



# Committee of the Whole: Downtown Waste Management Strategy Update

Presented by: Public Works Services

Date: June 19, 2023





# BACKGROUND

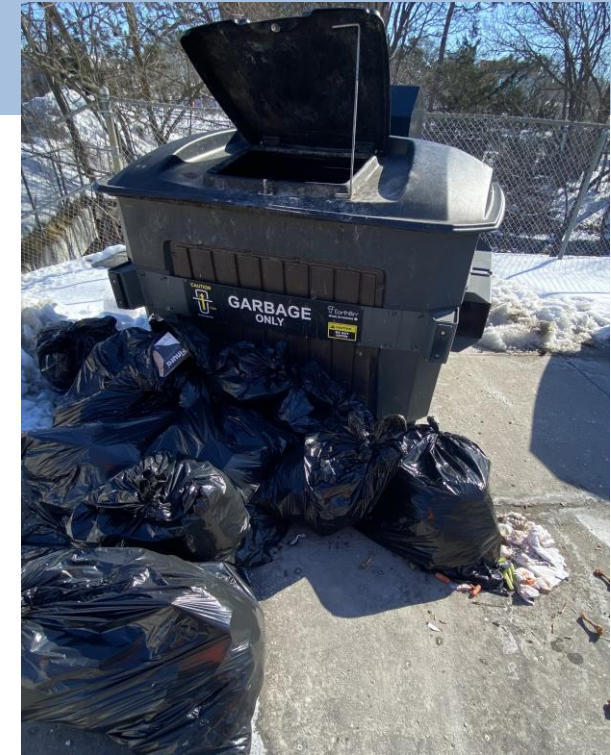
- Downtown Newmarket has experienced growth and development.
- Specialized collection is currently required to maintain a clean and attractive Downtown area.



