



Overview of the City of Ottawa’s Current Waste Management System

As the City begins developing its new Solid Waste Master Plan, it is important to provide an understanding of the current waste management system in order to identify opportunities to strengthen the services and programs provided to customers. The information in this document offers insight into waste programs and services offered by the City of Ottawa.

Current Waste Management System

The City of Ottawa serves as the largest City in Eastern Ontario, with a population of 1 million and a land area of almost 2,800 square kilometres. Compared to other large cities across the country, Ottawa has the 6th largest population and the largest land area.

The City of Ottawa is responsible for the collection, transportation, processing, and disposal of residential waste from 294,000 curbside homes and approximately 1,700 multi-residential properties every week. 126 trucks travel across 5,600 kilometers of roadway every week to provide waste collection services to the City’s customers.





Plan directeur des déchets solides

Once collected, material is brought to the appropriate facility to be managed:

- Recyclables are transported to one of two [material recovery facilities](#): one processes blue bin materials, and the other processes black bin materials.
- Food and organic waste is brought to the organics processing facility operated by Renewi Canada
- Garbage is brought to Trail Waste Facility for landfill disposal



Recycling Collection

- Approximately 85% of Ottawa residents in curbside homes use the City’s recycling programs.
- Residents recycle 75% of all blue bin material and 79% of all black bin material that they throw out.
- This means that residents are putting 25% of blue bin and 21% of black bin recyclables in the garbage.

The City collects blue bin material (glass, metal, plastic) separate from black bin material (paper products). This reduces processing costs and keeps recyclables clean.

The City has an agreement with Cascades Recovery+ for the processing and marketing of recyclable material collected. Recycled material is sold by Cascades Recovery+ for use in North American markets.

The Future of Recycling in Ottawa

Starting in 2023, the responsibility for blue box programs in Ottawa will be transitioning from municipalities to producers, meaning that companies that create paper and plastic packaging will be responsible for the end of life management of these items. This shift in other areas of the world has led to innovative packaging design to keep material out of the landfill.

RECYCLABLES IN OTTAWA

Recycling extends the life of the City’s landfill site, protects the environment, and provides Ottawa with additional revenue to offset the costs of recycling programs.

In 2019, 61,500 tonnes of recycling was collected from curbside homes and multi-residential properties. This resulted in \$6.69 million of revenue. 29% of the revenue came from recycled metal, 33% of the revenue came from recycled plastic, and 37% of the revenue came from recycled fibre!



Organics Collection

- More than 50% of the City's waste is made up of material that could be diverted from landfill through the green bin program.
- Program was fully rolled out to curbside households in 2010. Since then, the City has collected more than 600,000 tonnes of organics
- Approximately 50% of Ottawa residents use their green bin, and about 1/3 of all multi-residential properties use the green bin
- The compost has been used to fertilize farmer's fields and as a beneficial reuse product and animal bedding

How organics processing works

The City has an agreement with Renewi Canada for the processing of household organics and leaf and yard waste until 2030. Renewi uses aerobic composting to process the food and organic waste. Aerobic composting uses oxygen and bacteria to break down the organic material and create compost.

When the organic material arrives at Renewi, it goes through a process approved by the Ministry of Environment, Conservations, and Parks to turn our food and organic waste into compost and beneficial reuse material:

- Organic material is placed in a shredder to break apart paper and plastic bags
- Material is then placed in tunnels, where forced air moves through the material to start the breakdown of organic waste
- The material in the tunnel is heated to kill off bacteria
- Material is removed from tunnels and placed in a screener, to separate plastic bags from compost

Leaf and Yard waste is collected weekly with household organic waste, except during peak spring and fall periods. These peak seasons occur as residents clean their yards before and after the growing season each year. During this time, leaf and yard material is taken to the Barnsdale Road outdoor windrow composting facility.



