Office of the
Auditor General
City of Ottawa

Audit of Curbside Garbage Collection

September 2026

Office of the Auditor General City of Ottawa

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Introduction

The Audit of Curbside Garbage Collection (previously titled the Audit of Solid Waste) was included in the 2026–2027 Audit Work Plan of the Office of the Auditor General (OAG), approved by City Council on December 10, 2025.

Background/Context

Solid Waste Services (SWS), a branch within the Public Works Department, is responsible for the development, management, and environmentally sound operation of the residential solid waste management system for the City of Ottawa (the City). This includes collecting, diverting, and disposing of residential waste, organics, parks waste, and household hazardous waste.

Under the Solid Waste Services By-law No. 2024-453 (the By-law), SWS is responsible for the bi-weekly collection of curbside garbage and bulky items (i.e., larger objects that do not fit in a standard garbage bag such as furniture) from approximately 315,000 addresses, including a mix of urban, suburban, and rural residences across Ottawa's 2,800 square kilometre footprint, with a single garbage truck typically servicing between 750 and 1,200 homes on a typical collection day. As of March 2026, curbside garbage collection is delivered through a hybrid model, with residences assigned to one of three service geographic areas or zones established by the City to manage collection operations across Ottawa, wherein:

- An in-house collection team serves one of three collection zones (approximately 22% of residences), and
- A vendor-contracted collection team serves the remaining two collection zones (approximately 78% of residences).

The annual expenditures of waste collection services including curbside garbage collection as well as other services such as organics (e.g. green bin) are summarized below, along with the updated 2026 budget:

Table 1 – Annual Expenditures Related to Waste Collection Services

Cost Category	2023 Actual	2024 Actual	2025 Actual	2026 Budget
	In $ millions			
Salaries, Benefits and Overtime	11.2	12.2	12.8	11.5
Fleet Costs	11.6	9.6	9.7	12.6
Materials & Services	42.2	45.6	53.2	57.6
Other (recoveries and allocations)	(2.2)	(2.4)	(2.8)	(1.6)
Total Expenditures	**62.8**	**65.0**	**72.9**	**80.1**

Solid Waste Master Plan and Long-Range Financial Plan

City Council approved the Solid Waste Master Plan (SWMP) in 2024, establishing a long-term framework to reduce reliance on landfill dependence, increase waste diversion, and support environmentally sustainable waste management. A key initiative under the SWMP was the reduction of the curbside garbage limit from six items to three-items in 2024 (as outlined in **Figure 1**). The change was intended to reduce garbage generation while promoting use of recycling and other diversion programs (e.g. green bin).

Figure 1: Illustrative Representation of the Three-item Garbage Limit



To support the long-term sustainability of the SWMP and ongoing operations, the City developed the Solid Waste Services Long Range Financial Plan (LRFP), a 28-year financial strategy that addresses current and future capital requirements. The LRFP included the replacement of the waste diversion charge on property tax bills with a fully rate-based residential curbside service fee, thereby changing the funding model for curbside waste services.

Other recent program changes

Curbside garbage collection has also been impacted by several other significant changes in recent years, including:

- Council's approval of the By-law in October 2024, which introduced additional limits, restrictions, sortation requirements, and responsibilities for residents when setting out waste for curbside collection;
- The transfer of responsibility for curbside recycling collection from the City to the Province of Ontario, effective January 1, 2026;
- Reconfiguration of curbside collection zones and the award of a new curbside collection contract, effective March 30, 2026. The City consolidated its five-zone collection structure, in which three zones were serviced by the contracted service provider (Contractor) and two were serviced by the City's in-house collection team, into a three-zone structure consisting of two contractor-operated zones and one zone assigned to the City's permanent in-house collection team; and
- Establishment of new processing contracts with two private landfill operators to divert up to 60,000 tonnes of garbage annually from the City-owned Trail Road Waste Facility Landfill.

Collectively, these changes have altered the operational footprint, service delivery model, responsibilities, and performance monitoring requirements associated with curbside garbage collection.

Audit Objective and Scope

The objective of this audit was to provide reasonable assurance that the City has designed and implemented processes to manage curbside garbage collection in support of applicable regulations and to achieve value for money.

The audit covered curbside garbage collection activities for the period of January 1, 2025 to May 31, 2026. It included the evaluation of:

- Collection activities performed by both Contractor and the in-house collection team;
- Monitoring, inspection, and enforcement processes across Contractor and in-house operations to promote resident conformance with collection and diversion requirements, including the three-item limit; and
- Budgeting, cost control, and resource management processes supporting curbside garbage collection, including the operation of the in-house collection team and oversight of contracted services.