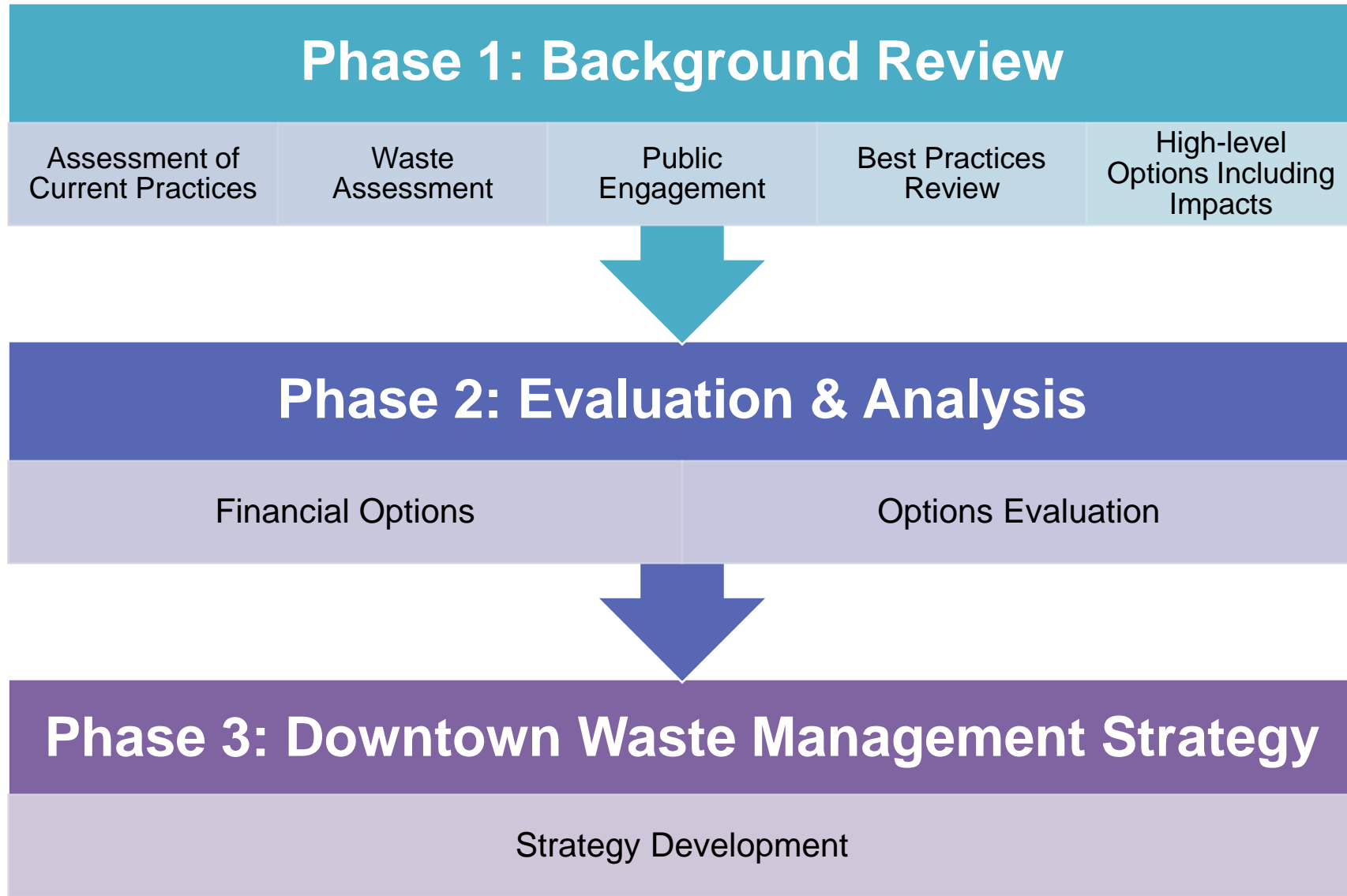


# BACKGROUND

- Purpose of the Strategy is to provide guidance on the overall management of waste along Main Street and the BIA area.
- RFP-2019-098 awarded to Dillon Consulting Ltd. (Dillon) in 2019.
- Project placed on hold due to the COVID-19 global pandemic and resulting lockdowns.



# APPROACH



# Background Study Report – Waste Assessments

## Public Space Waste Container Usage

Discreet user observations were conducted to analyze how public space waste containers were used.

