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TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON NOVEMBER 25, 2013
FROM:	JAY STANFORD, M.A., M.P.A. DIRECTOR, ENVIRONMENT, FLEET & SOLID WASTE
SUBJECT	WASTE DIVERSION AND GARBAGE COLLECTION UPDATES

RECOMMENDATION

That on the recommendation of the Director, Environment, Fleet & Solid Waste the following actions **BE TAKEN**;

- a) That staff **BE DIRECTED** to prepare business plans for the following initiatives from the report *Road Map 2.0 – The Road to Increased Resource Recovery and Zero Waste* as these initiatives have public support and minimal cost:
 - i. As part of recycling education and awareness, provide residents of newly constructed homes with two Blue Boxes at no cost,
 - ii. Establish a multi-residential recycling cart purchase program that sells roll-out carts at cost, and
 - iii. Add vegetable oil and used oil collection to the EnviroDepots;
- b) The report *Road Map 2.0 – The Road to Increased Resource Recovery and Zero Waste* **BE RECEIVED**;
- c) The report *Road Map 2.0 – The Road to Increased Resource Recovery and Zero Waste* **BE APPROVED** for release for public engagement which will include outreach through traditional media, social media, the City’s website and at community events between January 2, 2014 and April 30, 2014; and
- d) The remainder of this report **BE RECEIVED** for information.

PREVIOUS REPORTS PERTINENT TO THIS MATTER
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Relevant reports that can be found at www.london.ca under City Hall (Meetings) include:

- Status Report: Update of Road Map to Maximize Waste Diversion 2.0 (July 22, 2013 meeting of the Civic Works Committee (CWC), Item #14)
- Status – Green Bin and Modified Garbage Collection Pilot Project (October 1, 2012 meeting of the CWC, Item #4)
- Solid Waste Management Updates (April 23, 2012 meeting of the CWC, Item #17)
- Interim Business Plan for the Green Bin Program and Zero Waste Strategies (January 11, 2010 meeting of the Environment & Transportation Committee (ETC), Item #11)
- Waste Diversion Strategy Public Consultation Document and Recent Waste Diversion Initiatives – *Road Map to Maximize Waste Diversion* in London (December 10, 2007 meeting of ETC, Agenda Item # 9)
- Preliminary Information on the Draft Waste Diversion Strategy and Impact on Weekly Garbage and Recycling Collection (January 25, 2007 meeting of the Board of Control)
- Additional Garbage Pickups (September 25, 2006 meeting of ETC, Item #3)

BACKGROUND

PURPOSE:

The purpose of this report is to:

- seek approval to release the report *Road Map 2.0 - The Road to Increased Resource Recovery and Zero Waste* for public engagement;

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- provide Committee and Council with information on the cost, advantages and disadvantages of various garbage and recycling collection systems; and
- provide Committee and Council with preliminary information on the costs of London’s garbage collection and waste management system compared to other municipalities.

CONTEXT:

Road Map 2.0 - The Road to Increased Resource Recovery and Zero Waste

At the October 28, 2013 meeting staff provided CWC with an update on the recently released Waste Diversion Ontario and Ontario Municipal Benchmarking Initiative 2012 solid waste collection, diversion and disposal data noting that more detailed information on the City’s waste diversion system will be presented with the release of *Road Map 2.0 – The Road to Increased Resource Recovery and Zero Waste* (Road Map 2.0). Road Map 2.0 is ready for public release and engagement and is summarized in this report.

Alternative Waste Collection Systems

From time to time, a review of London’s waste collection system is undertaken to confirm if the current collection system is the most appropriate system for London as staff and elected officials often hear requests from residents for more frequent garbage collection. The results of the most recent review are presented in this report.

Additional Waste Collection and Waste Management Information

At the October 28, 2013 meeting, CWC requested that cost information (municipal benchmarking data) on garbage collection and related waste management costs be provided at the CWC November 25, 2013 meeting including information from OMBI (2012) and the C.D. Howe Institute report *Picking up Savings* (2010, using 2008 data).

