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TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON OCTOBER 28, 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 report **BE RECEIVED** for information.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

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)
- Timeline For Major Environmental & Engineering Reports (February 25, 2013 meeting of the CWC, Item #3)
- 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)

BACKGROUND

PURPOSE:

The purpose of this report is to provide Committee and Council with an update on the status of waste diversion in London, the status of the proposed Waste Reduction Act and on the waste collection system optimization review that is underway.

CONTEXT:

Waste Diversion Update

In October the Waste Diversion Organization (WDO) released Blue Box data for Ontario municipalities and the Ontario Municipal Benchmarking Initiative (OMBI) released solid waste collection, diversion and disposal data for participating municipalities. Highlights of this information are presented in this report.

Waste Reduction Act Update

On June 6, 2013, Bill 91 was introduced into the Ontario Legislature. The government has proposed to replace the existing *Waste Diversion Act, 2002* with the proposed *Waste Reduction Act, 2013* (WRA). The Province has also proposed a new Waste Reduction Strategy (WRS). If passed by the Legislature, the WRA and accompanying WRS will result in significant changes to how recyclables, organics and residential waste (garbage) are to be managed in Ontario.

The City provided comments on the proposed WRA and WRS through the Environmental Bill of Rights Registry in September. An update on the status of the WRA is provided in this report.

Waste Collection System Review Update

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 asking for more frequent garbage collection.

The last time this review was undertaken was 2007. City staff was requested to provide updated information to Committee and Council. Staff are currently undertaking a review of the collection system.

This report is divided into three parts:

- Part A: Waste Diversion Update
- Part B: Proposed Waste Reduction Act (Bill 91) Update
- Part C: Waste Collection System Review Update

DISCUSSION

PART A: WASTE DIVERSION UPDATE

As noted above, the WDO and OMBI have recently released 2012 solid waste collection, diversion and disposal data. Highlights of this information are presented in this report. More detailed information on the City’s waste diversion system will be presented with the release of *A Roadmap to Maximize Waste Diversion in London – Roadmap 2.0* currently scheduled for the November 25, 2013, CWC Meeting.

Waste Diversion Rate

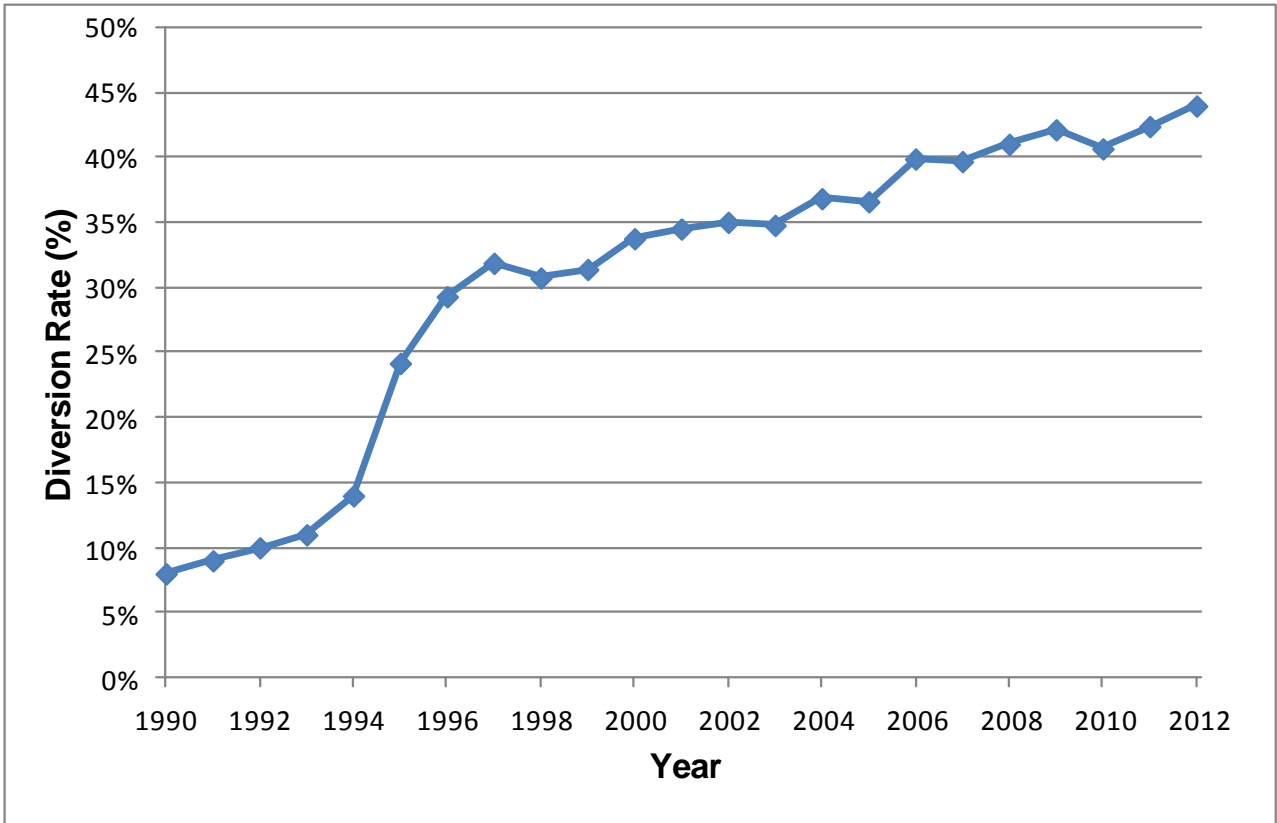
The data being released shows London’s waste diversion rate climbed to 44% in 2012. This is calculated by dividing 67,600 tonnes diverted from landfill versus the 153,700 tonnes of residential waste generated.