## Visual Waste Audits

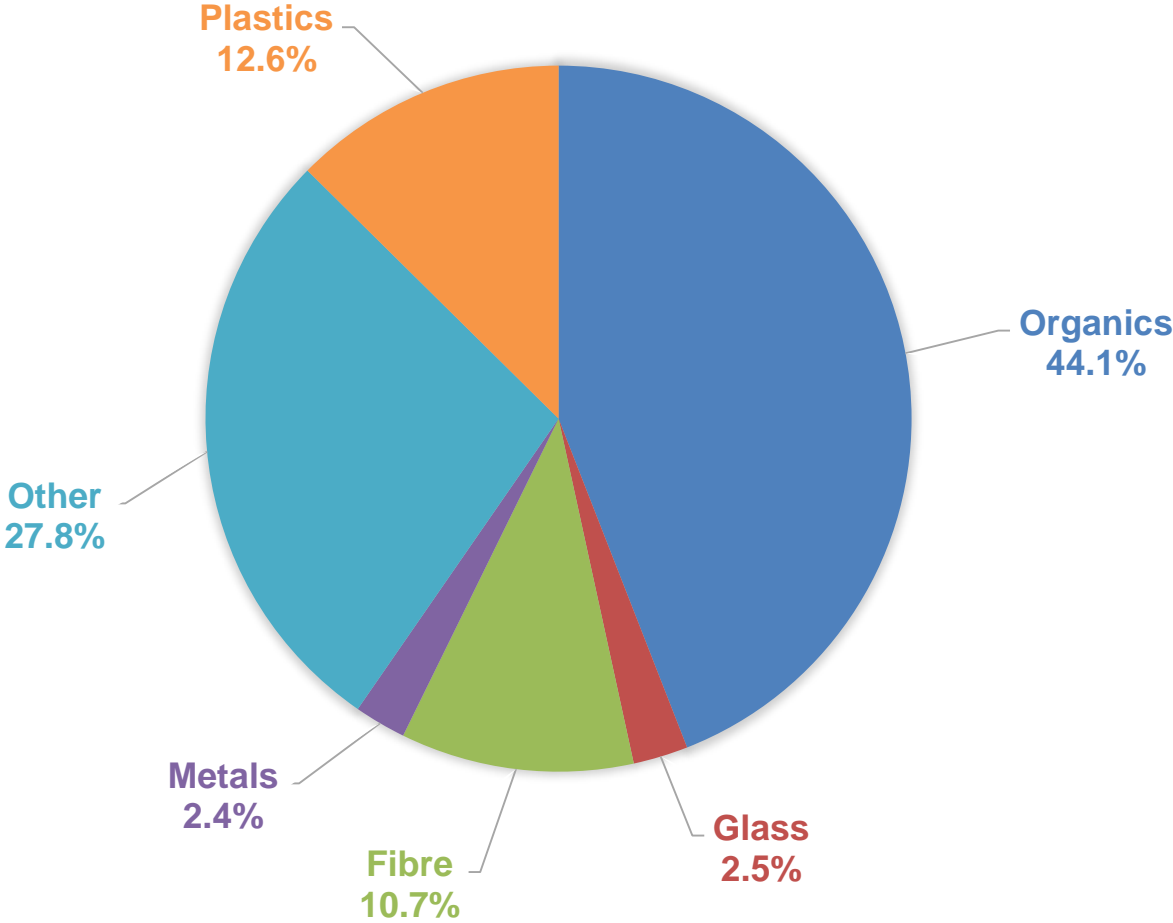
Waste set outs were assessed to identify the different types of wastes, quantities, and issues.

## Manual Waste Audits

Waste samples were collected and sorted into categories to understand composition.

