## **Document 1**

# **City of Ottawa Curbside Waste Collection In-House Service Options Analysis**

## 1.0 Purpose

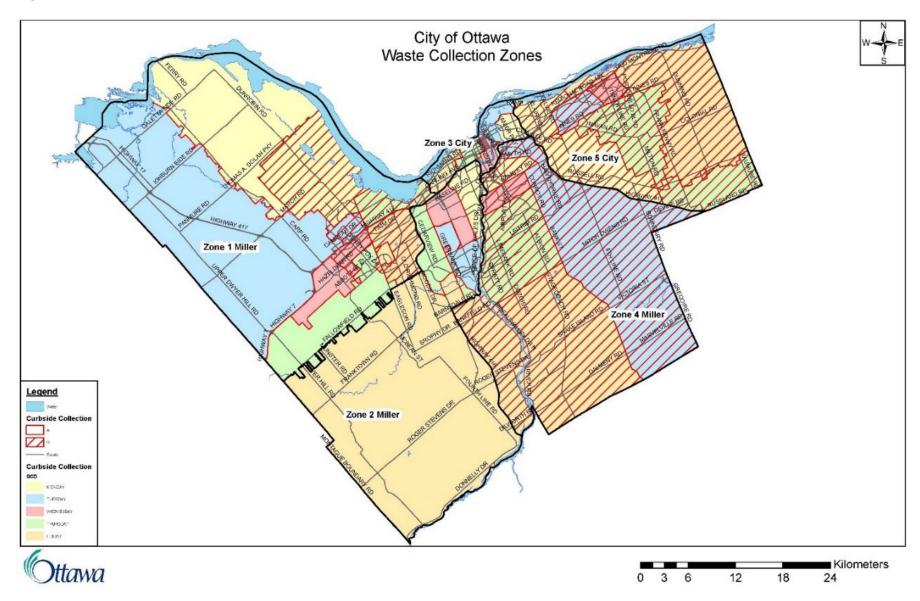
This document analyzes three viable options for the future delivery of residential curbside waste collection services, specifically related to Zones 3 and 5 in Ottawa, when the current contract expires in March 2026. Since extensive lead time of up to 24 months is required for vendors to procure collection vehicles prior to implementing a new contract, the planning and procurement for the new contract must be completed in 2023.

# 2.0 Background

#### 2.1 Ottawa's Current Residential Curbside Collections

The City of Ottawa provides waste collection services to over 306,000 residential households across the City under the curbside collection contract. Collection services include garbage, recycling, organics, leaf and yard waste and bulky items collection. Curbside collection is currently divided into five zones of different geographic size with roughly 60,000 households per zone, and collections services are provided by two entities. The City's contracted In-House Collections Group services Zones 3 and 5 (downtown core and east end), while the remaining Zones 1, 2 and 4 are serviced by Miller Waste Services.

Figure 1: Current Residential Curbside Collection Zones



Throughout Ontario, residential waste collection services are provided either by municipal resources, procured through the private sector or a combination of both. For the City of Ottawa, a combination of contracted municipal staff known as the In-House Collections Group and private service providers has been in place since 1998. The In-House Collections Group are hired as temporary staff for the duration of the curbside collection contract and union agreements are on a term-of-contract basis. This is different from all other municipalities in the municipal scan who use permanent staff to provide curbside waste collection service and requires a unique procurement process referred to as a "Managed Competition".

This process was established in 1998 by the former Regional Council for waste collection services to provide both accountability and transparency that could allow an in-house team to participate and submit bids for residential waste collection services for the Region. In 2005, this process was adopted by the City of Ottawa and carried through to the current collection contract, initially awarded in 2011 and extended numerous times through Council approval up to March 29, 2026. A managed competition requires a team of staff (internal and external if required) to put together a bid for the curbside collection contract on behalf of the City, while a separate team of City staff is responsible for evaluating and awarding the curbside collection contracts for each collection zone. The bid-submission team and bid-evaluation team cannot have contact with each other during this process. The managed competition process involves a lot of resources, staff time and increases the complexity and risk of the procurement process. It is worth noting that in consulting with peer municipalities, none use a Managed Competition Process for solid waste collections.

# 2.2 The City's In-House Collections Group

The City's In-House Collections Group consists of 103 positions servicing approximately 118,000 households throughout Zone 3 and 5, with 13 of these positions currently unstaffed.

The City has been the service provider for Zone 3 since 2005. With its high density, narrow streets, back-alley collection, snowbanks, traffic congestion, parked vehicles, pedestrian traffic, tourists' visits, and frequent route closures due to demonstrations, diplomatic visits or road, water and sewer works, the downtown core has historically been a challenging area to serve. The In-House Collections Group has the experience and expertise needed to address these challenges and a track record of providing excellent and consistent customer service to residents in the downtown core. In 2011, Council appointed Zone 3 to the In-House Collections Group for the duration of the

contract. The In-House Collections Group also participated in the procurement process through the managed competition and went on to win the bid for Zone 5.

While its non-profit status makes the City of Ottawa competitive in the biding process, long-term planning is difficult. The In-House Collections Group struggles with maintaining adequate staffing and retaining employees. There are challenges with vehicle acquisition and maintenance as Fleet Services is constrained by the terms and length of the contract and cannot manage the vehicles on an inventory basis.

#### 2.3 Residential Curbside Collection Contract

The current Solid Waste Services residential curbside collection contract, based on the four recent Council approved short-term extensions is valued at an average annual cost of approximately \$53.4 Million from June 5, 2023 to March 29, 2026, for all five zones. While the contracts are fixed and do not vary with tonnages, the costs per tonne for Zones 3 and 5 are captured in the annual Financial Statements for In-House Solid Waste Collection – External Audit Results reports. The table below shows the cost per tonne, based on the numbers provided in the statement of operation for 2020, 2021 and 2022.

