



STAFF REPORT ACTION REQUIRED

Curbside Waste Collection Services Review: Comparison of Curbside Waste Collection Services East and West of Yonge Street

Date:	September 9, 2015
To:	Public Works and Infrastructure Committee
From:	General Manager, Solid Waste Management Services
Wards:	All
Reference Number:	P:\2015\Cluster B\SWM\September\011PW (AFS#19979)

SUMMARY

The purpose of this report is to present the findings on the comparison of curbside collection districts in terms of costs, diversion rates, service levels and performance. It also provides an analysis of the financial and collection implications associated with the scenarios for contracting out collection services east of Yonge Street (Districts 3 and 4). A review of waste collection service delivery approaches in similar jurisdictions has also been undertaken. An independent financial analysis verification of the analysis was conducted by Ernst & Young LLP and is provided in Appendix C.

Curbside waste collection services west of Yonge Street (Districts 1 and 2) are provided under contract by private sector service providers, and east of Yonge Street (Districts 3 and 4) are provided in-house by City staff. The analysis indicates that the current service delivery approach provides a competitive environment that is effective in terms of costs and performance.

There have been productivity improvements for in-house collection following the decision to contract out District 2. Provided that these gains are sustained and improved, the best value and lowest risk to the City of Toronto at this time is to continue with the current model. A blend of in-house and private sector service provision also manages operational and financial risk and provides flexibility for the curbside waste collection system to adapt to changes.

RECOMMENDATIONS

The General Manager of Solid Waste Management Services recommends that:

1. The Public Works and Infrastructure Committee receives this report for information.
2. That the information in Confidential Attachment 4 remain confidential in its entirety as it relates to the security of the property of the City and labour relations matters.

Financial Impact

The 2015 operating budgets for the three curbside in-house collection service areas are presented in Table 1. The projected combined budgets for 2016 and 2017 will be reduced by 2% from 2015 costs resulting from anticipated productivity improvements.

Table 1 – 2015 In-House Curbside Collection Budget

Collection Area	Cost Centre	2015 Budget
District 3	SW1030	\$19,749,169
District 4	SW1040	\$14,756,597
Nights Collection	SW1050	\$6,338,891

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial implication information.

DECISION HISTORY

At its meeting of January 6, 2015, the Public Works and Infrastructure Committee directed the General Manager, Solid Waste Management Services to report back to its meeting of April 9, 2015 to consider curbside waste collection service delivery options to achieve savings and efficiencies. This report responds to that direction.

The Public Works and Infrastructure Committee Decision Document (Item PW1.8 – Garbage Collection East of Yonge Street) can be viewed at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.PW1.8>

ISSUE BACKGROUND

The Public Works and Infrastructure Committee at its meeting of January 6, 2015, requested the General Manager of Solid Waste Management Services (SWMS) report back with the options to achieve savings and efficiencies in curbside waste collection service. The Committee requested that the report include the following:

- Service delivery options including contracting out east of Yonge Street (Districts 3 and/or 4);

- The collection costs by district;
- A fleet analysis;
- A review of services from comparable jurisdictions;
- An independent review of the financial analysis; and
- An analysis of diversion rates by district.

This report provides the information and analysis the committee requested.

SWMS Collections & Litter Operations Section is responsible for contract management and the provision of curbside collection services for waste (i.e. garbage, recycling, organics, yard waste and durable goods, etc.) Curbside collection services are provided to single family homes, multi-residential apartment buildings, residential units above commercial establishments, City Agencies, Boards and Corporations and small charities and commercial establishments.