The scope of the audit did not include, unless otherwise specified, assessment of the City's:

- landfill and waste processing operations;
- waste collection streams beyond garbage and bulky items (i.e. organics, leaf/yard, hazardous and special waste); and
- waste collection points beyond residential address curbsides (i.e. multi-residential, City parks and facilities, small businesses, and schools).

While our financial analysis did include the budgeting for fleet costs, overall fleet management associated with the City-owned garbage truck fleet was not included in the scope of the audit.

Refer to Appendix 1 for additional details on the objective, criteria, and approach to the audit. This audit was conducted in conformance with the Institute of Internal Auditors' *Global Internal Audit Standards (2024)*.

Conclusion

The audit found that the City has established a comprehensive regulatory framework for curbside garbage collection through the Solid Waste Services By-law and has implemented significant operational changes to support waste reduction and diversion objectives. These initiatives include the three-item garbage limit, a new service delivery model, and long-term financial planning for solid waste services.

While these efforts demonstrate the City's commitment to improving waste management, the audit identified opportunities to strengthen governance, administration, oversight, and performance management of curbside garbage collection services. In particular, operational guidance and training provided to collectors are not fully aligned with By-law requirements, contributing to inconsistent application of collection standards.

The audit also found that certain aspects of monitoring and compliance activities, including the responsibilities of inspectors, are largely reactive and complaint-driven, limiting management's ability to assess whether collection requirements are applied consistently across collection zones. While we appreciate the City's focus has been on educating residents of the many changes that have transpired over recent years, existing compliance and enforcement tools, including contractual and By-law mechanisms, were found to be infrequently used to address recurring non-compliance by contractors or residents. As a result, the City is not fully leveraging available measures to promote compliance, support diversion objectives, and strengthen accountability.

From a financial management perspective, the audit recognizes improvements in the development of the 2026 curbside collection budget and the City's efforts to better align resources with operational requirements. However, opportunities remain to enhance budgeting practices by linking expenditures more closely to service cost drivers, such as staffing and fleet costs, enhancing the City's ability to assess service efficiency and value for money.

As the City continues to mature its current curbside collection program, further opportunities exist to address operational challenges, such as common pads, to improve the collection and use of performance information, and establish benchmarking practices to support informed decision-making and ongoing program evaluation.

Additional opportunities to strengthen the City's management of curbside garbage collection were outlined in a management letter, which was provided directly to management.

Each finding in this report has been assigned a rating that prioritizes the associated remediation. Rating definitions are provided in Appendix 2.

Value of Audit: This audit provides practical recommendations to improve the effectiveness, consistency, and accountability of curbside garbage collection services. By implementing these recommendations, the City will be better positioned to achieve its waste diversion goals, support informed decision-making, and ensure curbside collection services are delivered efficiently and in a cost-effective manner.

Audit Observations and Recommendations

1. Conformance with Collection and Diversion Requirements

The effectiveness of the curbside garbage program is dependent on:

- the consistent application of collection limits by collection staff; and,
- residents' adherence to established requirements for setting out garbage.

Effective monitoring, education and enforcement are therefore essential to ensure compliance, support program effectiveness, and achieve the intended outcomes of waste collection services.

1.1 Improvements to detailed operational guidance for waste collectors and inspectors are required.

Priority Rating: Moderate

The City has established a clear regulatory foundation for curbside garbage collection through the By-law, which defines collectable and non-collectable waste, acceptable bulky items, and resident responsibilities for setting out garbage at the curbside.

Garbage collectors (collectors), from both the in-house collection team and the Contractor, assist the City in applying the requirements of the By-law. Collectors perform this role at the curbside through:

- Determination of whether the garbage meets the requirements for curbside collection, and whether to accept/collect the garbage items, or to leave the non-collectable material at the curb; and
- Issuance of courtesy tags (refer to **Figure 2** below) in cases where the collector determines that the curbside garbage does not meet the requirements for curbside collection.

