

## **WASTE & RECYCLING SERVICES COLLECTION SERVICE DELIVERY REVIEW**

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### **EXECUTIVE SUMMARY**

Waste & Recycling Services (WRS) engaged consultant CH2M HILL to conduct a review of The City's residential collection service model. The timing of this review was set to insure sufficient time to implement any recommended changes to the service delivery model in conjunction with the implementation of the residential green cart composting program and the expiration of the current blue cart recycling contract.

CH2M HILL investigated the level of service provided to Calgary's residents, five service delivery models, current collection practices, fleet management and maintenance procedures and compared these to other jurisdictions. Findings and recommendations were presented for each of these areas.

CH2M HILL noted that waste and recycling collection services delivered by The City of Calgary are consistently highly valued and scored by our residents, and that WRS is only one of four public sector operations surveyed that conducts regular customer satisfaction surveys. In 2013, 95 per cent of citizens were satisfied with residential garbage collection, and 89 per cent of citizens were satisfied with City operated recycling programs. In addition, support for the green cart program is also strong with 89 per cent of pilot residents saying they are satisfied with the program while 91 per cent support a city-wide program (Ipsos Reid survey, December 2012).

CH2M HILL did not offer an opinion about whether The City should remain with public sector collection, or move to private sector collection. They concluded that private, public and mixed models can perform well or perform poorly depending on how they are managed and implemented.

CH2M HILL's report states that "the majority of the cost savings afforded by the private sector results from paying less to collection workers". To determine if potential cost savings offset the additional resources required to award and manage a contracted service provider, WRS will conduct an analysis of potential financial impacts and local market conditions in Calgary and Alberta. In addition, WRS will investigate the impacts to internal City services, operations and customer service; prepare a report for the Standing Policy Committee on Utilities and Corporate Services no later than 2015 March that outlines a recommended service delivery model.

### **ADMINISTRATION RECOMMENDATION(S)**

That the Standing Policy Committee on Utilities and Corporate Services recommends that Council direct Administration to:

1. Report back to SPC on UCS no later than 2015 March with a recommended collection service delivery model for black, blue and green cart service commencing in 2018; and
2. Review the consultants' recommendations on operational performance and fleet management and bring a status update to SPC on UCS no later than 2015 June.

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### **PREVIOUS COUNCIL DIRECTION / POLICY**

None

### **BACKGROUND**

WRS' Collection Services delivers residential black cart garbage collection, blue cart recyclables collection and the current green cart program to four communities. Other services delivered, but outside the scope of this report are community diversion programs and some commercial and condominium container collection services.

WRS contracted CH2M HILL to complete an external review of WRS' Collection Services operations, a review of The City's collection services model, and potential contracting options. CH2M HILL conducted this review with WIH Resources, who specialize in waste collection systems including fleet management and operational systems.

This review focused on opportunities within the blue and black cart collection systems, since these programs represent over 75 per cent of WRS' collection system expenditures.

### **INVESTIGATION: ALTERNATIVES AND ANALYSIS**

The services that Calgarians receive from WRS Collection Services are the result of the efforts of many inputs. The key elements of providing residential blue and black cart collection are people and vehicles. To provide the level of service currently offered to Calgarians requires collection equipment operators, a fleet of well maintained and fueled vehicles, and a route design system that integrates and allocates drivers and vehicles to achieve efficient and effective service delivery.

Salary and wage expenses combined with vehicle lease, maintenance and associated fuel and oil expenses are the main cost drivers for the residential collection systems, totaling nearly 90 per cent of the operating expenditures.

CH2M HILL conducted a comprehensive review of Calgary's collection service delivery model by obtaining and analyzing financial and operational data from WRS, as well as information from Fleet Services. CH2M HILL used this analysis to evaluate opportunities for increased efficiency and effectiveness both within current operations and those that might be gained from contracting out a portion of Calgary's residential collection system.

### **Service Comparison**

To explore collection efficiency, CH2M HILL also analyzed detailed data and conducted telephone interviews with four cities (Edmonton, Ottawa, Spokane, WA, and Toronto), and contacted five private collection firms to obtain select information about the performance of their collection operations.

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### *Key Findings:*

- Calgary has 49 community recycling depots (CRDs), which is more than double the amount of depots provided on a per-household basis than any of the other jurisdictions; four cities had no CRDs.
- WRS should no longer allow residents to set out excess material beyond what fits in the black cart container provided, or implement a tag-based system where residents must pay to set out excess material.
- WRS should consider implementing a pay-as-you throw system (e.g. varying cart sizes) that would act as an incentive to residents to properly source separate their garbage and recycling into the proper carts, minimizing contamination to recyclables collected.

WRS is currently evaluating its CRD network as part of the Multi-family Recycling Strategy and will implement any findings for excess material and varying cart sizes in 2019-2022, after the Green Cart Program is fully operational.

### *Next Steps:*

With the information provided in the CH2M HILL report, WRS will prepare a report for the Standing Policy Committee on Utilities and Corporate Services that will review and respond to the consultants' recommendations on fleet management and operational performance no later than 2015 June.

## **Service Delivery Models**

The CH2M HILL team also conducted a literature search and telephone interviews with 14 jurisdictions about the different delivery models used for residential collection.

The advantages and disadvantages of the five service models evaluated by CH2M HILL are summarized in Attachment 1. Fully public and fully private models were evaluated along with three mixed models.

