Region's Approach to Organics Processing Will Help Reduce Greenhouse Gas Emissions

York Region continues to be a leader in food waste reduction in Ontario. In 2019, we continued to promote York Region's Good Food program by working with partners such as grocery stores, farmers markets and local chefs to raise awareness and take action to reduce food waste. In 2019, 6,411 people were engaged at 67 Good Food outreach events. The Region also continues to collaborate with other municipalities and public health agencies through the Ontario Food Collaborative which supports efforts to reduce food waste and increase food literacy across the province.

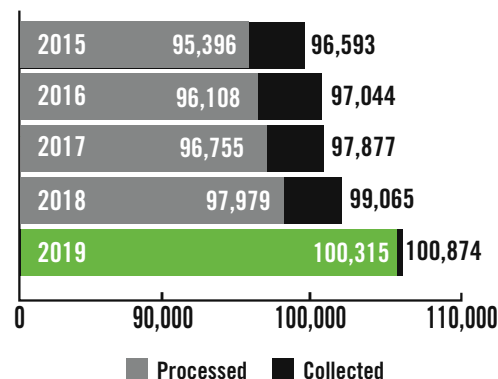
The municipal curbside green bin collection program is critical for keeping food and other organic waste out of landfill. The Region has one of the most inclusive green bin programs in the Province of Ontario. In York Region, organic waste represents 28% of the total waste collected. York Region residents generated 100,874 tonnes of green bin organics in 2019, with 100,315 tonnes being shipped to contracted facilities in Ontario for processing.

The Region distributed 1,246 backyard composters to residents in 2019. By starting to compost at home using these composters, families will divert an estimated 126 tonnes of organics from the curb each year.

York Region has secured reliable organic waste processing capacity until 2027. The Region's long-term plan favours anaerobic over aerobic composting, which is expected to reduce the Region's greenhouse gas emissions by roughly 15,000 tonnes per year.

The Region will issue a request for proposals in early 2021 to provide anaerobic digestion capacity for processing the Region's organics at privately owned facilities. The request for proposals will include transportation and anaerobic digestion processing for a period of 20 years, currently projected to commence as early as 2024.

## Source Separated Organics Tonnes Collected and Processed

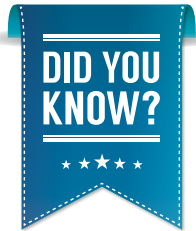
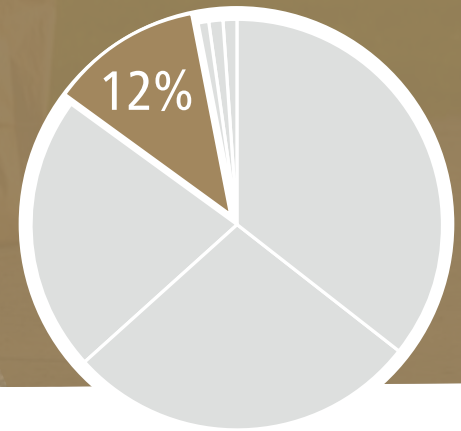


## Organic Waste Processing Facility Contracts

Facility	Current Term Expiry Date	Extension Term Expiry Date
Cornerstone Renewables (Elmira and Leamington, ON)	June 30, 2022	N/A
GFL Environmental (Moose Creek, ON)	June 30, 2020	June 2027
Convertus (Formerly Renewi) (London, ON)	June 30, 2022	June 2027



# LEAF & YARD WASTE



*Residents may drop off yard waste materials at two facilities in York Region – the Georgina Transfer Station and the Miller Waste Bloomington Yard Waste Facility.*

*Yard waste is turned into nutrient-rich compost.*

*Community members are encouraged to reduce leaf and yard waste by utilizing a backyard composter.*