This CWC report is divided into three parts:

- Part A: Road Map 2.0
- Part B: Alternative Waste Collection Systems
- Part C: Additional Waste Collection Information

DISCUSSION

PART A: ROAD MAP 2.0 – THE ROAD TO INCREASED RESOURCE RECOVERY AND ZERO WASTE

Background

In December 2007 the document *A Road Map to Maximize Waste Diversion in London* (Road Map) was released for public comment and input. This document looked at a wide range of program changes, initiatives and new measures to increase waste diversion. Following extensive consultation and feedback on the Road Map the *Interim Business Plan for the Green Bin Program and Zero Waste Initiatives* (Interim Business Plan) was developed and approved by Council in January 2010. The Interim Business Plan required Council approval of each proposed individual program change, initiative or new measure before they could be implemented. The vast majority of the proposed initiatives in the Interim Business Plan have now been implemented

In February 2013, staff informed Council that a report would be coming that would provide an update to the status of the original Road Map and look at potential next steps for achieving higher waste diversion and resource recovery. This report (*Road Map 2.0 – The Road to Increased Resource Recovery and Zero Waste*) is now ready for release and has been provided to Committee and Council members under separate cover.

A list of the proposed programs and initiatives contained in Road Map 2.0 is provided in Table 1. It is recommended that staff proceed to prepare business plans for Council’s approval for three of these initiatives because they are relatively low cost and are expected to have public support.

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- As part of recycling education and awareness, provide residents of newly constructed homes with two Blue Boxes at no cost;
- Establish a multi-residential recycling cart purchase program that sells roll-out carts at cost; and
- Add vegetable oil and used oil collection to the EnviroDepots.

Details of these initiatives are provided in Appendix A.

Table 1 – Summary of Road Map 2.0

Year	Proposed Programs/Initiatives
2013	<ul style="list-style-type: none"> • North end EnviroDepot (in progress) • Delay Green Bin decision until new, emerging and next generation resource recovery technology review complete in 2014 (in progress)
Early 2014 Adoption	<ul style="list-style-type: none"> • As part of recycling education and awareness, provide residents of newly constructed homes with two Blue Boxes at no cost; • Establish a multi-residential recycling cart purchase program that sells roll-out carts at cost; and • Add vegetable oil and used motor oil collection to the EnviroDepots.
Further Investigation 2014 to 2015	<ul style="list-style-type: none"> • Add mixed polycoat (includes hot/cold beverage cups & ice cream containers) & blister packaging (includes rigid plastic packaging around toys, hardware, etc.) to the Blue Box program • Sell Blue Boxes at EnviroDepots at cost • Front end bin cardboard collection at multi-residential buildings • Start downtown cardboard collection • Increase public space recycling • Facilitate purchase of recycling services by BIAs/commercial areas • Initiate targeted education and awareness programs for selected Blue Box materials • Increase education and awareness funding (as budgets permit) and/or in-kind services to implement new incentive programs (e.g., reward programs such as the Gold Box) and/or other encouragement/engagement programs • Explore source reduction of food waste • Examine the role of community composting
Further investigation 2016 to 2019	<ul style="list-style-type: none"> • Add single use batteries and metal cookware to the Blue Box program • Provide replacement Blue Boxes to residents • Add paint, expanded foam polystyrene, carpets and mattresses to EnviroDepots • Increase home composting • Begin curbside collection of Christmas trees • Ban curbside garbage collection of Christmas trees • Explore a reduced bag limit with user pay system for extra garbage • Begin semi-annual curbside collection of electronics, scrap metal and batteries
Delayed – Future Consideration	<ul style="list-style-type: none"> • Add film plastic, expanded foam polystyrene and textiles to the Blue Box • Add film plastic to the EnviroDepots • Examine full User Pay for garbage • Examine Mandatory Recycling Bylaw (with and without clear bags for garbage)

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It is also suggested that the report (Road Map 2.0) be received and released for public engagement. A final report will be provided to Committee at the end of the consultation period. A four month engagement period is proposed and would include:

- Information to residents through traditional media including a summary of the report in the London Free Press (provided at no cost as part of their obligation to support diversion)
- Social media outreach
- Feedback through a variety of means including the City’s website
- Outreach at community events (e.g., London Home Builder’s Association Home Show, late January 2014).