COMMENTS

The information and analysis requested by the Public Works and Infrastructure Committee (PWIC) is provided in the following sections:

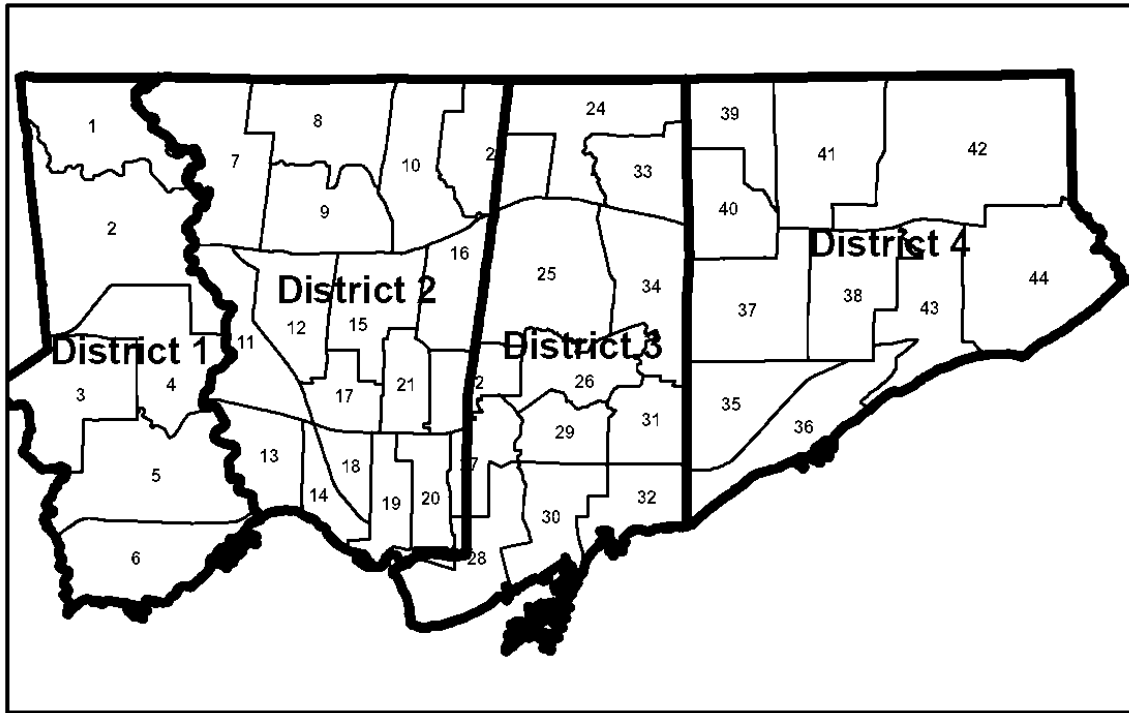
1. Overview of current curbside collection system
2. Analysis, including costing methodology, cost comparison, customer service requests, waste diversion rates, and fleet analysis
3. Service Delivery Options and Analysis
4. Approaches in other jurisdictions
5. Independent review

1. Overview of Current Curbside Collection System

The City of Toronto is divided into four (4) collection districts for daytime residential curbside waste collection (numbered 1 to 4; west to east respectively). The districts are defined by the Humber River, Yonge Street, and Victoria Park Avenue and are identified in Figure 1. Collection services are provided to almost 460,000 stops, primarily consisting of single family customers, as discussed in more detail in Section 1c below.

A small portion of the curbside collection service is provided at night (Nights Collection) along main arterial roads to serve areas where it is not feasible to provide collection during the day because of heavy traffic and public transit. Nights Collection serves approximately 31,801 stops across the City. The routes are as shown in Figure i in Appendix A.

Figure 1 - Daytime Curbside Collection Districts



a) Service Levels

The current service levels for single family residential curbside collection service are noted in Table 2.

Table 2 – Single Family Curbside Collection Service Levels

Service	Frequency
Garbage – cart collection (grey bin)	Bi-Weekly
Recycling – cart collection (blue bin)	Bi-Weekly
Organics – cart collection (green bin)	Weekly
Leaf & Yard Waste & Christmas trees	Seasonal Bi-Weekly
Bulky Waste	Bi-Weekly
Electronics and Durable Goods	Bi-Weekly
Toxic Taxi	Call In
Premium Organic Collection for Commercial	Up to 6x / Week

b) Service Providers

The current curbside collection system is split between contracted and in-house collection east and west of Yonge Street, with the exception of the Toxic Taxi (Household Hazardous Waste or "HHW") and Nights Collection which are provided by in-house collection city-wide. Table 3 below lists the service provider for each curbside service.