Table 1: Actual cost per tonne in \$

Year	Zone	Garbage (\$)	Recycling (\$)	Organics (\$)	All streams (\$)
2020*	Zone 3	143.91	237.85	144.99	162.70
	Zone 5	119.54	211.80	143.43	145.58
2021	Zone 3	132.29	221.63	144.42	155.01
	Zone 5	105.47	524.81	392.52	203.53
2022	Zone 3	158.81	240.71	159.66	176.56
	Zone 5	153.04	520.99	440.91	243.88

<sup>\*</sup>for 19 months ended May 31 due to a change of fiscal year-end

2020 was a difficult year for the In-House Collections Group (as it was for most businesses) due to costs incurred because of the COVID-19 pandemic. There was a need to hire additional labourers and rent extra collection vehicles to maximize staffing capacity and keep up service levels during the pandemic. In addition, tonnages in all

residential waste streams increased, likely due to lockdowns and because many residents transitioned to working from home. In addition, Fleet Services saw higher than anticipated costs because of an aging fleet. At the end of 2020, 19 new collection vehicles were commissioned and put into service, reducing the need for costly repairs and maintenance on older vehicles. In 2021 and 2022, a surplus was realized as staffing was able to keep up with turnover and waste volumes steadied out.

Currently, the In-House Collections Group has 103 contracted waste collection operator positions for Zone 3 and 5 combined. More than 13 per cent of those positions were vacant on September 1, 2023 (i.e. 12 FTEs).

### 2.4 Procurement of the Next Collections Contract

Solid Waste Services is planning for the procurement of the next curbside collection contract later this year, to be issued through a Request for Proposal (RFP) process, in line with industry best practices identified as part of the service level review and procurement strategy development. The next contract is set to begin on March 30th, 2026, with a 7+2-year term (7 years with the option of two 1-year extensions). Within the past procurement practice of a managed competition, there is no certainty as to which zones, if any, the In-House Collections Group will service past this current collection contract, unless Council appoints Zone 3 as done in the past.

Since extensive lead time is required for contract start-up activities and to procure new collection equipment prior to implementing any new contract, the procurement process must take place in Q4 2023 to facilitate contract award before the end of the year. In order to finalize the procurement process, a decision will have to be made on the future of the In-House Collections Group so that procurement for the remaining residential curbside collections can proceed.

# 3.0 Narrowing Down the Options

During the service level review for the next curbside collection contract, Solid Waste Services identified exploring alternative methods to procure the next collection contract. Along with a new procurement strategy, analyzing the value and drawbacks of having a contracted In-House Collections Group was identified. This led to the desire to analyze the relationship of the In-House Collections Group with both the City and as a service provider to residential curbside collections.

The options analysis for the continuation of the In-House Collections Group looks to reduce costs where feasible while maintaining service level standards and increasing operational flexibility. Over the last term of Council, the In-House Collections Group has consistently provided residential curbside collection services in Zone 3 at competitive

operating costs. While the 2020 Financial Statements report, covering a 19-month period from November 1, 2018 to May 31, 2020, stated a deficit for Zone 3 against the contract estimate at the time of tender – mainly due to the impacts of COVID-19 and the cost of maintaining and operating an aging fleet – In-House Collections Group reported an operating surplus for 2021 and 2022.

One of the business models reviewed included municipalities which solely provided residential curbside waste collection service through a permanent in-house collections group servicing all curbside households. Four out of ten municipalities surveyed in the municipal scan currently have this approach in place: Kingston, Guelph, Calgary and Vancouver. While one of those municipalities has an even greater population than Ottawa (Calgary: 1.3 million), all of their land areas are much smaller. Additional details are provided in Appendix A.

In order for the In-House Collections Group to service the entire City of Ottawa, major changes would be required, including a substantial investment in assets and resources. To be able to service the three zones that are currently serviced by external contractors in addition to Zone 3 and 5, Solid Waste Services would need to hire, train and manage at least 2.5 times as many waste collection operators compared to current In-House Collections Group staff levels, at a time when staffing challenges, including filling vacancies, are already being realized within the City and overall waste management industry.

It would also require a significant upfront capital investment in fleet and facilities<sup>2</sup> as well as a substantial effort to procure equipment, all of which would be followed by significantly higher operating costs, e.g. fuel, and a need for extra resources in Fleet Services to maintain more than twice as many vehicles. Creating such a strain on the City's budget would be difficult to justify, given that private vendors have proven they can provide reliable collection services outside the downtown core at competitive rates. Taking on full operational responsibility and establishing a permanent, municipal inhouse group big enough to serve the entire city was therefore not considered an option in this business case.

Three viable options were identified to be evaluated. They are:

<sup>&</sup>lt;sup>1</sup> Kingston: 274 km<sup>2</sup>, Guelph: 87 km<sup>2</sup>, Calgary 821 km<sup>2</sup>, Vancouver: 912 km<sup>2</sup>, Ottawa: 2,796 km<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> The curbside collection team would need access to garages across the City. Currently, all in-House staff and vehicles are based at Swansea.

- Status Quo: Maintain the current curbside collection contract model and procurement approach (i.e. contracted services, mix of in-House and private sector; managed competition process)
- 2. Fully outsource residential curbside waste collection to private sector through standard procurement process, and
- 3. Establish permanent in-house resources to service the downtown core and exclude expanded Zone 3 from procurement process.

To compare the three options, the following criteria were used:

- Employee retention
- Planning certainty
- Operational efficiency
- Service excellence
- Financial sustainability

Further, to effectively evaluate the benefits and challenges of the three options – criteria were grouped under the following four categories:

- 1. Procurement
- 2. Staffing
- 3. Fleet
- 4. Operational Flexibility and Innovation

# 4.0 Option 1 – Status Quo – Zone 3 is put out for tender, City to prepare Managed Competition Bid

The existing business model, or status quo option, was established in 2005 based on past industry best practice, to increase competition in the waste collection industry to help mitigate service level and financial risks to municipalities requiring waste collection services through the private sector. To maintain the current service model, the City would need to continue with the managed competition approach for the next curbside collection contract.

In this option, all collection zones are serviced by contractors and approximately the same size in terms of number of properties served. The City's In-House Collection Group is considered a contractor, just like any other external vendor. While staff are

unionized, contracted City employees, their positions are temporary and tied to the term of the current collection contract.

Keeping the status quo would mean continuing procurement for city-wide curbside collections services through a managed competition where the City's In-House Collections Group would bid on zones with the private sector.

#### Benefits:

- No changes are required to the existing process and procedures currently in place.
- Pricing is obtained through a competitive process for all zones, therefore considered the best available at the time the work is procured.
- Through having an In-House Collections Group bid, the City truly understands the business and costs to operate a waste collection system, a good benchmark to compare against private bids (also applies to option 3).
- City could change providers if service levels are not met, or at the end of the contract term, without having to eliminate permanent FTEs.

