



**SUBJECT:** Loose Leaf Collection Pilot evaluation and program options

**TO:** Environment, Infrastructure & Community Services Cttee.

**FROM:** Roads, Parks and Forestry Department

Report Number: RPF-02-22

Wards Affected: All

File Numbers: 795-01

Date to Committee: March 3, 2022

Date to Council: March 22, 2022

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### **Recommendation:**

Direct the Director of Roads, Parks and Forestry to implement a three-week Loose Leaf Collection Program as outlined in option 2 in roads, parks and forestry department report RPF-02-22.

### **PURPOSE:**

This report has been prepared to review the two-year Loose Leaf Collection pilot programs of 2020 and 2021 and provide improvement options for Council's consideration.

### **Vision to Focus Alignment:**

- Delivering customer centric services with a focus on efficiency and technology transformation.

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### **Background and Discussion:**

The primary service for leaf disposal throughout the City of Burlington is provided through the Region of Halton's bagged yard waste pickup program, with bi-weekly collections scheduled from April to mid-December. The city also provides a loose leaf collection service which supplements the regional service, and was originally put in place to help residents in areas where leaf drop volumes are very high, and where it

would not be convenient to bag/collect through the Region's yard waste collection service.

Prior to 2020, the city's loose leaf collection program was delivered annually over a six-week period commencing in early November, with two collections planned for designated areas of the city. Occurrences of winter weather during the program period would often cause collection delays and in extreme cases prevent the completion of the program. The later was the case during the 2018 and 2019 program years, with continuous winter weather causing an early end to leaf collection activities, leaving many areas not serviced with uncollected leaves remaining on the roadway.

Understandably, this caused intense resident dissatisfaction with a high number of complaints, which resulted in a program review and the establishment of the recent two-year pilot.

The current loose leaf collection pilot was approved by Council for the 2020 and 2021 program years and was restricted to a single pickup to select areas of the city, over a reduced four-week period. The pilot program was designed to mitigate service delivery risks associated with the Covid-19 pandemic as well as to reduce program costs.

This report has been prepared to summarize the findings of the two-year pilot as well as to recommend program improvement options.

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## **Loose Leaf Collection Program Challenges**

There are several issues that regularly arise during leaf collection operations that can interfere or frustrate collection operations as follows:

### Incorrect Placement/Contamination of Piles

Guidelines for loose leaf collection including instructions on the proper placement of leaves are provide on the city's website and shared through social media. However, in some cases leaves are not placed in a location where the vacuum hose can reach them. This can result in either a worker having to take additional time to rake leaves to the curb or leaf piles being left uncollected if a raker isn't available. These same instructions also advise that leaf piles must be free of garbage or yard waste such as twigs and branches, as these contaminants can damage collection equipment. If the operator notices a contaminated pile they are instructed not to collect it. In some cases, the operator does not notice the contamination, which results in the vacuum hose becoming clogged with subsequent cleanout activities delaying the operation from continuing.

### Parked Cars

Our guidelines indicate that loose leaf piles must be placed on the boulevard adjacent to the curb or road shoulder. The presence of parked vehicles can restrict or even prevent access to leaf piles, resulting in a return visit. This is of a particular concern in areas where on-street parking is permitted or where home renovations result in a high volume of contractor vehicles parked on the street.

#### Inclement Weather

The collection of leaf piles which are wet due to rain, frozen due to cold temperatures, or mixed with snow is more difficult and takes additional collection time when compared to a dry pile of leaves. In addition, the collection of wet/frozen leaf piles results in more frequent maintenance of equipment, such as the cleaning of blocked hoses or leaf box screens.

#### Winter Maintenance

The equipment and staff used for leaf collection operations are also the same resources used for winter maintenance operations. Therefore, the occurrence of a winter weather during loose leaf collection operations will result in delays to the leafing program as trucks are converted for winter response and then converted back after the winter event has been addressed. Each conversion requires several hours and may result in service delays to either operation. It should be noted that regardless of the amount of snowfall accumulation received, the city is obligated to divert resources to this activity in order to maintain safe road and sidewalk conditions as per the Provincial Minimum Maintenance Standards.

#### Staff Availability

Staff that are involved in both leafing operations and winter maintenance must adhere to “hours of service” legislation which may limit the resources available for leafing operations following a winter event. In addition, the availability of staff can be impacted by illness or the need to attend winter training sessions.