The mix of service providers has been in place since August 2012 when District 2 was contracted out. District 1 (former Etobicoke area) was contracted out in 1995 and three more contracts since then have been awarded to private contractors (2002, 2008 and 2015).

Table 3 – Curbside Collection Service Providers

Service Area	Provider	Notes
District 1 (D1)	Green for Life Environmental Inc.	7 year contract, expired June 30, 2015
	Miller Waste Systems Inc.	6 year (+2, 1 year extension options) contract, began July 1, 2015
District 2 (D2)	Green For Life Environmental Inc.	7 year contract, expiring August 6, 2019 (+2, 1 year extension options)
District 3 (D3)	In-House Staff	n/a
District 4 (D4)	In-House Staff	n/a
Nights Collection	In-House Staff	City-wide service
Toxic Taxi (HHW)	In-House Staff	City-wide service

c) Collection District Characteristics and Customers

- Similar urban form, housing density and building characteristics can be found in Districts 1 and 4, and Districts 2 and 3.
- Districts 1 and 4 primarily consist of suburban areas and industrial areas developed after the Second World War (WW2).
- In Districts 2 and 3, neighbourhoods south of Eglinton Avenue are more mature and have denser urban areas; neighbourhoods north of Eglinton Avenue are suburban and have comparable customers and housing density.

There are a total of 459,358 stops served by daytime curbside collection and the number of stops varies per district. A summary of the curbside stops by district is provided in Table 4. The table also provides information on the number of stops receiving Nights Collection. In 2014, there were 491,159 stops that received curbside solid waste collection services. A complete breakdown of the number of curbside stops by customer type and collection district is provided in Table I in Appendix A.

Table 4 – Curbside Collection Stops by District (2014)

Collection Area	District 1	District 2	District 3	District 4	Night Collection
Number of Stops	66,057	155,445	116,416	121,440	31,801
Total Curbside Stops	D1, D2, D3, D4 459,358				D1, D2, D3, D4 & Night Collection 491,159

2. Analysis

To undertake the analysis, costs and performance information was compiled for each of the four (4) collection districts.

Sources of information included:

- Actual operating expenditures from the City’s financial management system (SAP)
- 2014 Customer (Unit) Counts
- 311 Service Requests
- Tonnes of material collected (Paradigm)
- Toronto Maintenance Management System (TMMS)

a) Costing Methodology

As further explained below, the cost analysis examined actual curbside collection costs for 2013 and 2014 of the direct service costs for all four (4) collection districts from SAP and indirect costs for Districts 3 and 4. This reflects the first, two full calendar years of operation of the current curbside waste collection system. Staff undertook a detailed review of the 2013 and 2014 SAP actual expenditures for each of the four (4) collection districts and Nights Collection to ensure that the charges to the five (5) cost centres accurately reflected the collection costs. Adjustments were made as required. For example, staffing charges assigned to an incorrect cost centre were re-allocated.

The contracted collection costs (Districts 1 and 2) are provided in Table 5a and include:

- Contract costs based on monthly invoice charges to SAP
- Contract management costs, based on allocating the associated costs for contract management staff, including management, supervisors and City field and office staff to monitor the contracts

Table 5a - Contracted Collection Costs

Collection Area	Collection Costs	
	2013	2014
District 1		
Contract Costs (Actual)	\$8,776,447	\$9,040,835
Contract Management Costs	\$395,847	\$395,847
District 1 Total	\$9,172,294	\$9,436,682
District 2		
Contract Costs (Actual)	\$22,489,221	\$19,623,634
Contract Management Costs	\$1,081,226	\$1,081,226
District 2 Total	\$23,570,447	\$20,704,860

The in-house collection costs (Districts 3 and 4) are provided in Table 5b and include:

- Operating Costs (Direct Costs)
 - Labour and management costs from SAP, based on hours worked on collection activities related to the specific district
 - Fleet costs from SAP, including fuel, vehicle replacement, repairs and maintenance
 - Allocation of fleet costs between District 3 and Nights Collection, to reflect the allocation of costs for this shared fleet
- Estimated Indirect costs, for costs not directly charged to District 3 and District 4 SAP cost centres. The share of these costs were estimated for 2014 and assumed to be the same for both 2013 and 2014. These include:
 - Vehicle reserve contributions, which are charged at the Divisional level and are further discussed in Section 2e)

Table 5b – In-House Collection Costs

Collection Area	Collection Costs	
	2013	2014
District 3		
Operating Costs (Actual)	\$19,464,177	\$18,458,433
Estimated Fleet Reserve Contribution	\$2,190,000	\$2,190,000
District 3 Total	\$21,654,177	\$20,648,433
District 4		
Operating Costs (Actual)	\$12,852,412	\$14,110,510
Estimated Fleet Reserve Contribution	\$1,300,000	\$1,300,000
District 4 Total	\$14,152,412	\$15,410,510

b) Cost Comparison

The curbside collection districts have unique features and qualities that impact the collection logistics and costs, such as one-way streets, on-street parking, laneways, narrow roadways and traffic volumes/public transit demands. These traits influence the type and size of collection vehicle used in each district, such as fully automated or semi-automated vehicles, which in turn impact the cost and time required to service these areas.

Based on the collection district characteristics described in Section 1c) of this report, the costs of District 1 are compared to District 4; and the costs of District 2 are compared to District 3.

In order to compare costs by collection district, a per stop basis was selected as this is less variable from year to year than tonnages. The cost per stop was determined using the

total number of stops (all customer types) served by the collection district, as provided in Table 4. A cost per tonne analysis was also undertaken.

The results of the cost analysis by district are provided in Table 6. The comparison indicates that Districts 1 and 4 costs per stop and per tonne are competitive, with in-house costs being lower. Districts 2 and 3 have higher collection costs as a result of older neighbourhoods, row housing, one way and narrow streets, and on-street parking.

Actual cost per stop collection fluctuates between districts and years. Weather related episodes such as the flood in 2013 which impacted Districts 1 and 2 mainly and the ice storm in 2014, which primarily impacted District 4.

Table 6 - Curbside Collection Costs by District

Collection Area	Collection Costs		Cost Per Stop		Cost Per Tonne	
	2013	2014	2013	2014	2013	2014
District 1	\$9,172,294	\$9,436,682	\$138.85	\$142.86	\$115.68	\$121.60
District 2	\$23,570,447	\$20,704,860	\$151.63	\$133.20	\$129.93	\$113.10
District 3	\$21,654,177	\$20,648,433	\$186.01	\$177.37	\$176.09	\$165.32
District 4	\$14,152,412	\$15,410,510	\$116.54	\$126.90	\$116.43	\$121.90

Analysis of Collection Costs in Districts 3 & 4 and Nights Collection

The cost of providing curbside collection services in District 3 is currently the highest per stop. As previously noted, District 3 has similar challenges to District 2 of older neighbourhoods, row housing, one way and narrow streets, and on-street parking, which results in higher collection compared to Districts 1 and 4. District 3 also has some unique characteristics and operational practices, compared to District 2, which include:

- Vehicles
 - Shared with Nights Collection operations
 - Older model split rear collection vehicles
 - Significant vehicle breakdowns due to the age of the collection vehicles
 - More 2 person collection vehicles
- Other services provided
 - Toxic Taxi collection
 - Toronto Island collection
- Shared yard and facilities with Nights Collection, which provides curbside collection to areas across the city where it is not feasible to provide service during the day.

Through the course of the cost analysis, it became apparent that when considering service delivery options, it is not operationally feasible to separate District 3 and Nights Collection, because of the extent of shared resources between these two services. Both services are provided from the same yard and share vehicles. As a result, the associated

costs for Nights Collection have been included in the District 3 service delivery options and analysis in Section 3 of the report.