## Challenges:

- A managed competition is costly and complex; it requires a lot of staff time and resources to create independent teams - one leading the procurement process and one, preparing the bid submission. In consulting with peer municipalities, none use a Managed Competition Process for solid waste collections.
- With a managed competition, it may happen that the City will not be awarded any zone, and the In-House Collections Group would have to be dissolved.<sup>3</sup>
- If there was a successful bidder for Zone 3 other than the City, service levels for residents may change to operational challenges in the area.
- Potential for greater management effort with multiple external service providers.
- Employees are hired for a term of contract only, and turnover is high. Efforts
  taken to date to address retention issues include a pay increase for casual
  curbside waste collection operators. However, in the current labour market it is
  challenging to find enough candidates.

<sup>&</sup>lt;sup>3</sup> As per Article 36 of the CUPE Local 503 <u>Collective Agreement</u>, there could be a possible cost to no longer providing the service with the in-House group.

#### 4.1 Procurement

- No changes are required to the process and procedures currently in-place.
- Pricing is obtained through a competitive process, therefore considered the best available offer at the time the work is procured. Procuring and awarding by zone can help continue to drive competition among vendors to keep prices down.
- A managed competition requires almost double the resources. Two separate teams need to be established that do not speak to one another. One team would prepare the procurement documents, the other team would prepare the bid submission once it is posted. In addition, a Fairness Commissioner would have to be hired for at least \$32,000 (2018 financial figures).

## 4.2 Staffing

- Terms and Conditions of Article 36 in the Collective Agreement (CUPE Local 503 Inside/Outside) apply. The City will not have to absorb potential extra costs for permanent City employees (which would be required with Option 3).
- The existing term of employment protects the City from some financial liability in case of termination (e.g. per Article 36).
- Termination of service is tied to the contract term.
- Expected trends of high turnover and recruitment challenges due to the contract nature of the work would continue through the next contract potentially increasing costs due to overtime and short-term labour usage.
- Recruitment and training costs expected to remain high due to staffing turnover currently experienced.
- No changes would be required to the structures, practices and resources currently in-place in terms of contract administration and fleet services (assuming the City bid and won on the expanded Zone 3).
- Hourly rate comparator is no longer enough because industry has become more competitive with hiring/retention bonuses and incentive pay leading to staffing and retention issues at the City.

#### 4.3 Fleet

- Fleet is managed through the terms of the contract.
- Vehicle pricing and maintenance schedule tied to length of contract.

- Maintenance schedules optimized to fulfill the terms of the contract not necessarily to the serviceable life of vehicle – may lead to choosing higher maintenance cost rather than replacing a vehicle because of the length of contract remaining.
- Limited ability to shift vehicle type and size due to the limited contract length.

## 4.4 Operational Flexibility and Innovation

- Contracted collection does not provide flexibility to make contract amendments or changes – all changes must apply to all zones, and through the managed competition Council approval is required for most changes.
- Option to change providers if they do not deliver acceptable service at a reduced cost as a contract termination penalty versus terminating full-time staff.

# 5.0 Option 2 – Fully outsource residential curbside waste collection

In this option, the City would rely solely on the private sector for the next residential curbside waste collection contract and dissolve the In-House Collections Group at the end of this current contract. Private vendors would bid on a 7-year contract with two 1-year extensions for all zones through a standard Request for Proposal issued under the governance of the Procurement By-law. Solid Waste Services would continue to oversee contractors to ensure they are meeting service levels and contract requirements.

Note: The City of Ottawa has no history of exclusively using contractors to provide residential curbside waste collection services, but the model was used prior to amalgamation in the Regional Municipality of Ottawa-Carleton. An In-House Collections Group was established in 1998 when a private contractor failed to meet its contractual obligations.<sup>4</sup>

#### Benefits:

 Pricing is obtained through a competitive process for all zones, therefore considered the best available at the time the work is procured.

<sup>&</sup>lt;sup>4</sup> After the RMOC was forced to terminate the contract in February 1998, the Solid Waste Division was granted permission from Regional Council to purchase used equipment and hire operators to replace the contractor. In 1998, the Regional Council <u>adopted</u> managed competition protocols for waste collection services, which was carried forward through amalgamation. In 1999, staff competitively bid on the residential collection contract and was awarded one zone. The in-House group successfully provided service beginning June 7, 1999 through to the end of the contract in May 31, 2006.

- City could change providers if service levels are not met (with a cost), or else at the end of the contract term.
- Releases the City of staffing risks associated with filling collection operations positions that is and has proven to be extremely difficult.
- Less effort for municipality to outsource than to run the whole operation.
- No requirement for the City to purchase, maintain and replace waste collections fleet supply.

## Challenges:

- Potential cost increases if the City does not participate; one less competitor for the private sector to consider when submitting their bids.
- No other contractor has serviced Zone 3 since 2005; lack of experience outside the City's In-House Collections Group managing specific operational challenges (this would also be a challenge for Option 1 should the City not be a successful proponent on a Zone 3 bid).
- There is only a certain number of suitable service providers, and not all of them have a track record of satisfactory performance (e.g., a change was necessary in Zone 1 in 2019 due to poor service)
- Potential increase in risk of service issues and contract management efforts.
- Changing provider, as a result of contractor default, in the middle of a contract
  can be difficult and potentially costly and may not be possible given the lead time
  and capital needed to establish a collection service.<sup>5</sup>
- Staff hiring and retention remains a factor in the private sector as well.
- Less flexibility to react to special operational needs and circumstances.
- Emergency clean-ups come with significant additional costs, with potential for delays.
- No ability to "back up" contractors should an issue arise.

<sup>&</sup>lt;sup>5</sup> A new provider would have to procure fleet and depreciate over a shorter term, resulting in higher costs. It would also lead to operational inefficiencies until they become familiar with the area.

#### 5.1 Procurement

- Pricing is obtained through a competitive process, therefore considered the best available offer at the time the work is procured. Procuring and awarding by zone can help continue to drive competition among vendors to keep prices down.
- Potentially higher costs for service if City doesn't compete in the bidding process.
- No managed competition required. External vendors would bid on contract through a standard procurement process.

#### 5.2 Staff

 The City would not have the financial responsibility for employees' compensation nor their recruitment and training; staffing would be the responsibility of the contractors and included in proposal pricing.