Figure 2: Courtesy Tags Issued by Collectors



In addition to the By-law, SWS has developed operational guidance for collectors, supervisors, and inspectors. This includes the Collection Operation Procedure Manual (Collector Manual), which is the operating manual provided to collectors, which outlines their roles and responsibilities. While this guidance is broadly consistent with the By-law, the audit noted that not all guidance is fully aligned in defining item-level collection requirements. In several cases, the operational guidance uses different terms or describes different collection expectations than those set out in the By-law. Examples include:

- **Appliances** – The By-law indicates appliances are not collectable, whereas the Collector Manual indicates appliances are to be treated as “waste incidents” which require

the collector to contact their designated supervisors to confirm the required action;

- **Construction and renovation waste** – The By-law indicates construction and demolition waste is not collectable, while no specific guidance is provided in the Collector Manual;
- **Toilets** – The By-law indicates toilets must be dismantled, whereas the Collector Manual lists toilets as accepted garbage with no requirement for dismantling; and
- **Bulky item scope** – The By-law provides an itemized schedule of acceptable bulky items, whereas the Collector Manual defines bulky items broadly as acceptable waste items not fitting in a container and provides examples including doors, windows, bed parts and swing sets.

These differences increase the risk that collectors may interpret and apply collection requirements inconsistently, resulting in variations in collection practices.

Training for Collectors

While new collectors are required to complete formal training, the training program provides limited instruction on the application of the By-law's collectability requirements of curbside garbage. Collectors are provided a copy of the Collector Manual, but as previously noted, this document does not provide a comprehensive list of collectible and non-collectible materials. As a result, collectors do not have access to a single, consolidated source that comprehensively maps collectability requirements to the provisions of the By-law. As a result, collectors need to rely on judgment when assessing materials that are not specifically addressed in the Collector Manual.

We noted that operational guidance was developed for Collectors to support implementation of the three-item limit introduced in 2024. However, the guidance remained narrowly focused on the new policy and did not provide comprehensive instruction on the application of courtesy tags or the handling of other non-collectible materials. The audit did not identify any additional training material or decision-making guidance to support the consistent application of these requirements.

The City regularly uses temporary agency workers to address staff shortages, primarily resulting from employee absences. The audit identified that, while these individuals are generally paired with an experienced collector, they receive even less detailed instruction than permanent collectors (i.e. no formal in-class training) on collection requirements. Temporary agency workers are required to certify that they have reviewed the Collector Manual prior to being deployed on a collection route. However, the audit noted that this training requirement is primarily focused on the operation of

garbage collection vehicles and the physical handling of garbage and does not include comprehensive instruction on collection requirements and the application of By-law provisions.

To effectively enforce collection requirements, collectors need to remain informed of changes to operational procedures, collection requirements, and By-law provisions. The audit found that guidance regarding the phased implementation of the three-item limit was communicated to in-house collectors. However, beyond this significant operational change, limited documented guidance and instruction was available regarding other collection activities and requirements. Interviews and documentation review identified that updates on operational matters are often communicated through informal meetings and day-to-day supervisory discussions for in-house and contracted collectors, and that a structured process for documenting, communicating, and periodically reinforcing broader operational requirements, such as the issuance of courtesy tags and responses to uncollectible waste, are limited. As a result, there is a risk that changes may not be consistently understood and applied by all collectors.

The lack of clear and consistent guidance was evident from audit testing performed. As part of our audit procedures, collectors were discretely monitored across all three (3) collection zones on various days throughout the months of May 2026 and June 2026 to identify if the collectors took appropriate action in accordance with the By-law and corresponding operational guidance. Of the 21 test cases observed, it was determined that collectors took appropriate action in only two (2) instances. In the other nineteen (19) cases, collectors collected ineligible garbage left at the curb by residents or did not issue a courtesy tag to the resident as required by operational guidance and the curbside collection contract. Examples observed included several instances where the three-item limit was exceeded and all garbage was picked up, as well as paint cans that were collected despite not being eligible for collection under the By-law.

When operational guidance is outdated, inconsistent, or not clearly understood by collectors, there is a risk that curbside garbage collection decisions will be applied inconsistently and/or incorrectly. This has a direct impact on the effectiveness of the City's waste reduction and diversion initiatives and hinders its ability to deliver services in a consistent manner.

RECOMMENDATION 1 – UPDATE AND ALIGN OPERATIONAL GUIDANCE FOR COLLECTORS

The Director, Solid Waste Services should ensure that operational guidance for in-house and contracted collectors and supervisors align with the Solid Waste Services By-law and to ensure its consistent application.

MANAGEMENT RESPONSE 1

Management agrees with this recommendation. The Director, Solid Waste Services will ensure that operational guidance materials are prepared and distributed to collection staff when there are updates to the Solid Waste By-law related to curbside collection. Management will have updated materials prepared for the collection staff by Q2 2027.