PART B: ALTERNATIVE WASTE COLLECTION SYSTEMS

Background

At the October 28, 2013 CWC meeting, it was noted that from time to time, a review of London’s waste collection system is undertaken to confirm whether or not the current collection system is the most appropriate system for London. The last time this review was undertaken in 2007 it was decided to continue with the current six day collection system.

The main reasons for this decision were the \$1.7 million estimated cost increase (\$900,000 for additional garbage collection, \$700,000 in additional recycling collection and \$100,000 in other costs) for a weekly collection system, and the split in public opinion as to which system was preferred given the costs.

Over the years the City’s curbside collection system has evolved and in the past residents have had both a weekly same day service and “five business day” collection system. The history of the City’s collection system is presented in Table 2.

The City of London is the only municipality in Ontario that operates a “six business day” collection system for curbside garbage and recycling. In this system garbage and recyclables are collected every six business days and residents receive 42 collections per year. Most collections are eight days apart but can be as much as 12 or 13 days apart over the Christmas holiday period.

Prior to the introduction of the “six day” collection cycle in 1996, garbage and recyclables were collected every five business days (five day collection cycle) and residents received 50 collections per year. Under this system the collection day remained the same until a Statutory Holiday at which time it moved forward one day.

Most municipalities in the Province operate a weekly garbage collection system (52 collections per year) or a biweekly garbage collection system (26 collections per year). Municipalities that provide bi-weekly garbage collection also have a Green Bin program. When a Statutory Holiday occurs, the collection day typically moves forward for one day for that week (e.g., Friday’s collection takes place on Saturday) although some municipalities do collect on the Statutory Holiday.

The vast majority of recycling collection systems are weekly.

A few smaller municipalities in Ontario operate a “seasonal” collection system in which garbage is collected weekly for the warmer months and bi-weekly in the cooler months.

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Table 2 – History of London’s Curbside Collection Systems

Period	Description of Garbage Collection System	Major Changes to Materials Collected at the Curb
Prior to 1979	<ul style="list-style-type: none"> • 52 pickups per year • when a Statutory Holiday occurs, pickup days would move forward one day for that week only (e.g., Friday’s pickup takes place on Saturday) • one spring and one fall collection of bulky items 	<p>1975 – collection changed from “rear yard” to curbside collection</p> <p>1978 – limited collection of separated newspapers begins</p>
1979 to 1995	<ul style="list-style-type: none"> • calendar introduced • 50 pickups per year • when a Statutory Holiday occurs, pickup days would move forward one day and stay on that day until the next Statutory Holiday • one spring and one fall collection of bulky items until 1994 • bulky items collected at each pickup starting in 1995 	<p>1980’s – construction and demolition waste banned</p> <p>1990 – curbside recycling introduced (materials collected include newspaper, glass, steel, aluminum and 2 litre plastic soft drink bottles)</p> <p>1994 – Ministry of the Environment (MOE) 3 R’s Regulations enacted</p> <p>1995 – curbside recycling expanded to include mixed household paper, cardboard, boxboard, telephone books, magazines, rigid plastics (#1, 2, 4, 5)</p> <ul style="list-style-type: none"> – one spring and one fall collection of brush and scrap metal introduced – grass clippings and white goods (e.g., appliances) banned – one city-wide pickup of fall leaves using vacuum vehicles
1996 to present	<ul style="list-style-type: none"> • 42 pickups per year • pickup days would move forward after each collection • bulky items collected at each pickup 	<p>1996 – the brush and leaf vacuum program changed to 6 yard materials collection (Green) weeks and 3 fall leaf collection weeks</p> <ul style="list-style-type: none"> – scrap metal collection discontinued <p>2006 – four container limit introduced</p> <p>2009 – recycling expanded to include milk/juice cartons, drink boxes and empty paint cans</p> <p>2010 – electronics no longer collected with garbage</p> <p>2011 – recycling expanded to include more plastics (clamshells and #3, #6 & #7 containers), empty aerosol containers and cardboard cans</p>