The main advantages to a fully public delivered service are the control The City maintains over scope and quality of service and access to lower cost capital. The main disadvantages to fully public delivered service can be labour union requirements and the procurement of resources may be less efficient and more costly.

The main advantage to any of the private sector delivery models are potentially lower costs. The main disadvantage is the additional resources required for contract management, both for the contracting process and to insure any private haulers meet the terms and conditions of the contract once awarded.

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### *Key Findings:*

- CH2M HILL does not have a particular opinion about whether The City of Calgary should remain with public sector collection or change to private sector collection. Both models can perform well or perform poorly depending on how they are managed and implemented.
- If The City wants to move toward some type of private sector collection, CH2M HILL recommends that it use a mixed service or managed competition model rather than going completely to private sector service delivery.
- The City should avoid having multiple entities deliver services to the same customer: for example, do not have one entity (private or public) providing garbage, and other entity or company providing recyclables or organics. Having each customer served by only one collector will minimize customer confusion.

### *Next Steps*

With the information provided in the CH2M HILL report, WRS will conduct further analysis on two service models (Full Public Sector and Mixed Service-Managed Competition) including:

- Follow up with those jurisdictions that have had experience with contracting some or all collection services to develop a better understanding of the contracting process, the associated financial implications, the customer experience, the overall impact to operations, and the ongoing management of the contract;
- Conduct an analysis of potential financial impacts, local market conditions in Calgary and impacts to internal City services; and
- Prepare a report for the Standing Policy Committee on Utilities and Corporate Services that outlines a recommended service delivery model for black, blue and green cart service no later than 2015 March.

### **Operational Performance and Fleet Management**

CH2M HILL also provided a variety of operational performance and fleet management recommendations to improve efficiencies of the current waste and recycling operations.

### *Key Findings:*

- WRS and Fleet Services works together to develop a Maintenance and Fleet Management Improvement Plan. The plan should evaluate the recommendations in this study and other ideas from WRS' and Fleet Services' staffs, prioritize the recommendations, and develop a timeline to implement process improvements. These improvements should include the communication, service, and efficiency of the maintenance services provided by Fleet Services, supplemented with driver training and performance feedback to drivers to ensure

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that the trade-off between higher productivity and overworking equipment is balanced properly.

- WRS is to explore the potential benefits of waste collection industry-specific routing software further by pilot testing some routing software packages and comparing route maps generated by those packages to route maps generated by The City's existing mapping software.
- WRS should improve public education and outreach to citizens to make sure they are setting out their carts properly and to ensure minimization of recycling contamination.

With these recommendations from the CH2M HILL report and through benchmarking initiatives with the Ontario Municipal Benchmarking Initiative and the National Solid Waste Benchmarking Initiative facilitated by AECOM, WRS will continue to improve the efficiency of current operations.

WRS has been working closely with Fleet Services on some of the recommendations outlined in the report (e.g. a vehicle availability report and the current ROE), and will continue working with Fleet Services' "Customer Focus Initiative" to improve WRS' fleet efficiency and availability.

### *Next Steps:*

With the information provided in this recommendation in the CH2M HILL report, WRS will prepare a report for the Standing Policy Committee on Utilities and Corporate Services that will review and respond to the consultants' recommendations on operational performance and fleet management no later than 2015 June.

### **Stakeholder Engagement, Research and Communication**

Citizen satisfaction with waste and recycling services is consistently highly valued and scored by our residents. In 2013, 95 per cent of citizens were satisfied with residential garbage collection, and 89 per cent of citizens were satisfied with City-operated recycling programs. In addition, support for the green cart program is also strong with 89 per cent of residents in the participating communities saying they are satisfied with the program while 91 per cent support a city-wide program (Ipsos Reid survey, December 2012).

### **Strategic Alignment**

The Collection Services Delivery Review responds to Council's direction for Administration to transform government by placing increased emphasis on improvements to efficiency and effectiveness.

### **Social, Environmental, Economic (External)**

#### *Social*

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The Collection Services Delivery Review supports a city of strong neighbourhoods through the provision of efficient and effective services.

### *Environmental*

Efficiency in collection services supports efforts for improved air quality through reduced kilometres travelled resulting in reduced emissions. Implementing collection systems that extract recyclables and compostable materials from the waste stream conserves resources, produces value-added commodities and reduces the environmental risks and long-term liabilities associated with landfills.

### *Economic*

Ongoing evaluation of WRS' collection system to identify efficiencies minimizes the cost of the services WRS provides to Calgarians.

### **Financial Capacity**

#### **Current and Future Operating Budget:**

Budget requirements to complete the next steps outlined are included in WRS' 2014 operating budget and have been incorporated in WRS' 2015 to 2018 Action Plan.

#### **Current and Future Capital Budget:**

There are no direct capital budget implications related to the Collection Services Delivery Review.

### **Risk Assessment**

There are no significant risks associated with this report.

### **REASON(S) FOR RECOMMENDATION(S):**

The recommendation will enable Waste & Recycling Services to continue to implement the recommendations to improve the efficiency and effectiveness in WRS' current collection operations and conduct a more complete analysis of the financial and overall business impacts of potential changes to Calgary's residential collection system. The results of the analysis will be used to inform future black cart garbage collection, the next blue cart collections contract and the new green cart collection program.

### **ATTACHMENT(S)**

1. Summary of Service Delivery Models
2. Waste & Recycling Services Residential Collection Services Review Final Report (CH2M HILL)