RECOMMENDATION 2 – UPDATE COLLECTOR TRAINING

The Director, Solid Waste Services should implement a formal training program for all collectors, including temporary staff, that includes a focus on developing collector competency in the application of the Solid Waste Services By-law requirements.

MANAGEMENT RESPONSE 2

Management agrees with this recommendation. The Director, Solid Waste Services, will develop and deliver a formal training program for all collectors, including materials for temporary workers, by Q3 2027.

1.2 The City lacks a structured approach to monitoring collector compliance with waste collection and diversion requirements.

Priority Rating: Moderate

The City has established roles and responsibilities for monitoring collector compliance with waste collection and diversion requirements, including designated supervisors and inspectors (as outlined is **Figure 3** below). Route supervisors (both in-house and Contractor) are responsible for the oversight of collectors and monitoring their performance to support compliance with operational requirements and the By-law. City inspectors are responsible for monitoring collection activities as a whole (both in-house and Contractor), identifying instances of non-compliance with the By-law, and exercising enforcement authority to address contractual and/or By-law infractions when required.

Figure 3: Illustrative Representation of the Key Curbside Garbage Collection Roles



However, despite these oversight responsibilities, the audit found that in practice, certain aspects of monitoring activities, such as the responsibilities of inspectors, remain largely reactive and complaint-driven, with limited evidence of a structured and proactive approach to compliance monitoring. The audit did not identify evidence of a structured compliance monitoring approach, such as route inspections conducted in accordance with defined frequencies, standardized review criteria, documentation requirements, and established follow-up procedures. Rather, supervisors and inspectors rely primarily on ad-hoc route inspections and complaints to identify potential compliance issues. This approach is not consistent with practices in other municipalities (e.g. Calgary), where we understand that structured route inspections are used to monitor collector adherence with By-law requirements and contractual obligations with the Contractor. As a result, the City may not consistently identify non-compliance or opportunities for corrective action before they lead to complaints or inconsistent curbside collection decisions.

Tagging of Non-Compliant Items

When collectors issue a hand-written courtesy tag for non-compliant garbage left at the curb by a resident, they document the resulting tag manually in a daily log. Information from this daily log is subsequently inputted into the City's Service Request Database at the completion of their shift. However, there is no process to ensure that all courtesy tags issued by collectors are entered into the Service Request Database. This creates a

risk of variability in completeness and reliability of tagging and compliance related data. As part of our observation procedures performed of collectors executing their role, auditors observed the issuance of three (3) courtesy tags in response to non-compliant garbage items. However, from our review of the Service Request Database, it was noted that only one (1) of these observed courtesy tags were actually recorded in the database. As a result, the City may not have complete and reliable information on collection issues, limiting its ability to monitor waste collection performance (i.e. is the Contractor and City staff adequately performing their responsibilities), identify recurring service problems, and support effective operational oversight and decision-making.

Use of Technology



The audit also found that technology available to support monitoring is not applied consistently across service areas. Currently, the Contractor uses truck-mounted cameras, while City-operated collection vehicles do not have this technology, although the City is exploring the use of similar technology on its own fleet. While infrequently used, camera footage has been periodically leveraged, by both the Contractor and the City, to investigate and resolve resident complaints rather than to support proactive monitoring of collector compliance with collection and diversion requirements.

Without a structured and proactive monitoring approach, management has limited assurance that collection and diversion requirements are being applied consistently by collectors. This reduces the City's ability to identify and address non-compliance, evaluate the effectiveness of collection practices, and assess whether curbside collection practices are contributing to the City's waste reduction and diversion objectives.

RECOMMENDATION 3 – FORMALIZE A PROACTIVE MONITORING APPROACH

The Director, Solid Waste Services should formalize a proactive monitoring approach for supervisors and inspectors, including structured route inspections conducted using standardized procedures and documented review criteria, as well as periodic compliance reviews, to support consistent application of the Solid Waste Services By-law.

MANAGEMENT RESPONSE 3

Management agrees with this recommendation. The Director, Solid Waste Services, will develop a proactive monitoring approach to support consistent application of the Solid Waste By-law. Management intends to have this operational by Q4 2027.

RECOMMENDATION 4 – EVALUATE THE USE OF TECHNOLOGY SOLUTIONS

In order to improve the consistency of compliance monitoring information available to the City for in-house and external collection monitoring, the Director, Solid Waste Services should evaluate the feasibility of implementing new technology solutions, such as truck-mounted cameras, across all collection zones.

