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Downtown Waste Management Strategy Update Staff Report to Council

Report Number: 2023-44

Department(s): Public Works Services

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Meeting Date: June 19, 2023

Recommendations

1. That the report entitled Downtown Waste Management Strategy Update dated June 19, 2023, be received; and,
2. That Council approve the options proposed by staff for further exploration and consideration in the development of a final plan for the Downtown Waste Management Strategy; and,
3. That Staff be authorized and directed to do all things necessary to give effect to this resolution.

Executive Summary

Newmarket's Main Street area is home to attractive historical buildings and a unique blend of residential and commercial establishments. Over the years, as Main Street has experienced growth and development, the nature and generation of waste material from this area has also changed. To address the evolving needs of efficiently managing waste for the downtown area, a Downtown Waste Management Strategy (Strategy) is being developed.

Current waste generation along Main Street requires specialized collection to maintain a clean and attractive Downtown area. However, despite current efforts, waste management along Main Street remains a challenge. Such challenges include (but are not limited to) space availability, storage capacity, accessibility, and participation. In response, the Town issued an RFP for consultant services to establish a Strategy which was awarded to Dillon Consulting Limited (Dillon).

The purpose of the Strategy is to provide guidance on the overall management of waste in the Main Street area and consider alternative solutions such as changes to infrastructure (i.e., waste collection equipment, public space receptacles, etc.), collection schedules, and policy directives. Proposed recommendations are also to include projected costs and a cost-benefit analysis as well as incorporate proposed legislative changes (i.e., Ontario's Food and Organic Waste Framework, *Waste Diversion Transition Act, 2016*, *Resource Recovery and Circular Economy Act, 2016*).

Project deliverables include the development of a Background Study Report (Attachment 1), the Strategy, and public and stakeholder consultations and presentations.

Dillon is seeking direction on which proposed options to pursue as part of the next steps of the Strategy's development. Staff recommends pursuing an approach that combines multiple options to address the unique needs and challenges of the Town's downtown area. Building on what Dillon has proposed, staff would like to move forward with additional recommendations for incorporation into the Strategy that are outlined in this report.

Purpose

The purpose of this report is to provide Council with an update on the development of the Town's Downtown Waste Management Strategy and seek approval of additional options proposed by staff to shape the overall Strategy.

Background

In 2019, RFP-2019-098 was awarded to Dillon Consulting Limited (Dillon) to develop a Downtown Waste Management Strategy (Strategy) for the Town of Newmarket. Not long after the project began in Q1 2020, the project was placed on hold in response to the COVID-19 pandemic and resulting lockdowns.

The purpose of the Strategy will be to provide guidance on the overall management of waste along Main Street and the BIA area as well as direction for effective and efficient waste management solutions that will meet current and future needs of a downtown area experiencing growth and change. An important component of this Strategy includes improving waste management, increasing waste diversion, and enhancing participation from local businesses and residents in the Main Street/BIA area.

Discussion

As part of the development of the Town's Downtown Waste Management Strategy (Strategy), a Background Study Report was completed by Dillon and includes the following:

- Assessment of the Town's current waste management situation for the downtown residential and business sector and public waste containers.
- Waste diversion performance review.
- Feedback obtained through stakeholder engagement and consultation activities.
- Assessment of legislative and population growth impacts to the Town.
- Best practice review.
- Development of potential options.

Stakeholder Engagement & Feedback

Stakeholder engagement and feedback was conducted through virtual engagement events, web-based tools, and surveys. The Town's social media accounts (Twitter and Facebook) and email was used to notify stakeholders of engagement events. Web-based tools were maintained regularly throughout the background study to inform the community of updates and opportunities to get involved.

Town staff were also engaged to provide feedback and a survey was held from October 20, 2021, until November 4, 2021, and a virtual meeting was held on October 26, 2021. Attendees represented various aspects of the Town's waste management services including customer service, operations, enforcement, and administration.

Waste Assessments

A component of the Strategy included a series of assessments to assist in determining immediate and long-term concerns for improving waste management in the Town's downtown core:

1. Public Space Waste Container Usage

Discreet user observations to analyze how downtown business customers and pedestrians access public space waste containers to determine how containers meet their intended purpose. Observations indicated that some individuals take the time to read signage, while others appeared to just want to dispose of their waste regardless of if it's disposed of correctly.