Review of Alternative Collection Systems

A brief discussion on the advantages and disadvantages of each system is provided in Table 3. A comparison of the costs for each system is provided in Table 4.

Table 3: Comparison of Curbside Garbage and Recycling Collection Options

Description	Advantages	Disadvantages
<p>Existing collection system</p> <ul style="list-style-type: none"> • collection every 6 business days • 42 pickups per year 	<ul style="list-style-type: none"> • Cost efficient • 4 container limit is reasonable to generous • Bulky item collection occurs with 42 pickups per year 	<ul style="list-style-type: none"> • Longer cycle times between collections in warm weather and over Christmas can be an inconvenience to some residents • Garbage & recycling sometimes placed at the curb on the wrong day
<p>Optimized existing collection system</p> <ul style="list-style-type: none"> • collection every 6 business days • 42 pickups per year 	<ul style="list-style-type: none"> • Most cost efficient • 4 container limit is reasonable to generous • Bulky item collection occurs with 42 pickups per year 	<ul style="list-style-type: none"> • Longer cycle times between collections in warm weather and over Christmas can be an inconvenience to some residents • Garbage sometimes placed at the curb on the wrong day • May require some adjustments to service levels
<p>Seasonal collection</p> <ul style="list-style-type: none"> • weekly same day summer; biweekly same day winter • 39 pickups/year 	<ul style="list-style-type: none"> • No long cycles between garbage collection in summer • Less confusion as to when garbage is collected • Possible future cost savings 	<ul style="list-style-type: none"> • Longer cycle times between collections in winter can be an inconvenience to some residents • Fewer collections • Higher cost than existing system with potential for lower cost in the future
<p>5 day collection</p> <ul style="list-style-type: none"> • collection every 5 business days • 50 pickups per year system 	<ul style="list-style-type: none"> • 20% more pickups per year • Only two long cycles between garbage collections • Less confusion as to when garbage and recycling is collected 	<ul style="list-style-type: none"> • Higher cost than existing system
<p>Weekly collection</p> <ul style="list-style-type: none"> • weekly same day collection • 52 pickups/year 	<ul style="list-style-type: none"> • 25% more pickups per year • No long cycles between garbage collections • No confusion as to when garbage and recycling is collected 	<ul style="list-style-type: none"> • Highest cost system

It should be noted that all collection systems including weekly collection require a Waste Reduction & Conservation Calendar. In a weekly collection system a calendar is required to inform residents when they have yard material or fall leaf collection and when to put out their garbage on weeks that have Statutory Holidays. It is also imperative that Londoners have easy access to waste management and resource conservation information and the instructions for various services. City Staff are not aware of any medium or large city that does not have a calendar produced in both paper and electronic form.