If deemed feasible, the Director, Solid Waste Services should integrate new technology solutions into the formal monitoring approach, as outlined in recommendation #3.

MANAGEMENT RESPONSE 4

Management agrees with this recommendation. As part of our commitment to continuous improvement, the Director, Solid Waste Services, will continue to explore new technology solutions, including opportunities to leverage the technology currently used by the Contractor. Pending that review and evaluation, the Director of Solid Waste Services will work with the Director, Fleet Service to incorporate the new technology into upcoming tenders for new vehicles for In-House. Management will have this review completed by Q1 2027.

1.3 Escalation options available to the City regarding Contractor compliance and resident conformance with the By-law are underutilized.

Priority Rating: Moderate

In addition to defining collectable and non-collectable waste, the By-law establishes a framework for inspection and escalation, granting inspectors the authority to inspect waste on residential properties, issue compliance orders, and take enforcement action through offence notices.

Contractor Compliance

While the City has contracted the delivery of curbside collection services in two of its three collection zones, SWS remains accountable for compliance with the By-law across all collection zones. Both the current curbside collection contract in place, and the previous one prior to reconfiguration of collection zones, provided SWS with the

authority to levy liquidated damages in cases where the Contractor was non-compliant with the contract. The City may levy liquidated damages for certain failures to meet collection responsibilities, such as:

- Collection of bagged or containers of garbage and/or bulky items above the three-item limit (without pre-authorization of City) - $282 in damages per incident; and
- Insufficient use of courtesy tags - $282 in damages per incident.

However, the audit noted that since January 1, 2025, the City levied liquidated damages only once against the Contractor for failure to use courtesy tags, in the amount of $282. As noted in Section 1.1 above, our testing noted numerous instances of non-compliance by the Contractor, which could have been the subject of penalties. Where identified instances of Contractor non-compliance are not consistently subject to the contractual escalation provisions available to the City, there is a risk that non-compliant practices may persist and that the Contractor may not be sufficiently incentivized to comply with By-law requirements.

Escalation of Awareness Measures

The City's approach to encouraging resident compliance with the curbside garbage collection requirements of the By-law is described in the Inspector Manual, which states: "The preferred approach is to employ an educational approach towards compliance. Should the educational approach not result into a resolution of the situation then progressive enforcement is the next suggested remedy." To support this progressive enforcement, inspector guidance outlines enforcement tools available to inspectors when they identify non-compliance by residents. These are outlined below:

- **Notice of Personal Visit** - A notice of personal visit should be used to address any concern/item that is not directly linked to the Solid Waste By-law.
- **Notice of Violation** - A notice of violation should be issued anytime any violation of the Solid Waste By-law exists.
- **Provincial Offences Notice (PON)** - A PON should be issued when residents repeatedly violate the Solid Waste By-law, and without warning for more serious violations.

Inspector guidance indicates that residents should be issued with notices when they "**repeatedly** violate the Solid Waste By-law, and without warning for **more serious violations**." However, the related criteria and thresholds for these enforcement actions are not standardized or documented (i.e. what is the numerical threshold that meets the requirement of repeatedly and what constitutes a more serious violation).

The audit found that these tools are rarely used. From discussions with management, given the significant changes to curbside collections for residents in recent years, staff have been instructed to focus their efforts on education and awareness for residents via the use of courtesy tags.

While a focus on education at this time is reasonable, the audit found that data on repeat non-compliance by individual households is generally not monitored or analyzed to identify broader trends or support program improvements and policy changes. This represents a missed opportunity to revisit the enforcement tools and approaches available to the City or to focus program resources on persistent non-compliance and improve program effectiveness. For example, the audit found that households with multiple courtesy tags, indicating repeated non-compliance with the By-law, are not consistently identified for follow-up education or escalation by inspectors.

Figure 4: Repeat Courtesy Tagging Activity



For the period January 1, 2025, to May 27, 2026 (17 months), 9,483 addresses were tagged more than five times, of which 1,962 addresses were tagged for exceeding the three-item limit (**Figure 4)**. However, this repeat tagging information has not been used to trigger targeted inspector action, such as additional education or escalation measures. While this represents a relatively small proportion of the approximately 315,000 addresses receiving bi-weekly curbside garbage collection, repeated tagging suggests that the courtesy tag alone may not have been effective in influencing behaviour for some residents.

Without focused follow-up measures, such as notices to provide more targeted education, recurring non-compliance issues may continue and opportunities to reinforce collection requirements and improve resident awareness may be missed.