2. Visual Waste Audits

Waste set outs were assessed on three occasions to identify the different types of wastes, quantities, and ongoing issues with waste management in the study area. Results indicated that the participation rate in organics is approximately 20% of curbside set outs, and over 80% of recycling set outs had contamination. Over 60% of garbage set outs were observed to have materials that are divertible in the Town's existing curbside diversion programs.

3. Manual Waste Audits

Waste samples were collected and sorted into categories to understand composition. Results indicated that curbside garbage is comprised of 44% organics and over 70% of the garbage stream could be diverted in the Town's existing curbside diversion programs. More than 60% of curbside recycling is fibre materials, of which 60% is corrugated cardboard.

Waste found in public space waste containers was comprised of 40% residential waste and 7% business waste. Waste was comprised of 46% organics, 20% plastics and 13% fibre materials.

Front-end containers located in Market Square contained both residential and business waste and was comprised of 52% organics, 24% fibre and 10% plastics. More than 80% of the materials, by weight, found in the front-end container could have been diverted in the Town's existing waste diversion programs.

Project Considerations

Each of the jurisdictions reviewed in the Background Study Report implemented different waste management strategies for managing business and residential waste in their downtown cores. From the jurisdictional review, Dillon provided a list summarizing project considerations including:

1. Costs

- In-ground containers can have high upfront capital costs for the container, shipping, and installation; however, these containers may reduce long-term operating costs, depending on the frequency of collection in the area. These containers can also encourage a reduction in the amount of garbage generated due to potential costs savings from decreased collections which may increase recycling rates.
- One entity (such as a municipality or BIA) may be able to provide waste collection services at a reduced cost (through either municipal collection or a private contract) rather than each business individually contracting with a hauler. This type of collaborative and coordinated program can result in higher participation in recycling and organics collection.
- Some systems that require access through fobs and/or RFID tags incur replacement costs as well as costs to manage illegal dumping. Additionally, repairs to systems may be costly and require alternative collection systems in place when the system is down for scheduled and unscheduled maintenance.

2. Infrastructure

- Infrastructure can be costly and have high upfront capital costs; however, if there is an opportunity to install systems, (e.g., the Bossnett system – an automated underground vacuum-based system) while other infrastructure projects are taking place, there can be installation cost savings. Backup plans and budgeting should also be in place for when there is scheduled and unscheduled maintenance.
- There is a desire from businesses to have an ability to dispose of their garbage, recycling, and organics frequently. For some businesses (e.g., restaurants), waste is typically removed and disposed of daily. For other businesses in a downtown core, there are space limitations and waste material cannot remain on-site. Keeping organic waste on site risks attracting vermin and insects, as well as causing unpleasant odours. Frequent collection can be expensive; however, in-ground containers can permit businesses to access waste disposal 24 hours a day, 7 days a week without the added daily collection cost.
- Some systems may be taken advantage of by users that must self-declare the amount of waste that is generated versus a pay-by-weight/pay-per-use system. Ongoing enforcement will be required to determine which users may be taking advantage of the system.
- User identification systems make users feel more accountable and provides an incentive to reduce and separate waste materials.
- Night collection services (whether in-ground containers or garbage bags/carts) can reduce traffic congestion and delays on major streets.

3. Ease of use

- Containers (i.e., front-end containers, carts, or in-ground containers) can reduce pests compared to using garbage bags.
- In-ground collection containers make waste disposal and waste collection convenient when placed strategically in places that users and collection vehicles can easily access.
- Infrastructure such as in-ground containers are more aesthetically pleasing versus bags of garbage on the streets.

- Registration processes should be simple for users as long approval processes will deter participation in new programs.

Waste Management Options

Based on the Town's current waste management system, Dillon developed potential waste management options, noting that these will be further refined and evaluated following the financial analysis. The next step in the development of the Strategy is for the Town to review the options proposed by Dillon and determine which ones to pursue further.