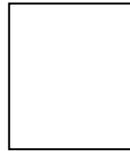


Table 4: Curbside Garbage and Recycling Collection Options – Operating Costs

Description (Garbage and Recycling)	Estimated Change in Cost Compared to Existing System			Estimated Average Cost Per Household Served ^c	
	Services provided by Municipal Employees ^a	Services provided by Contractors ^b	Total Cost (Savings)	\$/hhld	Change
Existing collection system <ul style="list-style-type: none"> collection every 6 business days 42 pickups per year 	\$0	\$0	\$0	\$60^d	-
Optimized existing collection^e <ul style="list-style-type: none"> collection every 6 business days 42 pickups per year 	(-\$100,000 to -\$200,000)	\$0	(-\$100,000 to -\$200,000)	\$59	(\$1)
Seasonal collection^f <ul style="list-style-type: none"> garbage - weekly summer; biweekly winter recycling - weekly 39 pickups/year 	\$0 to \$200,000	\$700,000 to \$800,000	\$700,000 to \$1,000,000	\$67	\$7
5 day collection <ul style="list-style-type: none"> collection every 5 business days 50 pickups per year system 	\$200,000 to \$300,000	\$500,000 to \$600,000	\$700,000 to \$900,000	\$67	\$7
Weekly collection <ul style="list-style-type: none"> weekly collection 52 pickups/year 	\$400,000 to \$500,000	\$700,000 to \$800,000	\$1,100,000 to \$1,300,000	\$70	\$10

Notes

- a) Collection of 96% of curbside households plus landfill operations on Statutory Holidays.
- b) Collection of recyclables from all curbside households and garbage from 4% of curbside households. Does not include potential charge for contractor’s capital requirements (vehicles).
- c) Based on average of system cost divided by 117,000 curbside households.
- d) Total existing annual cost of curbside garbage and recycling collection is approximately \$7 million (includes Waste Diversion Organization funding for Blue Box collection)(\$7 million / 117,000 households = \$60 per household).
- e) Potential optimizations vary and may require adjustments to the level of service.
- f) Potential for lower costs in the future.

In summary, City staff continue to receive comments from residents who support the existing collection system and from those who want more pickups.

Potential staff action, subject to Council approval, could include:

1. Take no further action on this review, at this time.
2. Prepare a detailed implementation plan outlining how the existing collection system can be further optimized and submit to CWC in January 2014.
3. Prepare a detailed implementation plan outlining how a collection system change could occur in 2014 and submit to 2014 Budget deliberations noting that there is no funding currently earmarked for increased pickup services.

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PART C: ADDITIONAL WASTE COLLECTION AND WASTE MANAGEMENT INFORMATION

At the October 28, 2013 meeting, CWC requested that cost information (municipal benchmarking data) on garbage collection and related waste management costs be provided at the CWC November 25, 2013 meeting including information from OMBI (2012) and the C.D. Howe Institute report *Picking up Savings* (2010, using 2008 data).

Benchmark costs from two sources are presented in Table 5. The first source is from the Ontario Municipal Benchmarking Initiative (OMBI) which collects data for more than 850 measures across thirty-seven (37) municipal service areas. OMBI acts as a source of credible information to assist Council, City staff and citizens in understanding how their municipality is performing over time and in relation to others. OMBI municipalities provide services to over 60% of Ontario’s population.

The second source of information is from the C.D. Howe Institute report (2010) which examined contracting out municipal waste management services versus having the services provided by the public sector. This report also presented cost information on garbage collection, recycling, waste disposal, and the cost of all waste management services for the nine largest municipalities in Canada. London data was not included in this report. Data is generally from 2008 and prior.

Table 5 contains summary information and suggests that City of London garbage collection costs and overall waste management costs are lower than the vast majority of municipalities. Further details are provided in Appendix B. Details on the next page highlight important considerations when reviewing any benchmarking data.