# Waste Audit Results – Garbage Composition

## Curbside Collection

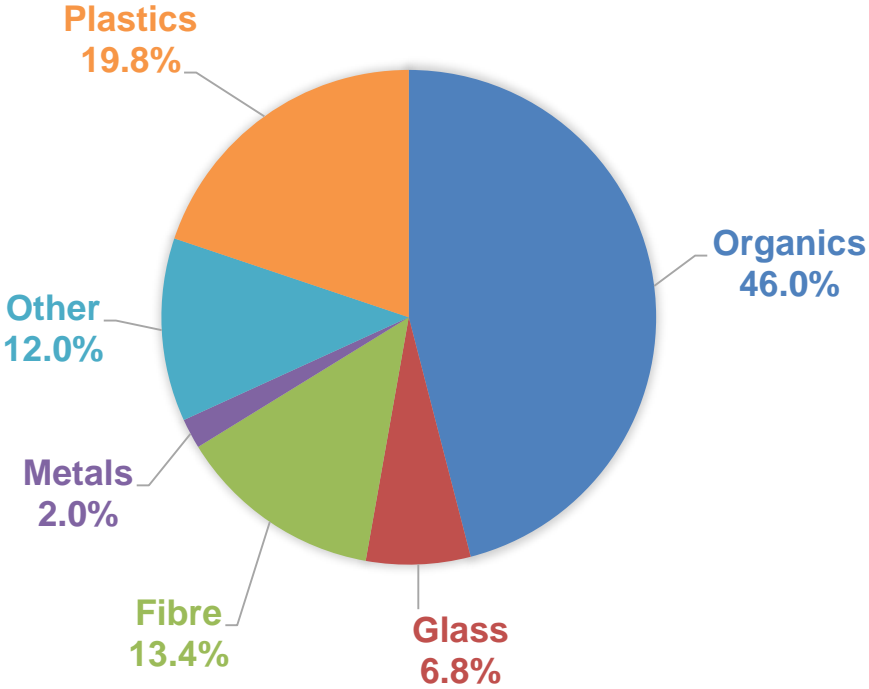




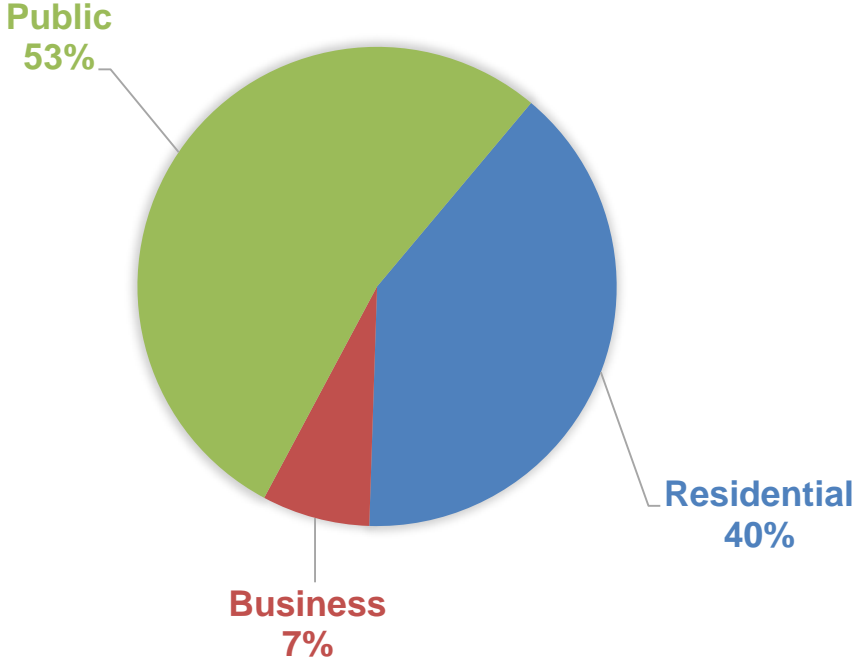
# Waste Audit Results – Garbage Composition