RECOMMENDATION 5 – ESTABLISH A DOCUMENTED COMPLIANCE AND ENFORCEMENT FRAMEWORK

The Director, Solid Waste Services should establish and implement a documented compliance, education and enforcement framework that:

- defines clear escalation conditions and thresholds for recurring and serious By-law violations by residents, as well as contractor compliance with the curbside collection contract in place;
- uses available compliance information to identify and address repeat non-compliance;
- ensures education, inspection, and enforcement activities are consistently documented and tracked; and,
- monitors and reports on the use and effectiveness of available education and enforcement tools.

MANAGEMENT RESPONSE 5

Management agrees to review compliance, education and enforcement with respect to curbside garbage collection by Q4 2027. The Director, Solid Waste Services will include framework considerations for Committee and Council with the planned update on the three-item garbage limit in Q4 2027.

2. Financial Management

Effective financial management is essential to ensuring that curbside waste collection services are delivered efficiently, sustainably, and in a cost-effective manner. Sound budgeting, forecasting, and resource management practices help align expenditures and staffing levels with operational needs while supporting value for money.

2.1 The City should continue its efforts to ensure that curbside waste collection budgets are linked to factors that affect collection costs.

Priority Rating: Moderate

As previously noted, SWS has undergone significant operational changes in recent years. These changes include the introduction of the three-item limit effective in September 2024, the elimination of responsibility for collecting residential recycling material effective in January 2026, and lastly a new curbside collection contract and delivery model effective in March 2026. SWS management prepares annual department and branch budgets, with the assistance of the Financial Services unit, for City Council's approval. These budgets present line-item detail for key expenditure categories, as summarized in Table 1 above, for the Garbage Collection Branch of SWS.

The audit found that budgeting and forecasting processes supporting SWS are defined and documented, including the related roles and responsibilities. However, from review

of budget details related to the 2025 fiscal year, it was noted that the 2025 budget was not developed based on an analysis of underlying curbside garbage collection factors that affect collection costs, such as employee headcounts and salaries. Rather, management developed the budget using the 2024 SWS budget as a baseline. Budgetary line items, including salaries, materials, and services, were then reviewed and adjusted for expected pressures, such as inflationary adjustments for salaries and contracts. This is not a preferred approach, as developing budgets without a detailed analysis of the factors affecting collection costs increases the risk that budget estimates will not accurately reflect operational requirements. This was evident in 2025, as the Garbage Collection Branch ended 2025 with a surplus representing more than 10% of the initial 2025 budget approved by Council (refer to Table 2).

Table 2 – 2025 Budget to Actual Analysis for Waste Collection Services

Cost Category	2025 Budget	2025 Actual	Variance
	In $ millions		
Salaries and Benefits	11.5	11.1	0.4
Overtime	0.6	1.7	(1.1)
Fleet Costs	12.6	9.7	2.9
Materials & Services	57.6	53.2	4.4
Other (recoveries and allocations)	(1.5)	(2.8)	1.3
Total Expenditures	**80.6**	**72.9**	**7.9**

In 2026, due to the new curbside collection contract, management developed an estimate of the major components of expected costs due to the changes in curbside garbage collection. This included developing a budget based on the major components of the costs to deliver curbside garbage collection (i.e. permanent staff salaries, fleet costs, and costing associated with the new curbside collection contract) rather than using prior year figures as the basis and adjusting them for expected changes.

The development of the LRFP aimed to support the identification and forecasting of the future costs of delivering services related to curbside collection, including significant long-term obligations such as those related to a new landfill and other capital requirements. Accurate forecasting of these costs is important to ensure that fees charged to residents are aligned with the expected costs of service delivery, support the gradual accumulation of reserves needed to fund future requirements, and reduce the risk of significant fee increases when major expenditures arise.

While management improved the 2026 budget development process by considering key factors of curbside waste collection costs, opportunities remain to strengthen the process by continuing to review the key drivers of costs (e.g. tonnages collected, fleet,

and landfills) in the area and applying these learnings on a go forward basis. More accurate budgeting will limit larger variances between budgeted and actual expenditures. As residents of the City are now charged an annual solid waste fee on their municipal property tax bill, a budget driven by key operational cost drivers will provide Council and residents greater comfort that the rate-based fee is truly representative of the current and ongoing costs for the service. Furthermore, as the City continues to grow, it will enable management to quickly understand the costs of the additional growth and adjust their fee accordingly.