*Each composter can divert approximately 100 kg of organic waste per year.*

## Flexible Long-Term Processing Contracts Offer Stability to This Unpredictable Waste Stream

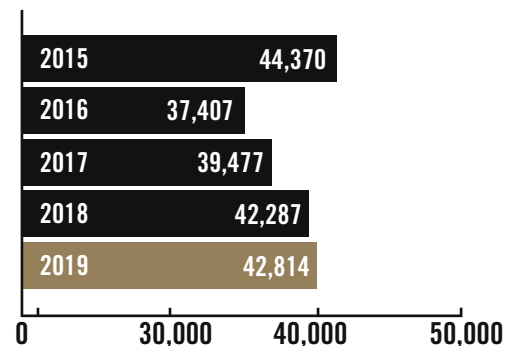
Leaf and yard waste is the most unpredictable waste stream as the tonnages collected are directly affected by weather and may also be impacted by invasive species infestations. During storms or wet conditions, the Region experiences more leaf and yard waste than during dry or drought conditions. Extreme weather events like ice storms, wind storms or seasonal changes can also affect the amount of leaf and yard waste generated making it difficult to predict collection capacity and timing.

York Region's local cities and towns offer residents seasonal curbside leaf and yard waste collection programs every other week from spring to fall. Some of them have also added extra yard waste collections in the fall to account for trees losing their leaves very late in the season. Residents can also drop off leaf and yard waste at the Bloomington Yard Waste Facility in the City of Richmond Hill and the Georgina Transfer Station in the Town of Georgina. One of York Region's waste contractors, Miller Waste, composts all yard waste collected in York Region at their Bloomington Facility. In 2019, York Region residents generated 42,814 tonnes of leaf and yard waste, representing 12% of total waste collected.

The Region has secured long-term leaf and yard waste processing capacity to accommodate annual tonnage fluctuations and unanticipated weather events. In 2015, the Region entered into a 10-year agreement with Miller Waste to process leaf and yard waste collected by local municipal partners

and at the Region's Georgina Transfer Station with no annual maximum tonnage specified. The contract can be extended by mutual agreement for five years until October 2030, after which a further extension may be negotiated. Before the current contract expires, the Region will review and evaluate available options and present a preferred option to York Regional Council for approval.

### Leaf and Yard Waste Tonnes Collected







# WASTE DEPOT COLLECTION

## DID YOU KNOW?

★★★★

*In 2019, residents recycled approximately 20,851 litres of cooking oil at York Region's waste depots.*

## Depots Increase Access to Diversion Programs

York Region's five public drop-off depots provide convenient outlets for residents and small businesses to drop off a variety of waste materials. In 2019, York Region collected 2,659 tonnes of divertible materials through depot collection. Divertible materials include: cooking oil, concrete, drywall, electronic waste, polystyrene foam, refrigerated appliances, scrap metal, shredded paper, textiles, tires and wood.

In January 2018, some key service level changes and operational enhancements were implemented at the York Region Community Environmental Centres (CEC) and the Georgina Transfer Station including modified hours of operation to provide residents with more convenient access to disposal services.

Additionally, the Region introduced weighing scales and weight-based fees for residual waste, concrete, drywall and wood. The fee changes brought fees in line with neighbouring municipalities and significantly improved cost recovery on high cost divertible material. With the introduction of scales and weight-based fees, these locations are now able to monitor the total number of visitors whereas prior to 2018 only paid transactions were tracked.

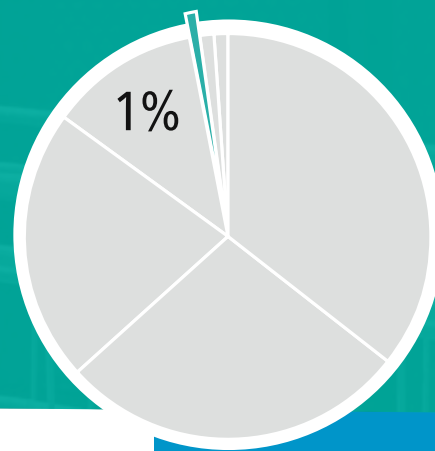
Based on customer use patterns and staff observations, it is evident residential users are adapting to new fees as they continue to use the CECs and the Georgina Transfer Station. Compared to 2018 visits, there was a 21% increase in the number of visits to Elgin Mills CEC while visits to McCleary Court remained almost the same.

Adding textile collection in 2019 could also drive more visitors to the sites in the future.