Staff recommends pursuing an approach that combines multiple options to address the unique needs and challenges of the Town's downtown area. Building on what Dillon has proposed, staff would like to move forward with additional recommendations for incorporation into the Strategy. These proposed recommendations are outlined below:

Option #1: Infrastructure (Collection System)

- Explore a system that incorporates the use of in-ground containers located throughout the Main Street area that takes the following into consideration:
 - Use of in-ground bins for businesses only.
 - Having multiple locations to provide convenient collection points for businesses.
 - In-ground bins would help address the lack of storage space for businesses and are aesthetically pleasing.
 - In-ground bins would need to capture garbage, recycling, cardboard, and organics.
 - In-ground bin options must consider accessibility in terms of collection (i.e., crane operated collection versus front-end collection).
 - Identify strategic locations for in-ground bins and the impact they will have on spaces (i.e., loss of parking spots, patios, etc.).
 - Explore cost recovery solutions (i.e., pay-per-use, levy, fob usage, cost-sharing, etc.).
 - Conduct a cost comparison of private collection (i.e., a single business or building) versus group collection.
- Changes to the current system will need to consider the Town's current waste collection contract and account for regulatory changes (i.e., Ontario's transition of the Blue Box program to producers, Ontario's Food and Organic Waste Policy Statement, etc.).
- Explore different infrastructure options and combinations such as cart-based collection, in-ground containers, increased collection frequencies, requirements for the use of clear plastic garbage bags (e.g., to support monitoring and assessment), etc.

- Consider existing challenges and possible solutions that address illegal dumping, lack of recycling options, and improper use of the bins (i.e., locks being broken off for current in-ground containers in the Main Street area).

Option #2: Infrastructure (Public Spaces)

- Consider innovative and technology-based solutions such as solar-compacting containers located strategically throughout the downtown area that are functionable year-round in all types of Canadian weather.
- Explore and provide examples of new public space waste containers that would compliment the Town's downtown area. New waste receptacles should be durable, have easy-to-follow signage, multiple waste compartments, and be visually appealing to residents, businesses, and visitors.

Option #3: Enforcement (Visual Audits)

- 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.

Option #4: Enforcement (Security Cameras)

- The installation of security cameras should take into consideration privacy concerns.
- New infrastructure (e.g., in-ground bin locations) will need to take into consideration the installation of power sources to provide lighting and/or security cameras.
- Implementing a new system should help with the proper disposal and management of waste. If illegal dumping continues to be an issue, this option can be explored further as part of a comprehensive strategy.

Option #5: Enforcement (Waste By-law)

- By-law enforcement should be used as an escalated approach with education and outreach being the first step.
- Outline the staffing resources required to support enforcement and compliance within the downtown area.

Option #6: Education (Toolkit)

- Consider having toolkits available online to support easy and convenient access to waste resources for tenants, landlords, and businesses.

Option #7: Education (Coaching Program)

- Anticipate the level of staff resources required to provide education and training to co-op/summer students, businesses, and residents.

- Education should anticipate non-compliance with a new system; identify the required level of training to ensure users are aware of new program requirements if there are changes to the current system.

Option #8: Education (Signage)

- Identify the ideal type of signage that has been proven highly effective in increasing waste diversion and provide examples where possible.
- Confirm if new signage will be created in-house or through a third-party. If conducted in-house, anticipate the level of staff resources required.

Option #9: Education (BIA Collaboration)

- Identify the level of waste management assistance required to best support the BIA in managing their waste and addressing waste-related concerns.
- Anticipate the level of staff resources required to provide continuous education and training to the BIA.

Option #10: 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.

Proposed options should take into consideration the resources (e.g., capital costs, staff, planning, procurement, etc.) and timeframe required for successful implementation and operation.

The detailed exploration of these options will provide the Town with a recommended final plan to implement, which will include details such as waste receptacle locations, container types, recommended by-law changes, possible mandatory waste collection program, education, and enforcement approaches, costing and funding solutions. The final plan will be brought back to Council for review and approval.

Conclusion

The recommendations proposed by staff are intended to help guide the development of the Strategy to ensure that proposed options increase waste diversion, are cost-effective and strategic for an area experiencing rapid growth and change, makes waste collection and disposal convenient, easy, and accessible for residents and businesses, and has the potential to enhance the downtown streetscape.

Business Plan and Strategic Plan Linkages

This report aligns with the Town's vision of being a community Well Beyond the Ordinary and supports the Town's mission of Making Newmarket Even Better.

Consultation

Consultation was undertaken with the public, the BIA, Economic Development, and other internal departments.

Human Resource Considerations

None.

Budget Impact

Not applicable to this report.

Attachments

Attachment 1 - 2022.03.11 DWMS Background Study Report

Approval

Mark Agnoletto, Director, Public Works Services

Peter Noehammer, Commissioner, Development & Infrastructure Services

Contact

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