This diversion rate is:

- generally about 6% to 10% lower than municipalities that have a Green Bin program;
- the highest diversion among OMBI participants that do not have a Green Bin program; and
- among the highest diversion rates for municipalities in Ontario that do not have a Green Bin program.

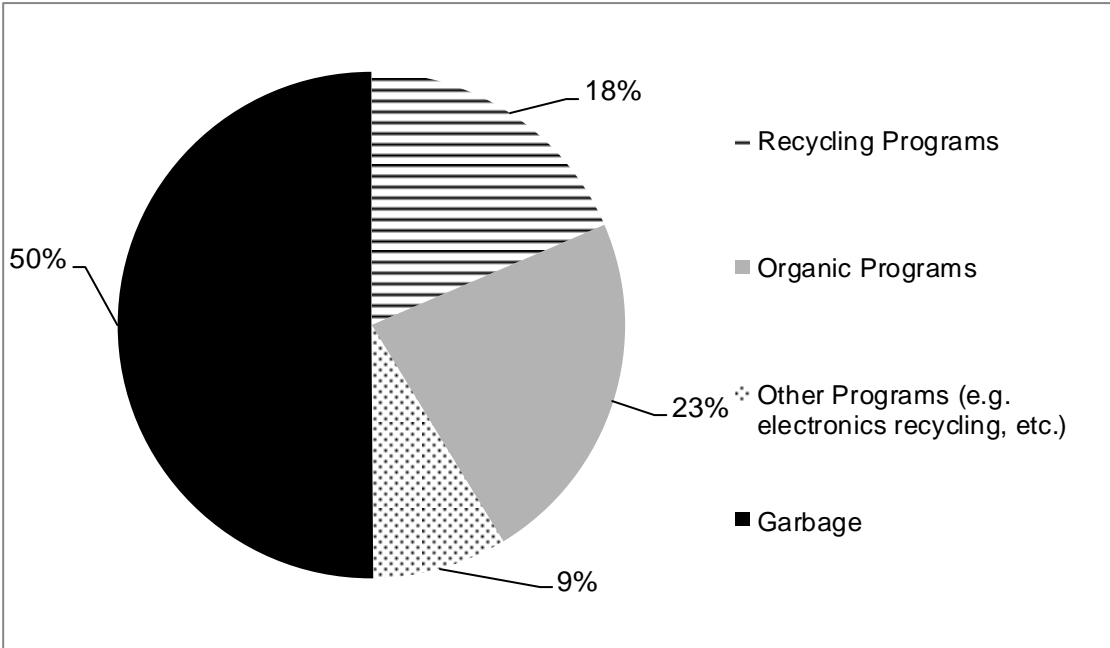
London’s diversion rate over the years is shown in Figure 1 below and has increased from 8% in 1990 when the curbside Blue Box program was first introduced to its current level of 44%. During this period numerous diversion programs have been implemented including yard material collection, multi-residential recycling, electronics recycling, tire recycling, construction/renovation material recycling, community EnviroDepots and the four garbage container limit.