## 5.3 Fleet

- No curbside collection vehicles to procure or maintain, pricing for collection vehicles would be included in vendor bids.
- Limited fleet would remain that could assist in emergency situations or clean-up efforts.

# 5.4 Operational Flexibility and Innovation

- No backup if a contractor defaults.
- Allows for a much leaner administration, absorbing less City resources in Solid Waste Services, but also in other areas including Fleet, Human Resources and Finance
- Option to change providers if they do not deliver acceptable service.
- Provides flexibility to make contract amendments or changes affecting all zones.
- Contractors bear all risks and responsibilities. No City accountability for claims and service infractions or liability for potential injuries, accidents etc.

# 6.0 Option 3 – Establish a permanent In-House Collections Group to service an expanded Zone 3

In this option, curbside collection in the expanded Zone 3 would become a permanent municipal service carried out by a permanent In-House Collections Group. Zone 3 would be excluded from the procurement process, which would eliminate the need for a

managed competition and allow for a simplified procurement process as per the City's Procurement By-law (No. 2000-50).

The remaining zones would be serviced by external contractors, and the City would not bid on any of those zones. Vendors would bid on a 7-year contract with two 1-year extensions for any of the remaining zones. They would be supervised by Solid Waste Services' staff to ensure they are meeting service levels and contract requirements.

#### Benefits:

- Chance to standardize the procurement process by eliminating the need for a managed competition and having authority to procure the contract through regular procurement practices (RFT or RFP) as per the City's Procurement Bylaw.
- Removes risk and uncertainty around lack of bids for Zone 3 due to its specific challenges.
- Operational expertise guaranteed for service delivery in Zone 3.
- City remains a knowledgeable buyer in the marketplace through first-hand experience and a better understanding of industry needs and challenges.
- Direct and valuable operator feedback helps City make practical advancements and informs service level reviews for future contract procurement processes.
- Servicing Zone 3 does not require a continuous adjustment of routes and resources, since there is little growth in the downtown core compared to the other zones (other than through densification, which mostly affects multi-residential waste collection).
- Establish a structure that enables better long-term planning, for staff as well as for fleet.
- Right-sizing fleet and life-cycling vehicles according to industry best practices instead of aligning to contract timing would minimize maintenance costs.
- Competitive advantage: easier recruitment in a tight labour market and better staff retention due to a longer-term perspective and more job security (backed by findings from municipal scan).
- Greater flexibility to assess operational procedures at any given time when not confined by contract terms. This could lead to better working conditions and help with retention, e.g., shift or redesign routes to support a Monday to Thursday

- work week with guaranteed free weekends due to Friday collection on a push week, or trial automated cart collection for less strenuous physical labour.
- Reduced need for contracted services (labour agencies) due to better retention which would reduce operational costs.
- Potential to reassign/redeploy permanent in-house resources through crosstraining within the Public Works Department, subject to union support.
- Possibility to take on tasks that give the City more control over costs, practices or programs that could be bundled into the In-house Collections Group, e.g. delivery of replacement green bins, providing collection services for <u>Cleaning the Capital</u> and/or the <u>Yellow Bag</u> program geared towards small businesses etc.
- Opportunity for innovation through corporate or departmental initiatives that could yield environmental benefits, e.g., greening City fleet, pilot new approaches to increase waste diversion, etc.
- More cost-effective emergency response than through hired labour and paid overtime.

## Challenges:

- Potential for less competition if City is no longer one of the bidders in the market;
   may drive prices up for service provided in remaining zones.
- Reclassification as permanent employees within the main body of the CUPE
   Local 503 <u>Collective Agreement</u> could lead to an increase in wages and benefits
   for waste collection operators and to potential costs due to expanded Collective
   Agreement entitlements (such as Article 25: Organizational Or Technological
   Change, and Article 7: Income Protection Plan entitlements)
- Potential for increased contract management efforts to ensure consistent service levels are maintained across the City.

### 6.1 Procurement

- A standard procurement process would occur for the remaining zones, but no managed competition would be needed.
- With each contract award there are start-up costs or added budget pressures
  due to a need for hiring, training and other start-up requirements. In the case of
  permanent In-House Collections Group there would be no start-up costs going
  forward.

 Assigning Zone 3 to a permanent In-House Collections Group would eliminate risks and uncertainty around not successfully procuring services for the downtown core.

# 6.2 Staffing

- Staffing the In-House Collections Group has been very challenging over the last few years. Being able to offer permanent positions to waste collection operators would make the City a more attractive employer and help with recruiting staff.<sup>6</sup>
- A thriving workforce is one of the City's seven strategic priorities identified in the last <u>Strategic Plan</u> (2019-2022). Labour shortages are being felt across the whole waste collection industry. By making the In-House Collections Group for Zone 3 permanent as opposed to contract, not only does the City continue to have competitive, permanent jobs, SWS expects a greater ability to attract qualified candidates in a competitive labour market and to improve staff retention and thereby retain the knowledge and experience that is needed to provide excellent service, which is another strategic priority.
- Permanent staff would also have greater opportunities for career development and advancement.
- Making In-House Collections Group staff permanent could foster a feeling of belonging and appreciation, resulting in greater ownership, pride in the work and employee engagement.
- Reduced hiring cost through lower staff turnover. In 2022, Solid Waste Services
  had to hire 50 new waste collection operators, i.e. replace about half the InHouse Collections Group's workforce (102 FTEs).
- Reduced onboarding training cost through lower staff turnover.
- Opportunity to right-size workforce so they can complete their daily duties and take on extra projects or assignments at a lower cost than contracting out this work.
- Less overtime pay as a result of a right-sized workforce. According to the 2022
   Statement of operations, overtime pay for Zone 3 alone increased within one

<sup>&</sup>lt;sup>6</sup> Potentially eliminates need for article 36 from the CUPE Local 503 Collective Agreement; CUPE Local 503 president has been made aware of this initiative. Delegation of authority would have to be received to engage in discussions that have a financial impact outside of bargaining. The City would need direction to amend the current Collective Agreement which expires at the end of 2024. Bargaining for the next Collective Agreement would likely commence in early 2025, but it is unknown when it would conclude.