In January 2019, the Used Tire Collection Program transitioned to full producer responsibility under the Resource Recovery and Circular Economy Act, 2016. Under this new approach, producers are not required to compensate municipal depots for collecting used tires if they can achieve the regulated capture targets through private collection points. There are approximately 200 private tire collection points in York Region; however, there was still a notable spike in tonnage of tires collected at the Region's depots in 2019. A total of 291 tonnes of tires were collected, which is a 51% increase when compared to the tonnes collected in 2018. The increase in tonnage of tires collected was seen at all three facilities that accept tires, but most significantly at the Georgina Transfer Station. This increase can be attributed to the new regulation, which mandates collection points must accept up to 10 tires per day per customer, from both residential and small business customers, compared to the previous program with a limit of 4 tires per day accepted from residents only.

**In 2019, York Region collected 2,659 tonnes of divertible materials through depot collection.**





York Region has partnered with the Regions of Peel and Halton on a co-operative agreement to jointly procure the services of Evolve Recycling for the pick-up, transportation, processing and recycling of tires collected at the Region's depots. The joint procurement helped reduce cost and leverage total tonnages of tires collected by the three municipalities to get the most favourable bid. The contract was initially for a 12-month term with allowances for four additional one-year extensions.

### Total Tonnes of All Materials Collected at Community Environmental Centres (CEC) and Georgina Transfer Station

TOTAL TONNES COLLECTED					
Location	2015	2016	2017	2018	2019
Elgin Mills CEC	16,148	21,301	19,708	9,057	10,470
McCleary Court CEC	9,830	10,080	12,356	7,055	7,020
Georgina Transfer Station	16,383	16,876	16,333	15,020	14,484
<b>Total Tonnages</b>	<b>42,361</b>	<b>48,257</b>	<b>48,397</b>	<b>31,132</b>	<b>31,975</b>

### The recycling landscape in Ontario is changing

Producers of the following items are becoming fully responsible for collecting and managing their products and packaging after consumers have finished using them:

- Batteries
- Blue Box
- Electronic waste
- Household hazardous waste
- Used tires

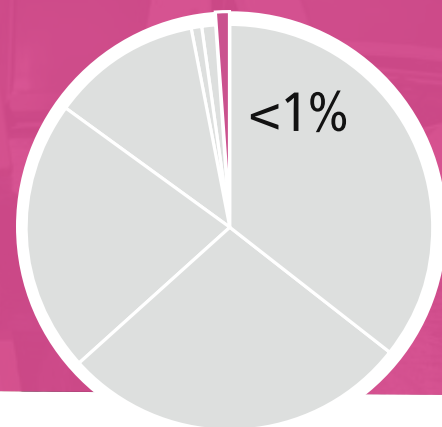
The Resource Productivity and Recovery Authority is responsible for oversight and enforcement.

Used tires were the first material to move to this new model on January 1, 2019, with single-use batteries following in July 2020. Waste electronics will transition in January 2021, hazardous or special waste in July 2021 and blue box by the end of 2025.

**Divertible materials include:**  
cooking oil, concrete, drywall,  
electronic waste, polystyrene foam,  
refrigerated appliances, scrap  
metal, shredded paper, textiles,  
tires and wood.



# ELECTRONIC WASTE



## DID YOU KNOW?

★★★★

*Electronic waste (e-waste) includes electronic equipment that is no longer wanted or has reached its end-of-life. E-waste piles up in our homes and in our landfills.*

*E-waste is hazardous material and over time can leak toxic elements, like mercury and lead, which can be harmful to the environment and to humans.*

*Bringing electronics to a local waste depot ensures proper recycling at safely managed sites to control any hazards.*

*Recycling also allows reliable resources found in electronics — recyclable plastics and even gold — to be reclaimed.*

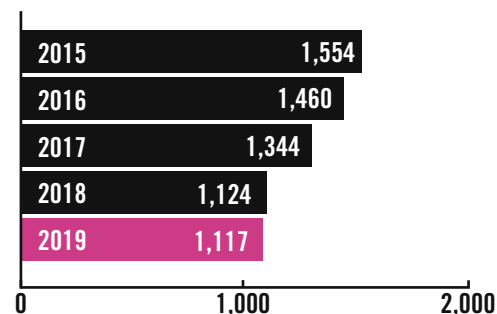
## Electronic Waste Program to Transition to Full Producer Responsibility by End of 2020

End-of-life electronics such as computers, printers, televisions and smartphones are managed by the Ontario Electronic Stewardship (OES) under the Waste Electrical and Electronic Equipment (WEEE) program. The program includes the collection, processing, recycling and disposal of electronic waste material and is funded by brand owners and first importers of these products. Collected electronic waste is sent for recycling to recover valuable raw materials through environmentally responsible de-manufacturing of waste electronics.