Table 5: Solid Waste Management Cost Benchmarks

Benchmark	London Cost	Other Municipalities		Comments
		Average Cost	Median ^a Cost	
2012 OMBI Data				
Cost to Collect a Tonne of Garbage • Curbside & multi-residential costs • See Table B-1	\$99	\$125	\$119	London has fourth lowest cost of the 13 Ontario municipalities reporting
Total Waste System Cost per Tonne • See Table B-2	\$81	\$188	\$182	London has second lowest cost of the 12 Ontario municipalities reporting
Total Waste System Cost per Household • See Table B-2	\$143	\$228	\$223	London has the lowest cost of the 12 Ontario municipalities reporting
Total Waste System Cost per Person • See Table B-2	\$66	\$114	\$101	London has the lowest cost of the 12 Ontario municipalities reporting
C.D. Howe Institute report <i>Picking up Savings</i> (2008 Data)				
Cost to Collect a Tonne of Garbage • See Table B-3	\$75 ^b	94 ^c	Not available	London 20% lower than average See footnotes
Cost to Collect per Household • See Table B-3	\$47 ^b	52 ^c	Not available	London 10% lower than average See footnotes
Total Waste System Cost per Person • See Table B-4	\$50 to \$66 ^d	\$89 ^e	\$91	London cost either the lowest or among the lowest reported

Notes:

- a) Median defined - the value/quantity at the midpoint of the values/quantities (half above, half below).
- b) Average of reported Municipal Performance Measurement Program (MPMP) costs for the period 2004 to 2008 (in real 2002 dollars).
- c) From C.D. Howe Institute report for Ontario municipalities for the period 2001-2008 (in real 2002 dollars).
- d) London’s data is for 2012 cost adjusted to 2008 dollars to be consistent with C.D. Howe Institute report. A range is presented for the Total Annual Cost per Resident because the exact methodology used to determine costs in the C.D. Howe Institute report was not known.
- e) From C.D. Howe Institute report for Ontario for the nine largest municipalities in Canada using 2008 data.

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It must be remembered when looking at benchmark costs that no two solid waste management collection systems are the same and these differences have an impact on the cost. Accordingly benchmark costs are typically not a true “apples to apples” comparison. Examples of differences in garbage collection include:

- Frequency of collection (varies from 26 to 52 times per year)
- Co-collection (some municipalities collect Green Bin materials and garbage in the same truck)
- Bulky item collection (some municipalities collect and others do not)
- Multi-residential collection (some municipalities collect and others do not)

In addition to the above noted differences in garbage collection, overall waste management costs can be influenced by:

- Ownership of a landfill
- Level of composting system in place (i.e. leaf and yard waste versus type of Green Bin program)
- Success of waste diversion programs
- Administrative and management structure in place

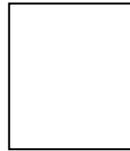
Potential staff action, subject to Council approval, could include:

1. Take no further action on this review, at this time.
2. Prepare a list of Best Practices implemented in other municipalities for garbage and recycling collection highlighting potential costs or savings; advantages and disadvantages to the customer; and impact on operations.
3. Prepare a report on the advantages and disadvantages of contracting garbage collection services and any processes that are required to be followed and submit to CWC in March 2014.

ACKNOWLEDGEMENTS

This report was prepared with the assistance of Kevin Springer, Manager, Solid Waste Collection; Mike Losee, Manager, Solid Waste Engineering & Planning and Anne Boyd, Waste Diversion Coordinator.

PREPARED BY:	
WESLEY ABBOTT, P. ENG. DIVISION MANAGER SOLID WASTE MANAGEMENT	
PREPARED AND RECOMMENDED BY:	REVIEWED & CONCURRED BY:
JAY STANFORD, M.A., M.P.A. DIRECTOR, ENVIRONMENT, FLEET & SOLID WASTE	JOHN BRAAM, P.ENG. MANAGING DIRECTOR, ENGINEERING SERVICES & CITY ENGINEER



APPENDIX A – WASTE DIVERSION INITIATIVES FOR IMMEDIATE CONSIDERATION

It is proposed that staff proceed to prepare businesses plans for Council’s approval for three initiatives from the report *Road Map 2.0 – The Road to Increased Resource Recovery and Zero Waste*. These initiatives are relatively low cost and are expected to have public support. Each initiative is described below.