Table 7 outlines the combined costs and cost per stop for District 3 and Nights Collection that were used as a baseline for forecasting options and costs. Inclusion of Nights Collection increases the combined customers by 31,801 to 148,217 and the collection costs by \$6.5 million per year. The addition of the costs for Nights Collection further increases the cost per customer; however, it is not comparable to daytime collection services. Nights Collection is unique due to:

- The nature of the routing (city-wide along main arterial roads)
- Servicing requirements for Commercial Collection/Residential Units Above Commercial (RUAC) and Premium Commercial Organic Collection

Table 7 – District 3 & Nights Collection Combined Costs

Collection Area	Collection Costs (Actual)		Cost Per Stop (Actual)	
	2013	2014	2013	2014
District 3 (From Table 6)	\$21,654,177	\$20,648,433	\$186.01	\$177.37
District 3 & Nights	\$28,172,538	\$27,215,389	\$190.08	\$183.62

Analysis of Collection Costs in District 4

Collection costs in District 4 indicate that City staff provide services at a competitive cost. Both Districts 1 and 4 have lower housing densities, with newer homes built post WW2, suburban streets with more room and little on-street parking. Similar vehicles are used in both districts, including the use of one-person, fully automated collection. District 4 has newer vehicles compared to District 1. Unlike District 3, the vehicles are dedicated for use in District 4.

In terms of productivity and efficiency, both districts are operating in a similar way. A number of factors were considered including:

- Number of stops per collection route
- Tonnes of waste collected per paid hour
- Tonnes per truck
- Tonnes per route

With comparable operations, this illustrates that the public and private sectors can be competitive. It has been an ongoing practice to optimize collection routes and staffing levels for in-house operations. The competitive environment that was introduced in 2012 provided continued support in ongoing efficiencies for in-house operations. Gains were also made to lower employee related costs, through lower wages and reduced sick-time costs.

c) Customer Service Requests

Enquiries from residents regarding curbside collection service issues are answered by 311 Call Centre customer representatives. Residents may call 311 for various service related requests, such as missed collections, and also for program information, such as billing, collection calendars, and bin exchanges.

SWMS represents the largest customer for 311, generating the highest number of calls per division. In 2013, 311 created 157,376 service requests for SWMS and 179,684 in 2014. The analysis considers service requests associated only with curbside waste collection, using 43 of the 243 service request codes that are tracked. The number of requests varies from year to year. As an example, the ice storm clean-up in 2014 resulted in a higher number of calls compared to 2013.

Collection service performance levels are measured by monitoring service requests initiated when residents contact 311. Collection related service requests can include missed collection, property damage and operator complaints. Table 8 provides the number of customer service requests per 1000 stops by collection district for 2013 and 2014 for both initiated and closed service requests. Overall, the number of service requests is relatively small in comparison to the number of stops and products collected on a weekly basis. To put the numbers in Table 8 into context, an average household would only make a collection related service request approximately once every 10 years.

The process for following up on initiated service requests received from 311 is the same in all four districts. When a service request is received, an investigation takes place, corrective action is taken and the request is subsequently closed.

In some cases, the investigation finds that the request was invalid. For example, a service request may be received from a resident calling 311 after 2 p.m. to report a missed collection. A service request is issued by 311, however, the crews are still collecting and have not serviced that particular street.

The process for closing invalid service requests, involves re-classifying the service request. As a result, the number of closed service requests is lower than the number of service requests that were initiated. In the case of District 1, the number of closed service requests has been estimated as there was a different practice in District 1. This difference in practice was a result of this being an older contract that was put in place before the current process for service requests was implemented, and was not set up to allow the contractor to reclassify invalid service requests. The new curbside collection contract for District 1 that began on July 1, 2015 allows the contractor to now validate all its service requests. Data in future years will be more comparable as a result of the requirements of the new contract for District 1.

Customer service requests by district are reviewed and monitored monthly by creating a report generated from the work management system - TMMS. Customer service levels are compared by the number of service requests received per 1000 households for each

district. Regular reporting on service request levels allows SWMS to ensure that contractors west of Yonge and City staff east of Yonge maintain consistent service levels and assist City staff in identifying and addressing service level issues.