- year from \$401,642 to \$540,031. That is the equivalent of the compensations cost for 6.65 FTEs.
- Reduced need for contracted services (labour agency workers). Over the last few years, the cost for subcontracted labour has been steadily growing in both Zone 3 and 5, from a combined \$373,090 in 2018 to \$951,634 in 2021 and \$1,279,895 in 2022.<sup>7</sup>
- A reduced number of privately serviced zones requires less contract
  management by Solid Waste Services staff, e.g. in case of non-compliance. This
  would be offset by the need to have permanent staff for performance
  management and ensure service levels are being met.
- Clear, unambiguous reporting structure. Within the current hybrid model, the In-House Collections Group is both a contractor and a branch of Solid Waste Services. The Program Manager Waste Collections reports to the Director of Solid Waste Services (who is technically their client). At the same time, the contract is managed in a different branch, under a different Program Manager, who also reports to the Director.

#### 6.3 Fleet

- Fleet consolidation and right-sizing; better prices with better planning for vehicle replacement; lower maintenance costs.
- Collection vehicles would become part of Fleet's regular replacement management plan. Greater control over the vehicle lifecycle results in lower overall maintenance costs.
- If a permanent In-House Collection Group served only one zone, fewer collection vehicles would be needed. Right-sizing fleet saves acquisition and maintenance costs.
- Fleet procurement would become part of regular operations. Capital budget asks
  could be incorporated into the normal budget process instead of seeking
  Council's approval on an ad-hoc basis in advance of a collections contract. There
  would be savings on staff time and effort; staff would not need to write business
  cases to purchase new vehicles and risk a delay in procurement processes due
  to a need for special approvals.

<sup>&</sup>lt;sup>7</sup> Information obtained through Financial Statements reports and directly from Finance Services (2022 number).

- More flexibility with vendors and timing to purchase vehicles, determined by lifecycle, not by contract length, could help mitigate supply chain issues. It would also help with maintenance if vehicles were not all the same age, experiencing similar breakdowns around the same time.
- The average industry lifespan of a waste collection vehicle is between five and seven years. The maintenance of keeping a vehicle in-service beyond its natural lifespan gets increasingly more expensive. These are the cost estimates by age of a collection vehicle in service, based on 2023 numbers and an average of current forecast maintenance (with an inflation adjustment of 15%).

Table 2: Progressive Annual Collection Vehicle Maintenance Costs, as per Fleet Services

Type of vehicle	Annual maintenance costs			
	after 1 year	after 5 years	after 7 years	after 10 years
Garbage truck (single)	\$19,922	\$56,528	\$65,132	\$130,768
Split truck (dual)	\$37,035	\$83,949	\$115,655	\$163,857

- As an example, 15 out of 19 garbage trucks that were decommissioned in 2020
  (Zones 3 and 5) were already 8 years old at the time of replacement. Based on
  the numbers provided in the table above, the extra cost for keeping those 15
  units in service just for one year past their maximum 7-year lifecycle amounted to
  almost one million dollars (\$976,980).
- Right now, the City's In-House Collections Group has an inventory of 50 waste collection vehicles to service both Zones 3 and 5. The current replacement value of a single unit collection vehicle is \$425,000 (garbage truck), and \$450,000 for a dual collection vehicle (split organics/recycling truck). 22 dual collection vehicles will be replaced in 2023 and two added to service Zone 5.

Table 3: Current Inventory of In-House Waste Collection Vehicles

Type of vehicle	Zone 3	Zone 5
Garbage truck (single)	8	13 (11, plus 2 for growth)

Split truck (dual)	13 (11, plus 2 spares)	16 (13, plus 3 spares)
Total per zone	21	29
Overall total		50

- If the new service model were to be implemented in 2026, the existing fleet could be consolidated to only serve Zone 3. This presents an opportunity to decommission aging equipment and leave in-house operations with a first-rate inventory of recent collection vehicles.<sup>8</sup>
- Reduced equipment downtime because vehicles will have a valid lifecycle schedule based on use, maintenance, and condition rather than being determined by the length of the collection contract.
- Supply chain issues can be mitigated if vehicle replacement can be planned.

## 6.4 Operational Flexibility and Innovation

- Having a permanent In-House Collections Group would enable better long-term planning, in terms of staffing and fleet as well as planning for operational and technical pilots for innovation. For example, the costs of retrofitting facilities for trialing alternative energy sources like compressed natural gas (CNG) could be justified with the ability to make long-term decisions and having control over purchasing plans. Spending taxpayers' money on a CNG retrofit does not make sense if there is no guarantee that the City will have an In-House Collections Group beyond a given contract term.
- There is little to no growth of curbside homes in the downtown core and therefore no need to constantly adjust resources and collection routes to new developments like in the suburbs.
- Operational expertise is needed to be able to provide excellent service. The In-House Collections Group has a long history of successfully servicing Zone 3 with its unique challenges (high density, narrow streets, vehicle and pedestrian traffic, back-alley collection etc.).
- Greater flexibility with resources: some opportunities for cross training could be leveraged, and qualified curbside collections staff may be deployed to other

<sup>&</sup>lt;sup>8</sup> The types of collection vehicles needed as of 2026 will partly be determined by IPR and the future of recycling collections.

- service areas if operational needs required extra support, or staff could be reassigned to other tasks within Solid Waste Services, e.g. green bin deliveries, yellow bags distribution etc.
- Possibility to take on tasks that give the City more control over programs, practices or procedures, e.g. in-house waste collection for Cleaning the Capital would allow Solid Waste Services to determine what is being picked up and brought to the Trail Waste Facility Landfill.<sup>9</sup>
- Staff become familiar with the routes. Consistency and experience are prerequisites for providing quality service, in particular in a challenging work environment.
- Added staff capacity would ensure waste collection continues or is completed as fast as possible in the case of extraordinary circumstances such as weather events.
- More consistency leading to deeper connections with residents, Community
  Associations and Business Improvement Areas in the downtown core. Those
  connections can help with customer satisfaction and a positive public perception
  of the City.
- Having a permanent In-House Collections Group will also allow Solid Waste
  Services to evaluate new approaches that can have environmental, social and/or
  financial benefits, e.g. piloting technologies suited for greening the fleet (a priority
  under City's <u>Climate Change Master Plan</u>) or piloting different collection methods
  and containers.
- In addition, establishing a permanent in-house waste collections group starting in 2026 aligns with the beginnings of the implementation of the many recommendations considered in the Solid Waste Master Plan (bins, diversion options, collection efficiencies, etc.) and will allow for more flexibility and agility in piloting new strategies.
- Changing climate conditions have led to and will lead to more extreme weather in the National Capital Region. Over the past few years, the City has seen two floods (2017, 2019), a tornado (2018) and a derecho (2022). Every time, Public Works has been heavily involved in the clean-up. As per the City's <u>Municipal</u> <u>Emergency Plan</u>, the Department is responsible for debris management after an

<sup>&</sup>lt;sup>9</sup> In 2022 (Spring and Fall campaigns combined), 99 garbage pick-up requests were received and submitted to 1-800-GOTJUNK.