In 2018, the Minister of the Environment, Conservation and Parks directed OES to prepare for the end of the WEEE program to enable transition of electronic waste to full producer responsibility. OES submitted its windup plan to the Resource Productivity and Recovery Authority (RPPRA) in December 2018 and consultations were held in the first quarter of 2019 before the plan was approved in August 2019. The WEEE program is expected to end on December 31, 2020. The program will continue operating during the transition period and York Region staff will remain involved in consultations throughout the windup process.

York Region provides residents with a network of drop-off facilities for electronic waste including Georgina Transfer Station, East Gwillimbury Household Hazardous Waste (HHW) and Recycling Depot, Markham HHW Depot and McCleary Court and Elgin Mills Community Environmental Centres (CEC). Regional depots collected 1,117 tonnes of electronic waste in 2019.

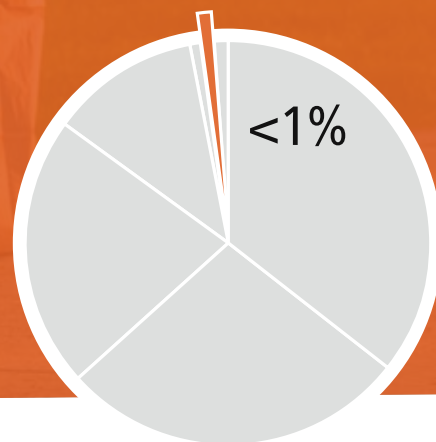
## Waste Electrical and Electronic Equipment Tonnes Collected



**Bringing electronics to a local waste depot ensures proper recycling at safely managed sites to control any hazards.**



# HAZARDOUS WASTE



## DID YOU KNOW?

\*\*\*\*\*

*Batteries that are improperly disposed of are the number one source of fires at our CECs and Waste Management Centres. Batteries can ignite other wastes in collection trucks and waste facilities, creating a serious safety risk. Always take batteries to a Household Hazardous Waste Depot or participating retailer that offers battery collection.*

## Battery Program Now Under Full Producer Responsibility

The Municipal Hazardous or Special Waste (MHSW) program is operated by Stewardship Ontario (SO) and allows residents to safely dispose household products that require special handling. Collection, processing and disposal of such material is funded by brand owners and first importers of these products and will continue to operate under the Waste Diversion Transition Act until the MHSW program is transitioned to full producer responsibility.

The collection program for single-use batteries transitioned to full producer responsibility on June 30, 2020 to coincide with the process of transitioning the Waste Electrical and Electronic Equipment program. All other designated materials will be fully transitioned on June 30, 2021. York Region continues to monitor regulatory changes and will remain engaged during transition.

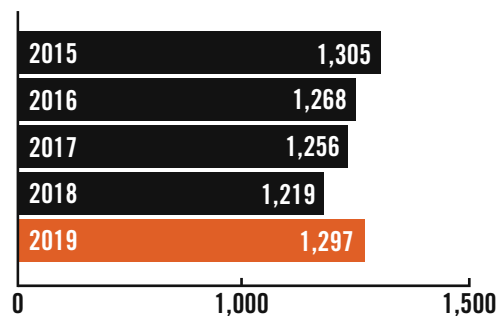
A new batteries regulation came into effect on July 1, 2020, following the transition of the battery recycling program in June. Battery producers are now individually accountable and financially responsible for collecting and reusing, refurbishing or recycling their batteries when consumers discard them. The new regulation includes both single-use and rechargeable batteries that weigh five kilograms or less and are not embedded in products. Batteries are collected at all Regional Depots and each site can accept up to 15 kilograms of batteries per day from any person.