Table 8 - Service Requests by District

District	Initiated Service Requests per 1000 Stops		Closed Service Requests per 1000 Stops	
	2013	2014	2013	2014
1*	129	147	71	81
2	107	109	48	63
3	182	194	69	69
4	164	141	90	46

*District 1 closed service requests per stop have been estimated based on percentage of invalid service requests in District 4 for 2013, based on the two being comparable districts. The 2014 data was not used for comparison purposes due to the higher number of initiated service requests in District 4 that resulted from the ice storm clean-up.

d) Waste Diversion Rates

The City has an overall goal of diverting 70% of waste materials from landfill. Waste diversion rates have been estimated for each district by applying an estimated residue rate for materials that are collected for diversion to the total tonnes collected from the curb. The estimated diversion rates in Table 9 show that diversion is slightly higher in Districts 3 and 4.

Diversion rates are largely based on what is set out for collection and as a result the trends are not reflective of the service provider. With a cart based collection system, it is more difficult to monitor what residents are placing out for waste collection. Operators are unable to see what is inside bins. As a result, this limits the role that collection operations has in influencing diversion rates and is based on the amount and type of materials customers place out for collection.

The diversion rate estimates in all districts may be affected by the estimated weights for dual stream or split compartment vehicles (e.g. organics/waste). Dual stream vehicles are weighed every 90 days to confirm the weight of the truck and tonnes of waste and organics on board. Subsequent loads are then calculated based on this percentage split and may not reflect the actual tonnes collected by material type. This practice has been implemented as it is not feasible to weigh vehicles twice because of high transfer station vehicular traffic volumes. Unforeseen weather-related events, such as the flood in July 2013 or the ice storm in December 2014, can also impact the amount of materials generated and thereby impact diversion rates.

Table 9 – Estimated Diversion Rates

District	Estimated Diversion Rate	
	2013	2014
1	57%	59%
2	55%	55%
3	61%	62%
4	62%	63%

e) Fleet Analysis for District 3, District 4 and Nights Collection

A total of 186 collection vehicles are used for in-house waste collection, as outlined in Table 10. District 3 is currently serviced by a fleet of 106 collection vehicles. Of these District 3 vehicles, approximately 25 are shared with Nights Collection. District 4 is currently serviced by a fleet comprised of 80 collection vehicles. The estimated value to replace all the vehicles is approximately \$52.1 million, which equates to an annual replacement cost of \$7.4 million (2014 dollars) based on a seven (7) year replacement cycle, if all the vehicles were replaced at the same time.

Table 10 – In-House Curbside Collection Fleet

Districts	# of Vehicles	Vehicle Age ≥ 6 yrs	Vehicle Age <6 yrs
Nights Collection	25*	25*	0
Total District 3 & Nights Collection	106	81	25
District 4	80	52	28
Total (District 3, 4 & Nights Collection)	186	133	53

*shared use vehicles with District 3

Budgeting for fleet replacement is done at the Divisional level on a straight line basis, through an annual reserve contribution. The balance of the Solid Waste Fleet Reserve at the end of 2014 was \$26,318,214. This reserve is for the replacement of all the SWMS fleet. The collection fleet represents approximately 70% of the total asset value, with the remaining being vehicles and equipment for transfer, loading and maintenance activities.

As noted earlier in the report, fleet reserve contributions are not allocated by business unit. As outlined in Table 5b, the annual vehicle reserve contributions relating to

curbside collection were estimated as follows:

- District 3 & Nights Collection: \$2.19 million
- District 4: \$1.30 million

These contributions equate to approximately \$15.00 per stop for District 3 and Nights Collection and approximately \$11.00 per stop for District 4.

3. Service Delivery Options and Analysis

Options

The following service delivery options were considered:

- Contracting out District 3 & Nights Collection
- Contracting out all services east of Yonge Street (District 3, Nights Collection and District 4)
- Contracting out District 4
- Continuing with the current service delivery model

Analysis

As the analysis of these options, for delivery options in District 3 and Nights Collection in particular, relates to labour relations matters and the potential management and administration by the City that is not currently in place, and as the disclosure of this analysis, at this time, may be prejudicial to the financial interests of the City, it is set out in Confidential Attachment 4 to this report. In considering options to contract out any services east of Yonge Street, whether in District 3, District 4 or Nights Collection, the City must consider the legal context and the applicable Collective Agreement framework. Ontario law permits the City to contract out work currently performed by unionized employees, subject to any applicable Collective Agreement provisions. The Collective Agreement with the Toronto Civic Employees' Union, Local 416 does permit the contracting out of work currently performed by members of the bargaining unit; however, there are detailed procedural and job security provisions that must be followed.