- incident. Paying overtime premiums and hiring contractors/labour agencies is more expensive than the costs incurred for full-time permanent employees.
- If Solid Waste Services had an adequately staffed permanent in-house group –
  including a contingency of operators dedicated to special tasks, projects, and
  programs, they would be able to provide cost-effective emergency response
  support and leverage opportunities to divert materials from landfill.
- More flexibility to try innovations intended to have a positive environmental impact, e.g. greening the fleet. The current contract allows for some piloting initiatives at the City's direction, but is extremely limited, i.e. the City can only remove one piece of equipment per zone, and contractor resources and payment is to be negotiated, based on mutual consent.
- The City could purchase different vehicles for smaller sub-divisions as a proof of concept or trial automated carts and right-size fleet for the next collection contract. These and other ideas are being explored through the Solid Waste Master Plan.

## 7.0 Risk Analysis

Potential risks associated with each of the options have been factored into the table below.

Table 4: Options Risk Analysis

Risk Event	Option	Likelihood (L ,1-5)	Impact (I,1-5)	Risk Score (L x I)	Mitigation Strategies
City may not win any bids, forcing the In- House Collections Group to be eliminated.	1	2	5	Medium - High	Exempt Zone 3 from external bidding process and award to In- House Collections Group
Complexity of managed competition leads to higher costs and less flexibility in	1	2	2	Low	Issue standard RFP for all zones outside the downtown core

Risk Event	Option	Likelihood (L ,1-5)	Impact (I,1-5)	Risk Score (L x I)	Mitigation Strategies
contract management and operational optimization.					and hold a managed competition with the in-House group bidding just for Zone 3
Lack of bids from vendors to serve Zone 3.	2	3	5	High	Exempt Zone 3 from external bidding process and award to In- House Collections Group
Vendor pricing for other/all zones may go up (even if City doesn't compete).	2,3	2	4	Medium	Procuring and awarding by zone can help continue to drive competition among vendors. Active efforts to market the procurement will attract vendors.
Difference in service levels across the City between in-House and external vendors.	1, 3	2	2	Low	Ensure compliance with city-wide standards through clearly defined contract specifications and well-established contract

Risk Event	Option	Likelihood (L ,1-5)	Impact (I,1-5)	Risk Score (L x I)	Mitigation Strategies
					management practices.
Difference in service levels across the City between external vendors	1,2,3	4	2	Medium	Ensure compliance with city-wide standards through clearly defined contract specifications and well-established contract management practices.
Service impacts in Zone 3 due to new contractor lacking experience with challenging environment	1,2	3	2	Medium	Exempt Zone 3 from external procurement process, or thorough preparation and oversight; SWS to assist new contractor with planning.
Service impacts in Zone 5 due to new contractor	1,2,3	2	2	Low	Thorough preparation and planning for the new contract; SWS to assist new contractor

Risk Event	Option	Likelihood (L ,1-5)	Impact (I,1-5)	Risk Score (L x I)	Mitigation Strategies
					with planning and on-boarding.
Lack of control over contractors' business decisions, e.g. re: vehicles' carbon footprint.	1,2,3	5	2	Medium- High	Make specific new practices and technologies a contract requirement.
Industry-wide staff shortages and retention issues.	1,2,3	3	5	High	Improve working conditions, benefits and job security for In-House Collections Group.
Need for contractors to continuously adjust to growth/sprawl in all zones other than Zone 3.	1,2,3	4	2	Medium	Build contingency for future growth; supply bidders with most recent growth projections from the City's Official Plan.
Exposure to claims/litigation around operational liabilities (injuries, collisions etc.).	1,3	3	5	High	Insurance and safety training for in-House and support from Legal Services, or else fully outsource (Option 2).

Risk Event	Option	Likelihood (L ,1-5)	Impact (I,1-5)	Risk Score (L x I)	Mitigation Strategies
Industry lead-time for equipment procurement is 18-24 months, with additional delays due to supply chain issues resulting from COVID-19 impacts.	1,2,3	4	5	High	Long-term planning essential for vehicle replacement; align with lifecycle instead of collection contract terms; make procurement faster and easier through eliminating need for special approvals
Change may result in surplus of in-House staff.	3	2	1	Low	Protection through Article 36 in the CUPE Local 503 Collective Agreement ("no grievance" clause); consolidate workforce, reassign tasks, reorganize processes; seek alternative employment opportunities across PWD.

Risk Event	Option	Likelihood (L ,1-5)	Impact (I,1-5)	Risk Score (L x I)	Mitigation Strategies
Extra cost incurred through staff's status change to permanent unionized employees (e.g. wages, IPP)	3	5	1	Medium	Costs likely to be offset with more retention, less hiring and training

# 8.0 Summary

The following table provides a high-level overview of each of the 3 options.

Table 5: Summary Analysis of Options

Objective	Option 1	Option 2	Option 3
Standard procurement process	No	Yes	Yes
Planning certainty	No	No	Yes
Operational efficiency	No	Yes	Yes
Business flexibility and innovation	Partial	Partial	Yes
Service excellence	No	No	Yes

## 9.0 Recommendation

Based on the evaluation of the information collected under the identified criteria, it is recommended that the City considers implementing Option 3: Establish a permanent In-House Collections Group to service the downtown core and exclude Zone 3 from the procurement process. Option 3 best addresses the business need since it removes the various challenges around the inherent inability to plan – which would remain with Option 1 – while not completely giving up control over waste collection operations in Ottawa – which would be the case with Option 2.

Establishing a solely municipal service delivery model across Ottawa would be a colossal, cost-prohibitive undertaking. It was not considered a viable option and was therefore not explored.