## Public Waste Containers

COMPOSITION OF WASTE FROM PUBLIC WASTE CONTAINERS

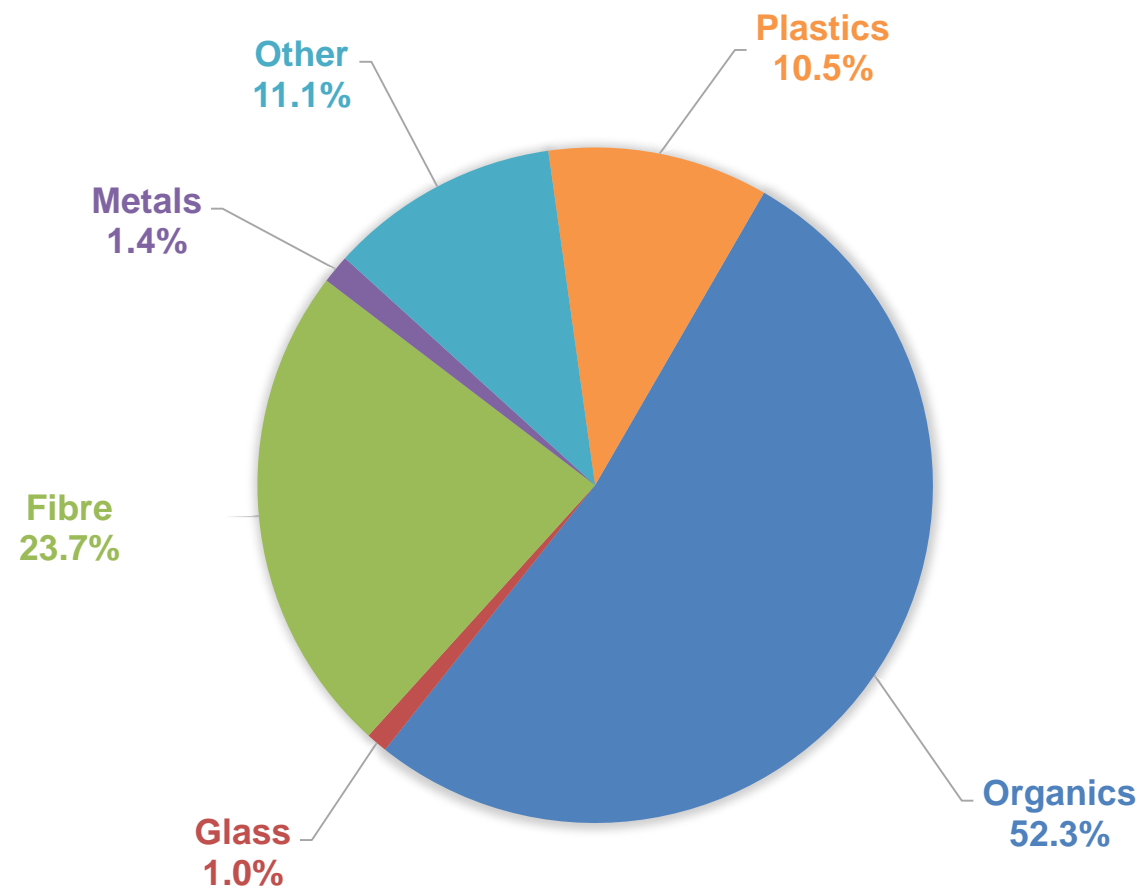


ORIGIN OF WASTE MATERIAL FROM PUBLIC WASTE CONTAINERS



# Waste Audit Results – Garbage Composition

## Front-end Containers





# Waste Assessments - Summary

## Visual Waste Audits

- Participation rate for organics was approximately 20%.
- Contamination was observed in all three waste streams (garbage, recycling, and organics).

## Manual Waste Audits

- The curbside garbage stream comprise of 44% organic waste (e.g., food scraps).
- More than 70% of material (by weight) in the curbside garbage stream was divertible.
- Approximately half of waste material in the front-end bins were organic waste.
- More than 80% of material (by weight) in front-end bins was divertible.

# Staff, Public & BIA Engagement & Feedback

## CONCERNS

- Illegal dumping, odour, overfilling of public waste containers, littering and improper sorting.
- Convenient and accessible collection.
- Limited areas to store waste coupled with insufficient collection frequency.
- Animals/pests.
- Aesthetics.
- Lack of accountability and poor Waste Collection By-law enforcement.
- Mixed use of public waste containers by residents and businesses.
- Improper set out of cardboard.
- Poor waste diversion.
- Lack of private garbage collection services for businesses.

## RECOMMENDATIONS

- Increase the number of waste containers, specifically commercial containers behind stores and restaurants.
- Improve the attractiveness of waste containers.
- Purchase underground waste containers.
- Increase service levels:
  - To improve the level of convenience.
  - To support restaurants by providing more nighttime collection.
- Enhance waste diversion education.
- Incentivize waste diversion for residents and businesses.
- Enhance outreach to property owners and conduct surveys to increase participation in diversion programs in multi-residential buildings.
- Construct a retaining wall to hide waste containers.

# Jurisdictional Scan

## City of Toronto, ON, Canada

- Launched collection services for small businesses and mixed-use commercial spaces with different levels of service and frequency of collection based on a fee structure (2008).
- Program is financed through a variable rate system and charged to the utility bill.

## City of Guelph, ON, Canada

- Pilot is currently underway.
- This program is responsible for providing garbage, recycling and organics collection to businesses in the downtown area.

## New York City, NY, USA

- Clean Curbs pilot program started in spring 2021.
- Allows commercial establishments and Business Improvement Districts (BIDs) to apply for sealed, on-street containers to store garbage and recyclables.



# Jurisdictional Scan (continued)

## District of Noord, City of Amsterdam, Netherlands

- Residents and businesses bring their waste to centralized underground containers.
- Recycling and organics containers are free of charge to use.
- Residents receive an RFID card at no charge.
- All businesses are eligible to use the containers and receive an RFID access card if they generate nine bags of garbage or less.