Figure 1: London’s Waste Diversion Rate, 1990 – 2012



The overall diversion of 44% is a combination of a 50% diversion rate for homes receiving curbside collection and 17% diversion for multi-residential buildings. This is the first year that waste diversion from curbside households has reached 50% diversion. A breakdown on how waste from curbside households is managed is shown in Figure 2.

Figure 2: Breakdown of Curbside Waste for 2012 (by Weight)



Blue Box Capture Rate and Changing Waste Composition

In 2012 the amount of material captured and shipped to end markets from London’s Blue Box program increased 2% by weight and 12% by volume. This can be compared to an overall 1% drop provincially in the amount of Blue Box material captured by weight and a 2% increase by volume.

The better performance of London in 2012 as compared to the province as a whole is directly attributed to 2012 being the first full year of operation of the new Manning Drive Regional Material Recovery Facility (MRF). This facility allowed for the inclusion of more materials into London’s Blue Box recycling program and a better capture rate of recyclables (over 99% of properly sorted recyclables are captured and shipped to end markets).

The changing waste composition is the reason for the difference between the change in volume of material captured as compared to the change in weight. The change in waste composition is because of the continued growth primarily in these main trends:

- A shift in packaging from heavier materials such as glass to lightweight, higher volume material as plastic, polycoat containers (milk cartons and juice boxes) and aluminum;
- An increase in plastic stand-up pouches for food products; and
- Consumers reading more newspapers and magazines online.

The changing waste composition is having a significant impact on London’s Blue Box program. Over the last decade, London’s recycling program has seen a modest 20% increase in materials recycled by weight but a large increase (70%) by volume. For this reason, in many cases going forward it will be more appropriate to measure the performance of the Blue Box program using volume instead of weight (although this is not as easy to do as a weight based measure using scales).

Waste Diversion Costs

Information on overall waste diversion costs is included in the OMBI data. These data show London’s 2012 waste diversion cost averaged \$113 per tonne compared to the median cost of \$158 per tonne. Overall, London had the second lowest cost of all municipalities reporting through the OMBI network. It must be noted that most of the higher cost programs have a Green Bin program in their cost structure.

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PART B: PROPOSED WASTE REDUCTION ACT (BILL 91) UPDATE

The proposed WRA and WRS for Ontario has a strong vision to divert more waste resources from landfill in a way that will benefit the Ontario economy and environment. This is an outcomes-based strategy that will promote Individual Producer Responsibility (IPR) and internalize the costs of recycling in the price of products if the WRA is passed. The WRS highlights why a transformation is needed and provides some specific facts and figures:

Recycling creates new jobs, fosters innovation, conserves resources and reduces environmental impacts. The province recognizes that there are significant economic, environmental and innovative opportunities to increase recycling. In particular:

- *7 jobs are created for every 1,000 tonnes of waste recycled.*
- *Recycling creates 10 times more jobs than disposal.*
- *The market value of waste that is currently landfilled in Canada is estimated at over \$1 billion annually.*
- *The waste management sector currently contributes annually over \$3 billion to GDP and \$300 million in capital expenditures.*
- *Recycling uses less energy, produces fewer greenhouse gas (GHG) emissions (e.g., in 2007 our diversion programs avoided 2.2 million tonnes of GHG emissions annually) and has less environmental impact than the extraction of raw materials (MOE: WRS, 2013).*

Since the WRA, the accompanying WRS and the draft Legislation were made public, waste management and other organizations across the Province have been reviewing and establishing their positions. The City of London submitted Council-approved comments in early September along with numerous municipalities, environmental organizations, businesses and business organizations.

The Association of Municipalities of Ontario's (AMO) response is attached as Appendix A. Also contained in Appendix A is a joint letter from AMO, Regional Public Works Commissioners of Ontario (RPWCO) and the Municipal Waste Association (MWA) to the Canadian Stewardship Services Alliance requesting a meeting to ensure their views on the WRA are known.

As of October 15, 2012, the WRA (Bill 91) continues to be debated as part of the Second Reading at the Ontario Legislature (Queen's Park) which started on September 24, 2013. City staff is actively involved in several organizations that are tracking the progress of the proposed WRA and WRS:

- AMO – City staff sit on the Board and the Waste Management Task Force of AMO (combination of elected officials and municipal staff).
- RPWCO – City staff sit on the main committee and the Solid Waste Subcommittee.
- Ontario Waste Management Association (OWMA) – City staff sit on the Board of Directors.

The Liberal sponsored WRA has received five hours of debate at Queen's Park. Generally, bills receive about 10 hours of debate before a vote is taken. There has been no information to suggest agreement has been reached on the WRA to proceed with a vote to move Bill 91 into committee and public hearings, where a clause by clause review and amendments will occur.