#### Storage and Disposal

Collected leaves are temporarily transported to various storage sites and then trucked to the regional waste management center in Milton. Location of the storage sites are critical to minimize turnaround/travel times in order to maximize the efficiency of the city’s collection service. Where yard space is available, a small amount of leaves are retained and utilized as flower bed compost in the city’s horticultural operations.

Disposal costs include the cost to truck collected leaves to the regional site plus a \$25 per tonne tipping fee. The Region has recently waived the city’s fees for leaf disposal occurring in 2022 and beyond. Disposal costs directly attributed to tipping fees at the regional site are in the magnitude of \$100,000. These savings were originally anticipated to be realized in the 2021 operating year and therefore previously

incorporated in the current program budget amount, which was reduced from \$835,000 in 2020 to \$720,000 in 2022.

### **Evaluation of the Two-Year Pilot**

A reduced loose leaf collection program was piloted for the 2020 and 2021 collection years. The pilot programs were scheduled over a four-week period and was restricted to a single pickup to select areas of the city. The pilot was designed to mitigate service delivery risks associated with the Covid-19 pandemic as well as to reduce program costs.

In general terms, collection operations for each year of the pilot went well. Leaf volumes collected for 2020 and 2021 averaged 4,400 tonnes per year and were understandably less than the average 5,500 tonnes of leaves collected when two pickups were scheduled. It should be noted that leaf collection volumes are approximate and will vary annually subject to seasonal growing conditions.

Program costs for 2020 and 2021 are projected to average \$650,000 per season. Prior to the pilot, the annual program budget was \$835,000 with a five-year average for actual costs incurred of \$730,000. The results confirm one of the pilot's objectives of reduced program costs.

In regards to mitigating service delivery impacts, reducing the number of scheduled pickups has reduced the risk of not completing the program or significant deviations in the pickup schedule from a probability perspective, but ultimately the completion of the program is subject to the occurrence and severity of winter weather experienced during the program period.

### **Strategy/process**

#### **Collection Schedule**

From a customer inquiry perspective, the most common complaint is related to the collection schedule and the desire to delay the program in order to maximize the amount of leaves collected through the city's service. As previously noted, the collection schedule is restricted by our requirement to deliver winter maintenance services, as the trucks used to collect leaves are the same trucks used for winter response. As a consequence, the collection timeframe is generally limited to November and on occasion will extend into the first week of December.

Practically speaking and regardless of our schedule restrictions, given the variety of tree species within the city, it would never be possible to align leaf drops with all trees within each collection zone. Therefore, residents will continue to be encouraged to supplement

the city's collection service by utilizing the region's yard waste program, as the well as using other environmentally friendly disposal methods such as mulching, composting or utilizing leaves for the winterizing of flower beds.

### Collection Zones

Historically collection zones have been delineated on a grid pattern in order to outline the limits of each collection area and simplify the understanding of the collection schedule. Through the implementation of the two-year pilot and reduced collection period/pickups, the zone layout was revised and sequenced to better align with historical leaf drop volumes. An opportunity exists to further align collection zones with tree canopy density which is an option detailed further below.

### Automatic Vehicle Locator (AVL) Application

The city has recently implemented a new AVL system with available real time vehicle tracking. Through the use of this application, opportunities exist to improve the efficiency of services delivered for leaf collection with increased oversight of the operations and better utilization/management of resources. In addition, the development of a public facing progress map for leaf collection operations is under consideration for future collection programs.

### Program Communications and Inquiry Tracking

Communicating information on leaf collection progress is an important part of the city's leaf collection program. Information is provided on the city's website and communicated through social media as necessary. Updates are also available through Service Burlington with customer requests tracked and logged in one central system which improves response timing as well as the overall customer inquiry experience.

## **Options Considered**

### Option 1 – Implement Current Pilot Four-Week Collection Program

This option will continue with the four-week, single pickup program that has been piloted over the 2020 and 2021 collection years. A map of the pilot collection zones is provided in Appendix A.

As previously noted, the pilot program worked well in mitigating service delivery risk and reducing program costs. Complaints were minimal, with the majority arising from residents within Zone 1 who could not take full advantage of the city's collection service due to leaf drop timing, and therefore had to utilize the regional bagged collection service.