RECOMMENDATION 6 – CONTINUE TO DEVELOP OPERATIONAL BUDGET BASED ON FACTORS THAT AFFECT COSTS FOR CURBSIDE GARBAGE COLLECTION

To help ensure curbside garbage collection budgets and forecasts accurately reflect operational needs, the Director, Solid Waste Services, in consultation with the Deputy Chief Financial Officer, should continue to improve the development of annual budgets and forecasts using key operational drivers to align funding with staffing, fleet and contract requirements (i.e. cost-driver budgeting).

MANAGEMENT RESPONSE 6

Management agrees with this recommendation. Solid Waste and Financial Services will continue to build on and enhance the improvements implemented for the 2026 budget, with those refinements being applied throughout the development of the 2027 budget and forecasting process. This work will further strengthen budget development and forecasting by incorporating key operational cost drivers into budget planning and decision-making. By Q4 2027, staff will document how operational drivers are used to assess, align, and adjust budget requirements. This analysis will inform the development of the 2028 budget and support ongoing improvements to future budget forecasts.

3. Opportunities for Continuous Improvement

As the curbside garbage collection process has undergone significant changes, the audit identified the following opportunities for improvement. The observations noted below would result in improved efficiencies and/or program outcomes.

3.1 Opportunities exist to enhance the effectiveness of curbside garbage collection

Priority Rating: Moderate

The City has reported that the curbside waste reduction and diversion efforts implemented as part of the SWMP to date (including the 2024 implementation of the three-item limit) have contributed to a significant decrease in the volume of curbside garbage sent to landfills (refer to Table 3).

Table 3 – Annual Garbage Tonnages Sent to Landfills

Year	Curbside Tonnage
2023	126,640
2024	120,779
2025	102,551

However, collectors are still faced with key challenges in determining whether curbside garbage meets the By-law requirements, which could be impacting the City's overall waste diversion efforts. These include:



- **Common Pads** - The City serves approximately 700 common pads, which are shared garbage collection areas used by multiple residential units, such as townhouses or multi-unit developments. Instead of each home placing garbage at its own curb, residents bring their waste to a central collection pad. Common pads create a significant challenge for collectors to assess compliance with collection requirements, such as the three-item limit, as they cannot identify what garbage belongs to which residence; and
- **Visibility of Uncollectible Items** - While collectors can identify some visibly uncollectible items, the City permits residents to place waste in rigid containers and opaque bags (including black bags), which restricts visibility of the contents. As a result, collectors cannot determine whether materials inside meet the collectability criteria or if they may contain prohibited items.

Based on the 2026 Solid Waste Master Plan Update, we understand that SWS intends to undertake a comprehensive review of the three-item garbage limit in 2027. This review would provide the City with the opportunity to consider the challenges identified to date, including limitations related to opaque bags, rigid containers, and common pad

collections, as well as the impacts of other significant SWMP initiatives. These key issues are limiting the effectiveness of the three-item limit and the City's ability to consistently enforce collection requirements and achieve intended waste diversion outcomes.

RECOMMENDATION 7 – PERFORM A REVIEW OF KEY COLLECTION CHALLENGES

As part of the planned 2027 review of the three-item garbage limit, the Director, Solid Waste Services should conduct a comprehensive review of key collection challenges, including garbage placed on common pads, and determine whether amendments to the Solid Waste Services By-law are required.

MANAGEMENT RESPONSE 7

Management agrees with this recommendation. The Program review of the Curbside Diversion policy is underway and it is intended to bring potential amendments and/or further recommendations back to Committee and Council for consideration in Q4 2027.

3.2 The City can further strengthen its ability to assess the cost-effectiveness of in-house curbside waste collection through enhanced analysis and benchmarking.

Priority Rating: Moderate

Under the hybrid service delivery model, the City uses an in-house collection team comprised of 79 permanent staff to cover one zone and relies on the Contractor in the other two zones. Implicit in Council's approval of this model was the positioning of the in-house team as a cost-effective alternative within the hybrid model, and the benefit that the City would maintain a competitive environment by benchmarking the cost of in-house collection in the City-served zone against the two zones served by the Contractor. The Solid Waste Services 2026 Residential Curbside Collection Contract report (ACS2023-PWD-SWS-0004_FINAL) further stated that, all else being equal, the cost-of-service delivery for the in-house zone would be no greater than, and likely less than, the cost under the previous model.