## City of Bergen, Norway

- The “Bossnett” system spans 7 km under the streets of the downtown city centre.
- Residents and businesses bring their waste to outdoor units (inlets) for garbage, recyclables or cardboard.
- Deposited material is stored in an underground tank.
- The vacuum system sucks waste material through at 70 km/hour to one of two waste collection stations.

# Project Considerations

## Cost

- In-ground containers can have high upfront capital costs
- Potential cost savings from decreased collections.
- One entity may be able to provide waste collection services at a reduced cost rather than each business individually contracting with a hauler.
- Some systems that require access through RFID tags incur replacement costs as well as costs to manage illegal dumping.

## Infrastructure

- New infrastructure can be costly and have high upfront capital costs
- There is a desire from businesses to have an ability to dispose of their garbage, recycling, and organics frequently.
- In-ground containers can permit businesses to access waste disposal 24/7.
- User identification systems make users feel more accountable and provides an incentive to reduce and separate waste materials.

## Ease of Use

- Containers can reduce pests compared to using garbage bags.
- In-ground collection containers make waste disposal and waste collection convenient when placed strategically.
- Infrastructure such as in-ground containers are more aesthetically pleasing versus garbage bags on the street.
- Registration processes should be simple for users.

# Proposed Waste Management Options

## Infrastructure (Collection System)

- Explore a system that incorporates the use of in-ground containers.
- Consider the Town's current waste collection contract.
- Account for regulatory changes.
- Explore different infrastructure options and combinations.
- Consider existing challenges and possible solutions that address illegal dumping, lack of recycling options, and improper use of bins.



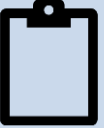


# Proposed Waste Management Options

## Infrastructure (Public Spaces & Signage)

- Consider innovative and technology-based solutions located strategically throughout the downtown area.
- Explore and provide examples of new public space waste containers that would compliment the Town's downtown area.
- Identify the ideal type of signage that has been proven highly effective in increasing waste diversion.
- Confirm if new signage will be created in-house or through a third-party. Anticipate the level of staff resources required.




# Proposed Waste Management Options

## Enforcement

 VISUAL AUDITS	 SECURITY CAMERAS	 WASTE BY-LAW
<ul style="list-style-type: none"><li>• Identify staffing resources required to train and oversee the visual audits conducted by co-op/summer students, the number of students required, as well as detailed plans of action based on audit results.</li></ul>	<ul style="list-style-type: none"><li>• Take privacy concerns into consideration.</li><li>• New infrastructure will need to consider the installation of power sources to provide lighting and/or security cameras.</li><li>• This option can be explored further as part of a comprehensive strategy.</li></ul>	<ul style="list-style-type: none"><li>• By-law enforcement should be used as an escalated approach.</li><li>• Outline the staffing resources required to support enforcement and compliance within the downtown area.</li></ul>

# Proposed Waste Management Options

## Education

 <b>TOOLKIT</b>	 <b>COACHING</b>	 <b>BIA COLLABORATION</b>
<ul style="list-style-type: none"><li>Consider having toolkits available online to support easy and convenient access to waste resources for tenants, landlords, and businesses.</li></ul>	<ul style="list-style-type: none"><li>Anticipate the level of staff resources required.</li><li>Education should anticipate non-compliance with a new system; identify the level of training required.</li></ul>	<ul style="list-style-type: none"><li>Identify the level of assistance required to support the BIA in managing their waste and addressing waste-related concerns.</li><li>Anticipate the level of staff resources required to provide continuous education and training.</li></ul>



# Proposed Waste Management Options

## Policy (Waste By-law Update)



Explore the requirement of mandatory participation in a new waste collection system by businesses/properties who currently have private collection.



Consider a policy/amendment to the By-law to ensure everyone is following the same program, and if properties decide to continue to use their own private waste contractor, if this will have an impact on the Strategy.

# Next Steps

- Approval to further explore proposed options.
- A detailed exploration of these options will provide the Town with a recommended final plan.
- The final plan will be brought back to Council for review and approval.







**THANK YOU**