1. As part of recycling education and awareness, provide residents of newly constructed homes with two Blue Boxes at no cost

Historically residents of newly constructed homes are provided one new Blue Box at no cost on the understanding that new homes have not received Blue Boxes in the past. Our program specifies that residents should sort into two streams. Providing two Blue Boxes for newly constructed homes will result in more boxes in the system and ensure that new homeowners start recycling correctly right from the start. Further benefits include:

- An important part of education and awareness for recycling (e.g., reduces contamination which helps to lower recycling program cost)
- Improved litter control by reducing overflowing boxes and the use of other containers (e.g. cardboard boxes, laundry baskets, etc.)
- Waste Diversion Ontario recognizes providing free or below cost recycling containers as a best practices and municipalities are financially rewarded in their grant payments
- Minimal cost to implement (approximately \$5,000 per year)

2. Establish a multi-residential recycling cart purchase program that sells roll-out carts at cost

The Blue Cart is the standard container for recycling collection in multi-residential buildings. The benefits of making carts more accessible are similar to those of providing more Blue Boxes. More carts in the system will increase the capacity to recycle and provide convenience for residents. Some specific benefits include:

- Improved ability of residents to sort recyclables into two streams
- More capacity to recycle
- Improved building maintenance and litter control by reducing overflowing carts

In 2010 the City received a grant from the Continuous Improvement Fund (Waste Diversion Ontario) to increase the number of recycling carts in our program. The goal of the grant program was to increase the number of carts to the best practices recommendation of 50 litres capacity per multi-residential unit (i.e. 1 cart per 7 units) which is about the equivalent of a small blue box. London used the grant to subsidize the cost of carts for building owners and property managers. We continue to make subsidized carts available, and work towards the best practices recommended number of carts. The following provides an overview of number of carts:

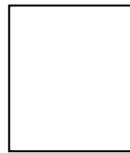
- Since 2009, prior to the grant program, we have increased the ratio of carts from 25 litres to 38 litres per unit (our goal is 50 litres per unit).
- There are 5,350 recycling carts in the program (compared to 3,400 in 2009)

The original “subsidized” cart program is drawing to an end and given its success should be replaced with a permanent “at cost” cart program.

3. Add vegetable oil and used oil collection to the EnviroDepots.

The existing EnviroDepots are popular destinations which provide a convenient “one stop drop” location for residents to dispose of a variety of materials. A review of other municipalities in Ontario found several materials that could potentially also be managed at the depots. Two of these materials (vegetable oil and used oil) are recommended for immediate consideration because:

- there are no processing or collection issues with adding these materials at the Oxford and Clarke Road EnviroDepots
- will reduce improper disposal of these materials (e.g., vegetable oil dumped down kitchen drain)
- they have stable Ontario and North American markets and will generate revenue that will offset any increase in operating costs
- funds are available in capital budget for EnviroDepots to purchase and install appropriate containers



APPENDIX B – SOLID WASTE BENCHMARKING DATA

Benchmarking data from the 2012 Ontario Municipal Benchmarking Initiative (OMBI) and 2010 C.D. Howe Institute report *Picking up Savings* is presented below.

Table B-1 shows the 2012 OMBI data for the cost to collect a tonne of garbage for participating Ontario municipalities. This table shows that London’s cost to collect a tonne of garbage is \$99 per tonne compared to an average cost of \$125 per tonne and a median cost of \$119 per tonne. Overall, London had the fourth lowest cost of the thirteen municipalities reporting.

Table B-1: Total Cost to Collect a Tonne of Garbage (2012)

Municipality	Garbage Collection Cost (\$/tonne)	Service Provider
Barrie	\$123	Contractor
Durham ^a	\$86	Contractor
Halton	\$132	Contractor
Hamilton	\$157	45% Public/55% Contractor
London	\$99	96% Public/4% Contractor
Muskoka	\$246	Contractor
Niagara	\$101	Contractor
Ottawa	\$95	40% Public/ 60% Contractor
Sudbury	\$131	60% Public/ 40% Contractor
Thunder Bay	\$142	Contractor
Toronto	\$113	50% Public/50% Contractor
Waterloo	\$119	Contractor
Windsor	\$75	Contractor
Average Cost	\$125	
Median Cost	\$119	

Notes a) Excludes Oshawa and Whitby which are collected by the lower tier municipalities using predominately municipal forces.