Forming a permanent In-House Collections Group would allow the City to continue to provide reliable service in a zone that comes with a unique set of challenges. In addition to service, having a permanent In-House Collections Group would also allow for better long-term planning in terms of fleet acquisition and maintenance, as well as the implementation of initiatives that have the potential to yield financial, social and environmental benefits. At the same time, it would help address systemic challenges around hiring and retaining staff. It would bring job security for the City's in-house waste collection operators who, under the existing system, are only hired until the end of term of each collection contract.

It would also give the City a competitive advantage with regards to recruitment and retention in a tight labour market with ongoing staff shortages. This kind of consolidated mixed model would ensure that the City has some control over residential curbside waste collection operations in Ottawa – which is not a given under the current business model and would definitely be lost if those operations were fully outsourced. Most importantly, it would allow the City to continue to provide reliable quality service in the most challenging zone and thereby remove any insecurities around future bids and compliance with service levels in the downtown core.

All other things being equal, staff anticipate that moving forward with an In-House collections group, given all the opportunities for cost reduction and efficiencies mentioned herein, the cost-of-service delivery will be no more and, in all likelihood less than what it is today for the expanded Zone 3. In parallel to the curbside collection procurement process, staff will be finalizing the collection costs associated for the In-House Collections Group activities for the expanded Zone 3, starting in 2026, so that the overall the curbside collection rate can be determined consistent with current practices.

Within the current business model, there is no certainty as to which zones, if any, the in-House Collections Group will service past Q1 2026. This structure does not allow for efficient long-term planning and allocation of resources. And neither the existing system nor complete outsourcing can ensure that the most operationally difficult zone, (Zone 3), will be well serviced long-term. The expertise of the In-House Collections Group and history of providing service in the downtown core presents an opportunity to save on the staff time and resources required to conduct a managed competition for Zone 3. Option 3 also aligns with the City's Strategic Plan established under the previous Council, with its commitment to provide excellent service and foster a thriving workforce. It supports the goals established in the <u>Climate Change Master Plan</u> and the ones that have been approved for the development of the Solid Waste Master Plan, while addressing the department's emergency response/debris management responsibilities.

Having Zone 3 serviced by the City's In-House Collections Group will yield additional benefits. By making the In-House Collections Group permanent, the City can offer staff increased job security and therefore expect to attract and retain qualified candidates in a competitive labour market. There will be cost savings from an operational and asset perspective (e.g., emergency response, tie-in with other programs, lower vehicle maintenance costs), and more flexibility to pilot initiatives intended to have a positive environmental, social, or financial impact. Potential extra costs for making waste collection employees permanent will likely be offset by lower staff turnover and a reduced need to hire through labour agencies.

After careful consideration, evaluation of the available options and the analysis of the results of a survey amongst 10 municipalities across Canada, as described in this report, staff are recommending that Council approve moving forward with Option 3: Establish permanent in-house resources to service the downtown core and exclude Zone 3 from the procurement process.

Table 6: Summary Analysis of Option 3

Objective	Option 3	Additional details
Standard procurement process	Yes	No managed competition necessary; standard RFP for all zones other than Zone 3
Planning certainty	Yes	Improved job security for staff, leading to better retention; proper vehicle procurement strategy
Operational efficiency	Yes	Fleet right-sizing and lifecycle replacement; savings through lower maintenance costs and opportunity to redeploy resources
Business flexibility and innovation	Yes	Allows for trials and changes to improve service delivery, emergency response, carbon footprint, working conditions and morale

Service excellence	Yes	Expertise and consistency serving the
		downtown core with its unique challenges

The next collection contract will be impacted by many changes both within and outside of the City's control (i.e. the transition to IPR where producers, not municipalities, will be physically and financially responsible for the collection and processing of recyclables). This shift, in combination with expected new policies related to the Solid Waste Master Plan and the City's <u>target</u> to reduce Greenhouse Gas emissions from operations by 50 per cent by 2030, makes 2026 a good time to implement changes.

## 10.0 Next Steps

Upon Council's approval of the recommendation, an implementation plan will be led by Solid Waste Services to ensure the successful conversion of the contracted In-House Collections Group to a permanent City service. Any changes to the In-House Group workers' terms and conditions of employment will be required to be negotiated with the union. While the current structure will stay in place as is until March 2026, extensive lead time is required to procure new collection equipment prior to implementing the new contract/system. Therefore, planning for the modified mixed service delivery model needs to start immediately and be finalized by the end of this year.

Table 7: Proposed Implementation Plan High-Level Project Schedule

Milestones	Anticipated Timeline
Present recommended option to Committee and Council for consideration	Q3 2023
Council approval of modified mixed service delivery model	Q3 2023
Develop Implementation Plan for making the In-House Collections Group permanent to service Zone 3	Q4 2023
Operational planning, fleet acquisition; explore staffing requirements and future employment status and conditions for in-house collection staff; hiring of permanent in-house collection staff etc.	2024/2025
Transition of In-House Collections Group to permanent status and implementation of modified mixed service delivery model	Q1 or Q2 2026

# 11.0 Supporting Documentation

- 1. Municipal scan: Results from interviews held with other jurisdictions on their experiences with different service delivery models. Documentation available upon request.
- 2. Solid Waste Collection Contract Development Competitive Elements report (50 57-97-0012-H)
- 3. Solid Waste Residential Curbside Collection (Tender RFT0210591027-TO2) report (ACS2005-PWS-UTL-0029)
- 4. Solid Waste Services-Collection Contracts: In-House Bid Authority-Managed Competition (ACS2011-ICS-ESD-0019)
- 5. In-House Bid Authority-Managed Competition report (<u>ACS2011-ICS-ESD-0045</u>)
- 6. Solid Waste Curbside Collection and Services (Tender RFT01811-91027-T01) report (ACS2011-ICS-ESD-0040)
- Solid Waste Services 2023 Residential Curbside Collection Contract Procurement Strategy report (<u>ACS2021-PWE-SWS-0002</u>)
- 8. Financial Statements for In-House Solid Waste Collection External Audit Results report (ACS2020-PWE-SWS-0003)
- 9. Financial Statements for In-House Solid Waste Collection External Audit Results report (ACS2021-PWE-SWS-0007)

#### **APPENDIX A**

## **Municipal Scan**

In addition to a review and analysis of supporting documents and consultation with internal stakeholders, a municipal scan was conducted to collect data on industry best practices and key considerations to inform the development of a recommendation. Ten municipalities across Canada<sup>10</sup> were asked 23 questions about their collection systems and their operational experience.