Other Diversion Programs – by the numbers

690 – tonnes collected at nine **Household Hazardous Waste** mobile drop-off depots hosted across the City in 2019; with over 20,000 vehicles served;

590 – number of members registered with the City’s Take it Back! Program, encouraging local businesses to “take back” many of the household materials that they sell to local retailers to ensure they are reused, recycled or disposed of properly;

70 – percentage of all elementary and secondary schools in Ottawa registered with the Green Bin in Schools Program

\$3.90 – cost per bag of garbage that small businesses pay for curbside waste collection through the City’s Yellow Bag Program, with free recycling and green bin organics collection

111 – tonnes of tires brought to Trail Waste Facility in 2018 by residents and businesses for recycling

900 – number of parks that the City collects waste from

650 – number of City-owned waste receptacles collecting on-street litter in Business Improvement Areas (BIAs)

For a complete list of diversion programs and services, visit www.Ottawa.ca



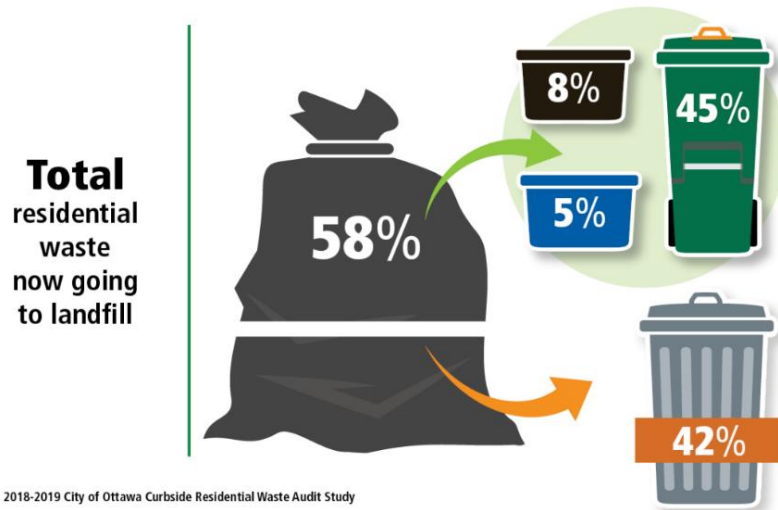
Solid Waste Master Plan

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Garbage Collection

The City offers a number of waste diversion programs aimed at keeping material out of the landfill. What cannot be recycled or returned to a store is considered “residual waste” and goes into the garbage. Garbage is collected every two weeks from curbside homes. The City collects bulky items along with garbage. Bulky items are large end-of-life items that can be easily lifted into a collection vehicle and include mattresses, furniture, toilet bowls, and pool covers.

42% of what is thrown in the garbage is “actual garbage”, by weight. The remaining 58% could be diverted from landfill through the City’s recycling and green bin programs.



All garbage collected by the City is brought to Trail Waste Facility for landfill disposal. This is a City-owned property and is the 2nd largest municipal landfill in Ontario. It opened in 1980 and was expanded in June 2007 to increase landfill capacity. This was to expand the life of the landfill by 10 to 40 years past 2008, depending on the extent of diversion from landfill in the future.

The life expectancy of Trail Road Waste Facility is approximately 2041, thanks to the efforts of Ottawa residents using the recycling and green bin programs!

The Trail Road Waste Facility primarily accepts curbside residential waste, but also accepts waste from the general public and some waste from the **Industrial, Commercial and Institutional (IC&I) and Construction and Demolition (C&D)** sectors, including City facilities. Trail Road Landfill site is a state-of-the-art facility that includes an on-site management program for leachate, and a landfill gas methane gas collection program.



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What is leachate?

Leachate is contaminated liquid that is created as liquid passes through the landfill and comes in contact with degrading waste. To protect the environment, leachate is collected and treated.

The leachate collection system is installed beneath a portion of the landfill: it is a liner and series of pipes that removes leachate for it to be pre-treated at Trail Road Waste Facility. It then receives a final treatment at the City-owned Robert O.Pickard Environmental Centre.

What is landfill gas?

Landfill gas is a combination of methane, carbon dioxide and some trace chemicals produced by the decomposition of garbage in the absence of air. Food waste decomposing in the landfill produces methane, a greenhouse gas that is 25 times stronger than carbon dioxide.

The City has an agreement with PowerTrail Inc., who collects the landfill gas and converts a portion of it to electricity. This process creates enough electricity to power 6,000 homes in Ottawa. This initiative keeps landfill gas out of the environment and uses it to create electricity!

What's Next?

While 2052 may seem far in the future, it is not. Planning end-of-life waste management processes, whether it be citing a new landfill, expanding organics processing capacity, or exploring alternative technologies, can take 10-15 years.

Developing a Solid Waste Master Plan will allow Ottawa to prepare strategic approach in how it will consider policies, programs, and initiatives aimed at reducing waste, reusing, recycling, and managing residual material in a way that incorporates the priorities and concerns of our residents and key stakeholders.

We look forward to hearing from you!