Table B-2 (next page) shows the 2012 OMBI data for the total solid waste management system cost for participating Ontario municipalities. This table shows that London’s cost to manage waste is among the lowest in Ontario. On a per tonne basis, London’s cost is \$81 per tonne compared to an average cost of \$188 per tonne and a median cost of \$182 per tonne. Overall, London had the second lowest cost per tonne of the twelve municipalities reporting.

On a per household basis, London’s cost to manage waste is \$143 per household compared to an average cost of \$229 per household and a median cost of \$223 per household. Overall, London had the lowest cost per household of the twelve municipalities reporting.

On a per person basis, London’s cost to manage waste is \$66 per person compared to an average cost of \$114 per person and a median cost of \$101 per person. Overall, London had the lowest cost per person of the twelve municipalities reporting.

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Table B-2 : Total Solid Waste System Cost per Tonne, Household, Person (2012)

Municipality	Total Solid Waste System Cost		
	(\$/tonne)	(\$/hhld)	(\$/person)
Barrie	\$170	\$191	\$73
Halton	\$181	\$191	\$70
Hamilton	\$237	\$234	\$97
London	\$81 ^(2nd lowest)	\$143 ^(lowest)	\$66 ^(lowest)
Muskoka	\$327	\$319	\$259
Niagara	\$257	\$344	\$152
Ottawa	\$213	\$182	\$101
Sudbury	\$115	\$233	\$162
Thunder Bay	\$73	\$212	\$103
Toronto	\$236	\$254	\$109
Waterloo	\$181	\$257	\$101
Windsor	\$183	\$182	\$76
Average Cost	\$188	\$229	\$114
Median Cost	\$182	\$223	\$101

Table B-3 shows information about garbage collection costs for Ontario municipalities taken from the C.D. Howe Institute report *Picking up Savings* plus information for the City of London. This table shows that London's garbage collection costs on a per tonne basis or a per household basis are significantly below average costs and compare favorably with municipalities that contract out a large portion or all of their residential garbage collection.

Table B-3 : C.D. Howe Institute Report – Garbage Collection Costs

	C.D. Howe Institute report <i>Picking up Savings</i> Average Costs ^a Ontario Municipalities, by Quartile Percentage of Budget Contracted (2001-2008 in 2002 real dollars)					London (2004 to 2008)	
	Contracting percentage quartile ^b					2002 ^c Real Dollars	No inflation adjustment ^d
	0 to 25	25 to 50	50 to 75	75 to 100	Ontario Average		
Average % of operating budget contracted	32%	83%	93%	100%	77%	4%	4%
Cost to Collect a Tonne of Garbage	\$121	\$77	\$81	\$92	\$94	\$75	\$82
Cost to Collect per Household	\$56	\$51	\$56	\$50	\$52	\$47	\$51

Notes

- a) From C.D. Howe Institute Report which used Ontario Ministry of Municipal Affairs and Housing data. This Ministry is responsible for publishing the Municipal Performance Measurement Program (MPMP) data.
- b) Quartiles were created in the C.D. Howe Institute Report to form equally sized groups of municipalities.
- c) Average of reported MPMP costs for the period 2004 to 2008 in real 2002 dollars. In other words, all costs were converted to 2002 dollars.
- d) Average of reported London MPMP costs for the period 2004 to 2008. No adjustment for inflation was made between the five years of data.

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Table B-4 shows information about the nine largest municipalities in Canada from the C.D. Howe Institute report *Picking up Savings* plus information added for the City of London. The information from *Picking up Savings* is from 2008. The information for the City of London is based on 2012 costs adjusted to 2008 dollars. This table shows that London's overall solid waste management costs are among the lowest in Canada for a large municipality.