



Ottawa's Solid Waste Master Plan – why is it needed and what are the key considerations?

What is a Solid Waste Master Plan?

A municipal Solid Waste Master Plan (Waste Plan) provides the overall framework, direction, goals and targets for solid waste management, diversion and reduction policy over the short, medium and longer-term horizon. The goal is to ensure a municipality's waste is managed in the most sustainable manner possible over the long term. Waste Plans chart the course for how waste is managed, as well as allow the City to address specific waste issues as they arise. Waste Plans guide solid waste planning, decision making and services at municipalities over the long-term and usually span from 25 to 40 years in length.

Why do we need a Waste Plan in Ottawa?

There are several benefits for developing a Waste Plan in Ottawa, including:

- Allowing us to understand, anticipate and plan for costs associated with meeting the needs of the City as the population continues to grow.
- Ensuring a balance of environmental sustainability, City and community desires, and fiscal responsibility (the triple bottom line) when planning programs and policies.
- Ensuring consideration of new approaches to managing waste, such as the 5Rs (Reduce, Reuse, Recycle, Recovery and Residual Disposal), which is an evolution of the traditional 3Rs (Reduce, Reuse and Recycle) approach to waste management.
- Advancing our stagnated waste diversion rate.
- Helping us to ensure our complex and integrated waste management system is managed efficiently and effectively.

To provide some context, the City of Ottawa provides waste services for 1 million residents across 291,000 households, 1,700 multi-residential properties, 375 City Facilities (including recreation centres, libraries, long-term care homes, and client service centres), 900 parks, 750 on-street waste containers and 485 small businesses through the City's Yellow Bag Program. There are over 126 trucks that travel across 5,600 kilometres of roadway every week and collect more than 330,000 tonnes from our customers. This represents approximately 9% of all residential waste generated in the Province of Ontario, according to a 2016 StatsCan report, and services will need to continue expanding as our population grows.



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In 2020, the City's new operating expenditure budget is \$83.3 million. It is funded through the tax base, and this covers waste collection, diversion, as well as the operation of the landfill. Municipal waste management in Ottawa isn't only about the collection of material from households, it also includes:

- what we do with the material after it is collected
- how we manage our waste collection and processing contracts to continue delivering the best service possible
- how we comply with provincial and federal regulation and how we implement new policies and programs that compliment this legislation
- the technology we use to monitor the landfill as waste is disposed of in it, and how we prepare different sections of the landfill to receive new waste
- how we engage the community to encourage program participation – through everything from direct mailouts to households, ads around the City, and face-to-face interactions in the community
- how we educate residents and stakeholders and how we enforce our Solid Waste Management by-law
- and how we plan and prepare to enhance programs and services to best meet our customer's needs.
- balancing delivering and enhancing our programs and services while preparing for major infrastructure upgrades.

While the City has made tremendous efforts in advancing waste diversion, our diversion rate has plateaued at approximately 45%. We also know that traditional approaches to waste management are not enough: our waste composition studies tell us that despite the various programs in place, more than half of what residents are throwing in the garbage could be diverted through existing recycling and green bin programs. This number doesn't include items that are being thrown in the garbage that could be reused or repurposed through other community programs and initiatives.

With all of this material going in the garbage, we have to keep in mind the life expectancy of our landfill. Trail Road Landfill is the second largest municipal landfill in the Province of Ontario. While the current diversion programs have gone a long way in extending the lifespan of our landfill, the facility is set to reach capacity in 2041. We also know that our population will continue to grow, and with that, more waste will be generated. The City's new Official Plan released projections anticipating the population of Ottawa to grow 40% over the next 28 years, for a City-wide population of 1.41 million by 2046.



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A lot has changed in the waste industry, and it is becoming apparent that traditional approaches to waste management are no longer enough to support a municipality in achieving acceptable waste reduction and diversion levels. Having a well-developed, community supported plan will allow the City to investigate innovative approaches to managing waste.

Key considerations

In order to have meaningful conversations about what the City should include in the Solid Waste Master Plan it is important to understand the significance of several key considerations that will affect the scope and direction of the Plan. These include:

- The role of federal and provincial governments in waste management in Canada and how municipalities can act to compliment these responsibilities.
- The transition from a “take-make-dispose” economy to a circular economy and the role of extended producer responsibility in this model.
- New trends and current thinking in waste management, such as the proliferation of plastics and changing lifestyle and demographic trends.

In addition, at the local level, the City of Ottawa has a number of strategies and Master Plans being revised or enhanced that will have implications on the way we manage waste. The City is currently revising its [Official Plan](#), which provides a vision for future growth and development for the City. The Official Plan is currently exploring a number of policy directions that have potential impacts on waste management in the city, including urban and community design, sustainable transportation, climate and energy resiliency and supporting rural economic development.

City Council also recently approved the new [Climate Change Master Plan](#), that sets aggressive targets to to reduce greenhouse gas (GHG) emissions from the community by 100 per cent by 2050 and from City operations by 100 per cent by 2040. Greenhouse Gas (GHG) emissions associated with waste management are significant. The Government of Canada indicates that emissions from Canadian landfills account for 20% of national methane emissions. Options proposed through the City’s new Solid Waste Master Plan will need be evaluated, where relevant, to understand the environmental impact (including GHG emissions) in an effort to support the Council-approved direction to reduce GHG emissions.

A major initiative under the Climate Change Master Plan that will also require consideration is [Energy Evolution](#). Energy Evolution is a community-wide initiative with a vision to reduce energy use through conservation and efficiency, increase the supply of renewable energy



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through local and regional production and prioritize the procurement of clean, renewable energy. Potential energy savings and renewable energy usage will need to be considered when relevant technologies and solutions are discussed throughout Waste Plan development.

In conclusion, municipal waste management is very complex, and while the programs and services currently offered have managed to divert a significant amount of waste from landfill, we know that more needs to be done. Given all of the changes at the provincial and federal level and interrelated Master Plans being developed at the municipal level, paired with City growth and development, Ottawa needs a Waste Plan to guide how it will move forward in continuing to deliver and enhance programs and services, while balancing the needs of the community, government requirements and infrastructure upgrades in a socially, environmentally, and economically responsible manner.