Program costs for the pilot averaged \$650,000 per season with realized savings over the five-year average cost of \$730,000 (prior to the pilot). In relation to the 2022 leaf

collection budget of \$720,000, this option will achieve approximately \$70,000 in annual operating budget savings for a total operating budget requirement of \$650,000.

#### Option 2 – Implement Three-Week Collection Program (Recommended)

This option will improve upon the parameters of the two-year pilot by deferring the start of the collection period by one week, which better aligns with leaf drop timing and thereby increases the ability for residents to take advantage of the city's collection service.

This option also has the potential to reducing service complaints but comes with additional resource/budget requirements to accommodate the compressed schedule and increased collection volumes. In order to optimize collection operations, the zone map as indicated in Appendix B, has been adjusted to better align with higher tree density areas, with collections in these areas occurring later in the program. Further zone adjustments will occur as necessary and in alignment with data from the upcoming Urban Forest Master Plan update.

Implementing this option does require the increased use of contract services through the addition of one collection crew at an approximate cost of \$50,000. In relation to the 2022 leaf collection budget of \$720,000, this option is estimated to have an annual budget savings of \$20,000 for a total operating budget requirement of \$700,000. The additional resources is for a full collection crew (vac with truck, operator and rakers). Haulage for the time being will be internal resources and we will review that after a couple of years of data to analyze. The additional week of work recovered in this option will be utilized for additional non-winter maintenance activities and winter training of operators.

#### Option 3 – Return to a Six-Week Collection Program

This option would result in the reinstatement of the original six-week, two pickup collection program. Service delivery risks intended to be mitigated through the pilot would not be affected and program costs would also increase.

Implementing this option would require the reinstatement of the original program budget plus inflationary increases, minus savings attributed to the elimination of the regional tipping fees. The updated program cost would be approximately \$775,000. This option is therefore estimated to have an additional costs impact of \$55,000 in annual operating budget.

#### Option 4 – Eliminate the Loose Leaf Collection Program

Cancelling the program would provide significant cost savings but also greatly inconvenience residents in areas where leaf drop volumes are very high, as residents

would need to rely on the region's bagged yard waste collection service or in some cases incur additional costs through the engagement of a private service provider. Implementing this option would achieve budget savings associated with equipment operations, staff overtime, contract services and disposal costs. The estimated annual operating budget savings would be approximately \$210,000. The remaining budget allocation is mostly made up of staff time that will be reallocated to other seasonal programs.

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## **Financial Matters:**

### **Total Financial Impact**

Financial impacts are provided within the body of the report.

The recommended option to implement a three-week collection program will have an estimated annual budget savings of \$20,000, resulting in a total operating budget requirement of \$700,000 for loose leaf collection.

### **Source of Funding**

The source of funding for the Loose Leaf Collection Program is the operating budget and the 2022 budget amount for the program is \$720,000.

### **Other Resource Impacts**

Not applicable

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## **Climate Implications**

The Loose Leaf Collection Program is currently dependent on gas and diesel powered equipment that contribute to the city's corporate greenhouse gas emissions. The Region's yard waste collection program also utilizes diesel powered trucks that contribute to greenhouse gas emissions. Through its green fleet replacement strategy, the city will be investigating opportunities to reduce its reliance on vehicles powered by internal combustion engines. Regardless, the best practice for homeowners to reduce the climate change impact of leaf collection would be to mulch and compost on their own property to the greatest extent possible.

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## **Engagement Matters:**

Communication of the Loose Leaf Collection Program and any related changes is very important to ensure the public have a good understanding of the program specifics, challenges, the variables that impact collection, where to look for information, and what happens if winter weather occurs.

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## **Conclusion:**

This report has been prepared to review the two-year Loose Leaf Collection pilot programs of 2020 and 2021, and provide improvement options for Council's consideration. Based on the findings of pilot staff are recommending the implementation of a three-week Loose Leaf Collection Program moving forward.

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Respectfully submitted,

Matt Koevoets

Manager of Roads Operations

## **Appendices:**

- A. Map of Pilot Four-Week Loose Leaf Collection Program
- B. Map of Proposed Three-Week Loose Leaf Collection Program

## **Report Approval:**

All reports are reviewed and/or approved by Department Director, the Chief Financial Officer and the Executive Director of Legal Services & Corporation Counsel.