Residents can drop off Household Hazardous Waste (HHW) at all five York Region public waste depots. Materials are recycled or treated and disposed of in an environmentally

responsible manner through specialized contract services. A new HHW Depot was introduced at the Elgin Mills Community Environmental Centre (CEC) in July 2018, making 2019 the first full year offering HHW service at that location. Additionally, York Region made service level changes in 2018 to better cater to customer needs, adjusting depot hours to ensure at least one HHW depot is open each day of the week. The total tonnages collected under the MHSW program at Elgin Mills CEC more than doubled in a one-year period, with 99 tonnes collected in 2018 and 211 tonnes collected in 2019.

York Region collected 1,297 tonnes of HHW materials at Regional public drop-off depots in 2019. Many retailers also offer take-back programs for some HHW materials. Municipal depots and retail take-back locations ensure materials are safely managed to end-of-life and divert harmful substances from landfill, waterways and forests. Many HHW items contain materials that can be recovered, refined and reused in manufacturing new products, reducing the need for virgin resources.

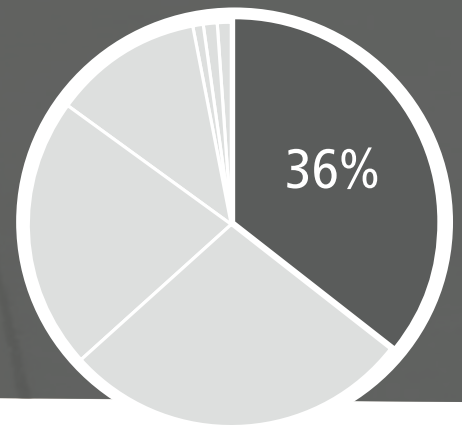
## Household Hazardous Waste Tonnes Collected







# RESIDUAL WASTE



## DID YOU KNOW?

★★★★

*In 2019, costs for residual waste was budgeted at \$105 per tonne. This included costs for administration as well as hauling, transferring and processing residual waste.*

*Each York Region resident generates an average of 81 kg of household garbage each year. Every day actions such as choosing reusable items over single-use plastics, sharing, repairing and donating household goods instead of buying new and fully participating in diversion programs will help reduce our waste footprint in York Region.*

## Energy Recovery Helps to Achieve SM4RT Living Visionary Goal

In line with the SM4RT Living visionary goal of a world where nothing goes to waste, York Region prioritizes reduction, reuse and recycling diversion efforts, while any remaining residual waste is managed primarily through energy-from-waste recovery. Energy-from-waste captures energy content of residual waste, lowers greenhouse gas emissions, recovers metals and reduces the volume of waste going to landfill by 90%.

In 2019, the Region managed 151,510 tonnes of residual waste, which includes tonnes collected at the curb and drop-off depots as well as unmarketable recovered recyclables and residues from the blue box program. Residual waste accounts for 36% of the total waste collected in York Region – a 5% increase largely due to higher levels of contamination in the blue box stream and the incineration of contaminated mixed paper bales. The Region shipped 127,858 tonnes of residual waste for energy recovery: 58,069 tonnes to Covanta Niagara in New York, 38,023 tonnes to Emerald Energy from Waste in Brampton, Ontario and the remaining 31,765 tonnes to the Durham York Energy Centre (DYEC) in Clarington, Ontario.

York Region achieved 94% diversion from landfill in 2019, exceeding the 90% target established in the Regional Official Plan. This was achieved through successful diversion programs and commitment to sustainable waste management programs.

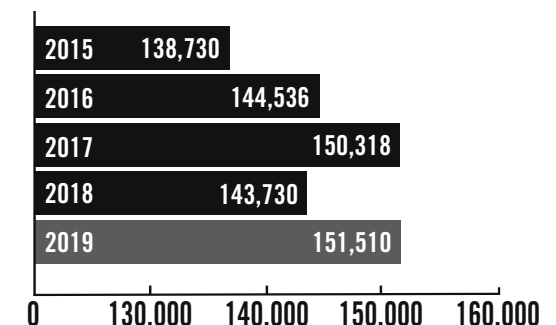
## Residual Waste Shipments

Destination	Tonnes
Energy-From-Waste	127,858
Landfill	22,900
Year-End Carry Over*	753
<b>Total Residual Waste</b>	<b>151,510</b>

**Note:** \*Change in transfer station inventory January 1, 2019 and December 31, 2019.

Material sent for energy recovery includes blue box residue and residual waste collected curbside and at waste depots. Landfill disposal remains a last resort for managing Regional waste materials, once all other diversion options have been exhausted. Bulky items like mattresses and sofas are most likely to be sent to landfills as they can block the feed chute and ash discharger in energy-from-waste facilities, making them unsuitable for energy recovery. In 2019, York Region sent 22,900 tonnes of residual waste to Walker South Landfill in Thorold, Ontario and Twin Creeks Landfill in Watford, Ontario.