In relation to the consideration of delivery options for District 4, the analysis is driven by the projected costs of the various options. An analysis comparing District 4 in-house costs to projected contract pricing based on the District 1 bid price from the contract that was awarded in 2014, for the period of 2017 to 2023 is outlined in Table 11. Pricing from District 1 was used as Districts 1 and 4 have similar geographical/building characteristics and are comparable. Fleet replacement costs have been excluded from the in-house costs, assuming in both scenarios that there would be no vehicles at the end of the typical seven (7) year time frame. No redeployment costs were included, assuming that all staff could be redeployed within one (1) year. Procurement costs for issuing and awarding an outside contract have not been included in the analysis.

Table 11 – District 1 vs District 4 Costs

Year	Total In House Costs	Total Contractor Cost
2017	\$14,674,702	\$17,695,400
2018	\$14,968,196	\$18,049,308
2019	\$15,267,560	\$18,410,294
2020	\$15,572,911	\$18,778,500
2021	\$15,884,369	\$19,154,070
2022	\$16,202,057	\$19,537,151
2023	\$16,526,098	\$19,927,894
Total 2017 to 2023	\$109,095,893	\$131,552,617
Net Present Value	\$96,872,748	\$116,813,412

There would be no cost savings in contracting out District 4 based on the District 1 pricing and current performance of District 4. It is also acknowledged that there is uncertainty in private sector pricing. A detailed analysis of a range of scenarios was undertaken as part of the review to examine the potential financial implications of higher or lower private sector pricing and other variables. This analysis is provided in Appendix A.

Moving Forward

Remaining with the current cost collection model for an additional two years represents the best course of action at this time based on the analysis that was undertaken. This timeframe will allow for continued data collection for informed decision making while introducing further efficiencies into the curbside collection system. This approach assures the best value for the City over the next two years by focusing efforts on efficiencies to reduce costs rather than incurring the associated costs, time and effort to undertake a procurement process and redeploy staff.

During this period, staff would implement further efficiencies to reduce in-house costs from 2015 levels. In addition, collection costs would be presented on an annual basis, at the appropriate time, using the methodology developed in this report. Additional productivity measures will also be developed for in-house curbside collection.

SWMS will continue to monitor the actual costs for the contracted and in-house collected areas and these actual costs will be submitted annually through the Operating Budget submissions. Continuation of the model would be dependent upon whether or not productivity improvements for in-house collection are achieved. Annual monitoring of performance levels and costs would also enable earlier intervention to change the service delivery model, if warranted, based on the results.

With the decision to contract out District 2 in 2011, in-house collection efficiencies have been implemented including:

- Wage Adjustments, including a harmonized job classification and lower rate for new and temporary employees
- Automated collection and newer vehicles
- Reduced injuries resulting in Workplace Safety and Insurance Board (WSIB) savings
- Union cooperation with operational changes, such as a Memorandum of Understanding for stepped wage increases

Moving forward, areas where additional savings can be realized through efficiencies include:

- Vehicles
 - Move to fully automated collection where possible
 - Single waste stream trucks
 - Lower maintenance costs resulting from reduced vehicle life span from seven (7) to five (5) years
 - Move to single person operations for automated trucks
- Next Generation Green Bin
 - Savings resulting from automated Green Bin collection
- Employee related costs
- Additional opportunities resulting from further examination of cost differences between Districts 2 and 3 as recommended by Ernst and Young LLP.