There are three common business models for providing residential curbside waste collection service: fully in-House, fully contracted or a mix of both. In our sample of 10 municipalities, 40 per cent operate with in-House staff only (except for some specialty programs or pilot projects), 20 per cent work exclusively with contractors and 40 per cent combine the two types.

Table 1: Overview of surveyed municipalities' current model

Business model	Solely in-House	Fully outsourced	Mixed system
Municipality	Kingston	Region of Waterloo	Toronto
	Guelph	Winnipeg	Hamilton
	Calgary		Saskatoon
	Vancouver		Edmonton

A mixed system model can be based either on a geographical divide (e.g., Toronto), by waste stream (e.g., Saskatoon) or a combination of both (e.g., Hamilton). It should be noted, though, that no other municipality applies a hybrid model like the City of Ottawa does, where an in-House collection group is considered an external contractor. Normally, where there is an in-House collection group, it is part of the organization, and operators are permanent staff.<sup>11</sup>

The majority of the surveyed municipalities are quite content with their current approach, expressing no desire to change the system. <sup>12</sup> While Hamilton, Saskatoon and Edmonton say they are pleased with the competitive advantage deriving from a mixed model, Guelph quotes cost savings as one of the main benefits of operating an in-

<sup>&</sup>lt;sup>10</sup> Kingston, Toronto, Guelph, Hamilton, Region of Waterloo, Edmonton, Winnipeg, Saskatoon, Calgary, Vancouver

<sup>&</sup>lt;sup>11</sup> Full time and part time, in some cases supplemented by seasonal staff for leaf & yard waste collection and casual labour·

<sup>&</sup>lt;sup>12</sup> On average, the current system has been in place for 15+ years.

House only system. Winnipeg, on the other hand, states that they save costs by outsourcing the service completely. Overall, there is a notion that contractors' rates may be slightly more affordable. Having an in-House group does, however, yield the additional benefits of staff retention, control over resources and operations, and business flexibility.

Not being bound by fixed conditions in a contract provides municipalities with increased flexibility to leverage and share permanent resources across departments and/or support other priorities. In some municipalities surveyed, collections staff may be deployed to other service areas as needed and qualified, e.g., to operate a snowplow instead of a waste collection vehicle, or assigned other tasks in special circumstances, e.g., an emergency clean-up. Having an in-House group also gives a municipality the ability to pivot and adopt changes more easily, e.g. implement new provincial rules or regulations. A couple of municipalities characterize staff retention as an industry-wide issue 13, as highlighted on page 130 of the Review of Policy and Trends as part of Phase 1 of the Solid Waste Master Plan, with the top reasons for leaving were for better pay, more time at home and for better benefits. Those surveyed that had a mixed or in-House only model report that their retention rates are high and stable. Some attribute this to factors like the switch to automated equipment, which makes the job easier and less physically demanding, as well as a 4-day work week and/or competitive wages with good benefits.

According to the information provided by those municipalities that do have an in-House group, the average in-House waste collection operator earns \$29.17 per hour. This is slightly higher than the 2023 hourly rate paid in Ottawa. Based on Article 36 of the collective agreement with CUPE Local 503, current wages for in-House waste collection operators range from \$27.97 to \$28.60 per hour, averaging to \$28.29 per hour.

As for those municipalities that hire external vendors, partially or exclusively, waste collection services are most commonly procured through a standard Request for Proposal (RFP) procurement procuress. Contracts usually come with a requirement for new collection vehicles and are valid for five to seven years, with an option to extend. This period aligns with the lifespan of collection vehicles and allows for their amortization over the term of contract.<sup>14</sup>

<sup>&</sup>lt;sup>13</sup> See also <u>Review of Policy and Trends</u>, a Technical Memorandum prepared by Solid Wastes Services' Long Term Planning Group in 2020; page 130: 6.4.3. "Staffing Challenges."

<sup>&</sup>lt;sup>14</sup> A 7-8 year initial term, plus extension options, saves money compared to a 5 year initial term, as capital cost of vehicles are amortized over the initial term only and not the extensions (which are not guaranteed to vendors).

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The table below provides a high-level overview of the risks and benefits of each business model, based on information gathered through the municipal scan.

Table 2: Municipal Scan Findings

Business model	Advantages	Disadvantages
Solely in- House (4): Kingston, Guelph, Calgary, Vancouver	<ul> <li>Flexibility to handle special circumstances</li> <li>More control to adjust to changes in regulations</li> <li>Satisfaction with costs and service levels</li> </ul>	<ul> <li>Unionized employees may work shorter days than contractor workers.</li> <li>Can be quite restricted, depending on collective agreement.</li> <li>More costs and logistics to maintain all services and fleet</li> </ul>
Fully outsourced (2): Region of Waterloo, Winnipeg	<ul> <li>Service provided at a reasonable price, even cheaper (e.g. no upfront capital costs)</li> <li>Simpler for municipality to outsource than to run and oversee the whole operation</li> <li>Avoid injuries, claims and accountability</li> <li>No need to procure, store and maintain vehicles</li> <li>Contractors work longer hours</li> <li>Liquidated damages for contractors</li> </ul>	<ul> <li>Potential for increased service level risk</li> <li>Less operational flexibility to adapt to changes or realign/deploy resources e.g. for emergency response</li> <li>Additional time and resources required to support the procurement process to ensure service continuity through contracted services</li> </ul>
Mixed model (4): Toronto, Hamilton, Saskatoon, Edmonton	<ul> <li>Balance between cost savings and control over service levels and operational efficiencies</li> <li>Helps to mitigate financial and service risk by increasing competition among vendors</li> <li>Municipality can evaluate private-sector service delivery in compared to the public sector</li> </ul>	Greater management effort with multiple service providers

Operational flexibility to adapt services  and recovered as required greater.
and resources as required greater ownership of the work for municipal
employees

In conclusion, three lessons learned through the municipal scan stand out:

- 1. The City's model with an in-house contractor is rare. In all other municipalities that have an in-house group, collection staff are permanent employees. No municipality expressed a desire to learn more about Ottawa's approach.
- 2. In comparison, wages paid for in-house residential waste collection in Ottawa are in the low to mid-range.
- 3. Municipalities that have an in-house collection group with permanent staff report good retention rates.