Under the new contract, the Contractor is required to maintain extensive service statistics, with obligations to keep detailed records and submit daily, weekly, monthly, and annual reports. Collection and analysis of this information will be required in order to enable the benchmarking of Contractor and in-house operations. It is important to note that this information has not yet been collected by SWS.

While we acknowledge that the new model and corresponding new curbside collection contracts have only recently been implemented, it will be important for the City to establish a process to obtain the service statistics and a framework for consistently benchmarking in-house performance and costs against those of the Contractor. Such analysis would provide clarity as to whether the City's in-house collection model is meeting expected performance outcomes and delivering comparable value.

RECOMMENDATION 8 – DEVELOP AND IMPLEMENT A BENCHMARKING FRAMEWORK FOR CURBSIDE COLLECTION

The Director, Solid Waste Services should develop and implement a benchmarking framework for curbside garbage collection that includes key performance and cost metrics across in-house and contracted operations, enabling management to assess efficiency, productivity, and value for money.

MANAGEMENT RESPONSE 8

Management agrees with this recommendation. By Q2 2028, Management will develop and implement a benchmarking framework for residential curbside collection that establishes consistent performance, operational, and cost measures across both in-house and contracted operations. The framework will support ongoing assessment of efficiency, service performance, and value for money using data collected under the new curbside collection contracts and City operations.

Appendix 1 – About the Audit

Audit Objective and Criteria

The objective of the audit was to provide reasonable assurance that the City has designed and implemented processes to manage curbside garbage collection in support of applicable regulations and to achieve value for money.

Criteria listed below were developed based on key risks related to curbside garbage collection and the relevant legislative and operational context.

1. Conformance with collection and diversion requirements	
1.1	The City has clearly defined and communicated waste collector responsibilities (based on what they can reasonably determine) in alignment with collection and diversion requirements.
1.2	The City monitors waste collector adherence to defined collection and diversion responsibilities.
1.3	Roles, responsibilities, and authorities for inspection and enforcement of resident and waste collector non-conformance with collection and diversion requirements are clearly and consistently defined, communicated, and applied.
1.4	The City systematically analyzes monitoring, inspection and enforcement results to improve control practices, guidance to residents and collectors, and overall achievement of collection and diversion objectives.
2. Financial management	
2.1	The City has designed and implemented effective budgeting, forecasting, and cost control processes for curbside waste collection that are based on and responsive to underlying operational cost drivers.
2.2	Internal resources assigned to curbside waste collection are reasonable given the expected activity levels while representing value for money.

Audit Approach and Methodology

Audit staff performed the following procedures to complete this audit:

- Reviewed relevant documents - including bylaws, contracts, guidance and training material, performance reports, budget and cost analyses and other relevant documentation.
- Conducted interviews and walkthroughs with key personnel - including contracted and in-house collection supervisors, inspectors, Finance and program representatives.
- Analysis of data – including analysis of non-compliance “tagging” reporting, inspection and enforcement activity reporting, waste collection operational metrics and relevant cost driver reporting.
- Comparative analysis – including exploration of comparative practices of other Canadian municipalities, where relevant.
- Performance of other analyses and tests.

Appendix 2 – Rating Scale for Audit Findings

The following rating definitions were used to assign priority to the findings associated with this audit.

Priority Rating	Description
Critical	The finding represents a severe control deficiency, non-compliance or strategic risk/opportunity and requires an immediate remedy. If left uncorrected, this could have a catastrophic impact on the achievement of the City's strategic priorities, its ongoing business operations, including the risk of loss, asset misappropriation, data compromise or interruption, fines and penalties, increased regulatory scrutiny, or reputation damage.
High	The finding represents a significant control deficiency, non-compliance or strategic risk/opportunity and requires prompt attention. If left uncorrected, this could have a significant impact on the achievement of the City's strategic priorities, its ongoing business operations, including the risk of loss, asset misappropriation, data compromise or interruption, fines and penalties, increased regulatory scrutiny, or reputation damage.
Moderate	The finding represents a moderate internal control deficiency, non-compliance or is a risk/opportunity to business operations that should be addressed timely. If left uncorrected, this could have a partial impact on business operations, resulting in loss or misappropriation of organizational assets, compromise of data, fines and penalties, or increased regulatory scrutiny. Typically, these issues should be resolved after any high-priority findings.
Low	The finding should be addressed to meet leading practice or efficiency objectives. Remediation should occur as time and resources permit. While it is not considered to represent a significant or immediate risk, repeated oversights without corrective action or compensating controls could lead to increased exposure or scrutiny.