Any decision to further contract out curbside collection services would incur costs and require time to implement following City Council approval. The key consideration in a procurement process is allowing sufficient time (one year) for the successful bidder to purchase trucks once a contract has been awarded. In estimating the time required to develop, issue, and award a Request for Proposal (RFP), approximately two years would be required before a contract could begin. Once a new contract starts, there would be costs and time required to move employees through the redeployment, bumping and layoff process, where applicable.

The following would need to be undertaken if a decision were made to further contract out:

- Retaining external assistance to support the development of a procurement process
- Development and issuance of a request for proposals
- Adding temporary staff in Human Resources to assist with facilitating the staff redeployment/bumping process
- Restructuring of the Solid Waste Management Services division to align with the service model change.

A RFP would be the recommended procurement method to allow for consideration of the quality and approach to the work, in addition to price. A minimum threshold price would

not be recommended to ensure that bidders are appropriately resourcing the specified work. External assistance would be retained to assist with the development of a procurement process in order to balance workload considerations and provide additional expertise. Managed competition exists as a practice in the public sector, however, it is not recommended due to the additional complexity and cost associated with this type of process.

Based on the experience with the staff redeployment and bumping process in District 2, additional support was required from Human Resources for approximately four years. This included temporarily adding staff in the Labour Relations, Strategic Recruitment and Disability Management sections.

It is estimated that the implementation requirements that have been described would result in an implementation cost in the order of \$1.5 to 2.0 million. A detailed plan, including staffing implications, would need to be developed.

4. Review of Approaches to Collection in Comparable Jurisdictions

Staff reviewed approaches to collection service delivery in thirteen (13) other jurisdictions. SMWS' waste collection system was compared to other large North American cities with similar characteristics (i.e. age, climate, housing density and market conditions). This review focused on residential curbside customers.

As outlined in Appendix B, there are a variety of curbside collection service delivery approaches used by North American cities. The service delivery models include:

1. Full Public Sector: City of Vancouver, City of San Diego, City of Los Angeles, New York City
2. Full Privatization, One Contractor: City of San Francisco
3. Full Privatization, Multiple Contractors in Exclusive Geographic Zones: Peel Region, City of Winnipeg
4. Mixed Service Providers Public/Private, based on area: City of Toronto, City of Hamilton, City of Ottawa, City of Edmonton, City of Montreal
5. Mixed Service Providers Public/Private, based on material: City of Calgary, City of Chicago

Table 12 summarizes the collection service offered by the municipalities surveyed and the City of Toronto. The table also provides the population affected by each model.

Table 12 – Collection Services Offered by Municipalities
(Including the City of Toronto)

Municipalities Surveyed	Service Type	Population	Population %	Municipality %
4	Full Public	4,429,000	58%	29%
3	Full Private	900,800	12%	21%
7	Mixed	2,344,309	31%	50%
Totals: 14		7,674,109	100%	100%

A more detailed discussion of the key factors of the models and key findings of the jurisdictional review can be found in Appendix B.

5. Independent Review

As directed by the Public Works and Infrastructure Committee, SWMS engaged Ernst and Young LLP (EY) to perform an independent third party review of the staff analysis and evaluation of options to achieve collection efficiencies. The scope of work of EY's engagement included reviewing the methodologies and approaches used to compile data and verifying the staff evaluation of the City's SAP financial reports to determine collection costs.

The independent review determined that staff analysis, data and key assumptions were "reasonable and applied in a fair minded manner." The review also found that the approach was reasonable, calculations were numerically accurate and the methodologies were correctly applied. The review recommended that the City consider further analysis on: redeployment costs and strategies to mitigate these costs; and cost drivers for District 3 that are resulting in the higher cost per stop. EY supports the staff recommendation to defer the decision to contract out, with the assumption that the in-house service efficiencies can be achieved and additional analysis will be undertaken. The independent review is Appendix C to this report.

CONTACT

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SIGNATURE

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General Manager
Solid Waste Management Services

ATTACHMENTS

Attachment 1 – Appendix A: Collection Cost Review Supporting Figures and Tables
Attachment 2 – Appendix B: Jurisdictional Review of Comparators
Attachment 3 – Appendix C: Ernst & Young Independent Review Report
Attachment 4 – Confidential Attachment