## Residual Waste Collected Including Blue Box Residue Tonnes







"Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it is the only thing that ever has."

—Margaret Mead

# COMMUNITY ENGAGEMENT

## Promotion and Education Drive Community Participation in Waste Reduction, Reuse and Diversion

York Region actively promotes waste reduction, reuse and diversion through engaging public communication and education programs in collaboration with community partners. Local cities and towns also provide education and information through their initiatives including annual waste collection calendars distributed to their residents. York Region is committed to continued collaboration with our local cities and towns, recognizing the importance of consistent messaging to minimize public confusion, educate and motivate residents to become waste ambassadors.

A key program expansion in 2019 was the launch of the Lendery, a library of things from which residents can borrow infrequently used items instead of purchasing them. The Lendery was first launched at Markham Public Library's Milliken Mills branch in July 2019 and has since opened a second location at the Newmarket Public Library in February 2020.

In 2019, York Region's waste communication and education campaigns included



## BLUE BOX SOCIAL MEDIA

**30+** TOTAL POSTS ON ALL PLATFORMS

### FACEBOOK:

Reach **54,338**  
Engagement **4,820**  
Shares **118**  
Comments **135**

### TWITTER:

Retweets **19**  
Likes **32**



**67**  
OUTREACH EVENTS

**6,411**  
RESIDENTS ENGAGED



**385**  
PARTICIPANTS

**267**  
ITEMS FIXED





York Region is committed to continued collaboration with our local cities and towns, recognizing the importance of consistent messaging to educate and motivate residents to become waste ambassadors.



## TEXTILES

188

MUNICIPAL  
COLLECTION BINS

2,003

TONNES OF TEXTILES  
COLLECTED

40 EVENTS

MOST COMMON ITEM:  
FURNITURE



## MULTI-RESIDENTIAL



PROMOTION AND EDUCATION  
MATERIALS DELIVERED TO

5,700 UNITS

## COMPOSTING



1,246

COMPOSTERS SOLD

126

TONNES OF  
ORGANICS DIVERTED



2

PRESENTATIONS

24

STUDENTS  
ENGAGED



139

ACTIVE  
USERS

71

LENDERY  
ITEMS

311

CHECK-  
OUTS



# SUMMARY



## York Region Remains a Leader in Waste Management Now and Into the Future

York Region residents are part of an extensive integrated waste management system delivered with our local cities and towns. Together with community partners, new and innovative programming is being implemented through the updated SM4RT Living Plan showcasing York Region's leadership in sustainable waste management and inspiring change through the 4Rs - Reduce, Reuse, Recycle and Recover.

York Region continues to rank first among its peers for highest diversion rate in the large urban category year after year. York Regional and local Councils have made waste reduction and diversion a priority and continue to advocate to federal and provincial governments on waste management issues.





Regional and local Councils have made waste reduction and diversion a priority and continue to advocate to provincial and federal governments on waste management issues.

**127,858**

TONNES  
RESIDUAL WASTE  
SENT TO ENERGY-FROM-  
WASTE FACILITIES

+

**100,315**

TONNES  
ORGANIC  
WASTE  
PROCESSED

+

**54,494**

TONNES  
BLUE BOX &  
RECYCLING  
MARKETED

**42,814**

TONNES  
LEAF &  
YARD WASTE  
COMPOSTED

+

**2,659**

TONNES  
DEPOT  
DIVERSION  
RECYCLED

+

**1,297**

TONNES  
HOUSEHOLD  
HAZARDOUS  
WASTE  
PROPERLY DISPOSED

+

**1,117**

TONNES  
ELECTRONIC  
WASTE  
RECYCLED

=

**94% DIVERSION FROM LANDFILL**

# THANK YOU TO OUR PARTNERS:



Town of  
East Gwillimbury