There are concerns that delays in voting could cause the Bill to not make past a Second Reading. This has resulted in various organizations urging all MPP's to move the Bill into committee where amendments and concerns are heard to make constructive improvements.

AMO responded to this concern by releasing a letter on September 23 to Members of Provincial Parliament (MPPs) (Appendix B). AMO, RPWCO and MWA also sent additional letters and request to meet in early October for the purpose of determining common ground on the proposed WRA and looking for solutions to the concerns.

The Second Reading debate (so far) can be summarized as follows. The Liberals are open to making constructive changes to the Bill which they see as an economy and jobs bill. The NDP has pledged its support to the Bill that would move the bill to Standing Committee. The Conservatives position in principle supports the need for the Bill as they support higher diversion, market based incentives, and Individual Producer Responsibility (IPR). However, the

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Conservatives have said they will not support the bill as it is a poorly written piece of legislation that is continuation of the current flawed Waste Diversion Act and falls short of establishing true IPR where producers are allowed to manage recycling and waste diversion. One of the Conservatives main concerns is Bill 91, as it is now written, has the potential, to set up and entrench a constant battle between municipalities and producers over money instead of focusing on bettering the environment.

Currently the main concerns over the proposed legislation being highlighted are:

- The need to review/repeal Ontario Regulation 101/94 that requires municipalities to provide Blue Box services but appears to be in conflict with true IPR and having producers assume the costs and risks of managing their wastes. This regulation is seen by producers as giving municipalities more bargaining power over costs and a form of taxation.
- How to determine what are municipal ‘reasonable costs’ and how a funding formula is developed and managed in the event of disagreement with producers over costs.
- Recycling and diversion targets - what they should be and how they should be measured
- Ownership and control of waste is being challenged by producers. They want full control to manage the costs if they are required to pay 100% of the costs.
- There is disagreement on the role of a Waste Reduction Authority/Designated Approval Authority (DAA).
- The role of municipalities continues to be unclear. Arguments range from status quo through to minimal role.
- The role of producers and their responsibilities differs for many involved with the debate.

PART C: WASTE COLLECTION SYSTEM REVIEW UPDATE

Background

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 better given the cost.

The City of London is the only municipality in Ontario that operates a “six 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. This change occurred in mid-1996 (17 years ago) and has resulted in avoided costs of between \$17 and \$20 million since that date.

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. 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. 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.

Since 2007 the amount of garbage being generated per household has dropped 15% (by weight). This drop is attributed to:

- the addition of more materials to the Blue Box program (milk and juice cartons, drinking boxes, steel paint cans and aerosol cans, #3, #6 and #7 plastic bottles, tubs and jugs, thermoform PET plastic (e.g. clamshell containers), cardboard cans, plastic plant pots & trays and oversize plastic pails (up to 20 litres)),
- changing demographics (e.g., smaller and older households), and
- the banning of various materials from curbside collection that have viable local recycling options (e.g., tires, electronics and fluorescent tubes).

Current Review

Staff are currently undertaking a review of different garbage and recycling collection systems based on existing systems in Ontario and other parts of Canada. As of October 15, 2013, these have been narrowed down to six systems that are considered the most appropriate given current budget constraints. Collection systems in municipalities tend to vary based on the type of trucks, hours of operation, types of materials collected, number of containers (bags) collected and the distance to disposal facilities. Also key in any collection review are the health and safety requirements associated with any proposed changes. Descriptions of the systems being reviewed are listed in Table 1 below.

Table 1: Curbside Waste Collection Systems Options

Description (Garbage and Recycling)		Preliminary Financial Consideration
Existing System (6 Day collection; 42 pickups per year)		Base Case
Existing System Optimized (6 day collection; 42 pickups per year)		Least costly (possibly cost reduction)
5 day collection (50 pickups/year)	Using larger trucks	Most expensive
	Adjusting length of work days	Medium cost
	Optimizing system delivery (e.g., materials collected, routing, number of containers, etc.)	Medium cost
Weekly collection (52 pickups/year)	Adjusting length of work days	Medium to above Medium cost
Seasonal collection (39 pickups/year; (weekly summer; biweekly winter)	Complete redesign of system delivery from routing and staff to resident communication and changes at drop-off depots	Medium to above Medium cost

The results of the review of different collection systems is currently scheduled to be brought to the November 25, 2013 CWC meeting.

ACKNOWLEDGEMENTS

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

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