That on the recommendation of the General Manager of Environmental & Engineering Services & City Engineer, the following actions be taken with respect to extending the City's recycling program contract with Halton Recycling Ltd.:

(a) the General Manager of Environmental & Engineering Services & City Engineer BE AUTHORIZED to enter into negotiations for an extension to the contract with Halton Recycling Limited for the collection and processing of residential recyclables for 2 (two) years from September 1, 2006 until August 30, 2008 to allow time for the City to address the many significant uncertainties with respect to the direction of waste diversion in the Province and that the following clauses be added into the existing contract:

i. increased collection costs for Year 1 of the extension will be $152,800 (excluding GST) and invoiced by Halton Recycling in 12 equal installments, it being noted that an additional fuel surcharge based on Ontario Ministry of Energy diesel fuel price index will be assessed and invoiced by Halton on a monthly basis

ii. increased processing costs for Year 1 of the extension will be $162,675 (excluding GST) and invoiced by Halton Recycling in 12 equal instalments

iii. CPI adjustments as currently stated in the existing contract apply to the above items in the second year of the contract renewal.

(b) the Civic Administration BE AUTHORIZED to undertake all the administrative acts that are necessary in connection with this matter;

(c) the authorization given herein BE CONDITIONAL upon the Corporation entering into a formal contract to give effect to the changes noted above, it being noted that other minor changes to the contract to improve service have also been negotiated;

(d) Civic Administration BE DIRECTED to report back on the final outcome on the contract negotiations for the final year of the existing contract (September 1, 2005 to August 30, 2006), it being noted that negotiation of a new price structure for the collection and processing of residential recyclables is taking place under the existing contract terms and conditions; deals with the significant change in the quantity and composition of material being collected; utilizes the analysis undertaken for the 2 Year extension; and the report back to include any options to contain the existing contract cost increases in the 2006 recycling program budget;

(e) Civic Administration BE DIRECTED to report back to the Environment & Transportation Committee (ETC) on the results of the Request for Proposal (RFP) for the collection of recyclables from the approximately 12,000 homes (about 2,000 households per Zone) removed from the Halton Recycling contract and inserted into RFP that previously dealt with Lambeth and Area; it being noted that the recyclables from these homes represent the portion of recyclables that are over and above that anticipated by the existing contract and that soliciting competitive proposals is practical for this portion of the recycling program;

(f) The General Manager of Environmental & Engineering Services & City Engineer BE DIRECTED to report back on how to fund the cost increases related to the recycling contract extension from September to December, 2006 and to include the current estimate of $870,500 in the growth component of the 2007 draft Budget to cover the annualized future cost increases for recycling and other related solid waste service initiatives;
(g) Municipal Council forward a letter to the Honourable Laurel Broten, Ontario Minister of the Environment, indicating Municipal Council’s support on her recent announcements dealing with waste diversion and the Environmental Assessment Act reform BE APPROVED, and noting that updates or answers on several areas of waste management are outstanding and impacting the City of London and likely other municipalities including:

i. any revision to the current target date of year end 2008 for achieving 60% waste diversion

ii. how the Ministry of the Environment is going to enforce the Provincial diversion targets including the potential use of the environmental assessment process (e.g., no new landfill capacity unless 60% diversion is achieved)

iii. long-term funding for waste diversion noting that the current Waste Diversion Act will be reviewed some time in 2007 with the outcome having a major impact on Blue Box recycling and other waste diversion initiatives

iv. the role of source separated organics in achieving 60% waste diversion and how this will be funded

v. the environmental and economic benefits of achieving 60% waste diversion, a study funded by the Ministry of the Environment

vi. the status of the Environmental Assessment reform process, noting that Municipal Council provided its input in June 2005

PREVIOUS REPORTS PERTINENT TO THIS MATTER

Relevant reports include:

• Modifications to Solid Waste Management Program (ETC Meeting of June 20, 2005)

• Outcome of the City’s Request for Proposal for Selected Programs within London’s Solid Waste Management System (RFP 98-58) (March 8, 1999 Meeting of ETC)

Reports after the Year 2000 are available from the City website (www.london.ca/Council/meeting_packages.html).

BACKGROUND

PURPOSE

The purpose of this report is to provide ETC and Board of Control with a thorough analysis of the elements that are causing major financial impacts to the City’s recycling program contractor (Halton Recycling), a review of the changes to the pricing structure to accommodate the impacts on Halton Recycling and to recommend a two year contract extension to allow City staff to address many of the uncertainties associated with recycling and overall waste diversion in Ontario.

CONTEXT

The direction and timing of recycling and related waste diversion initiatives (e.g., source separated organics) in the Province is unknown with a number of uncertainties that prevent City staff from making recommendations on the future of the recycling program and other programs to achieve 60% diversion. These uncertainties have also contributed to the reluctance to prepare a tender or request for proposal for the recycling program as Provincial program requirements in the future are not well established. Experience suggests that uncertainty in the marketplace tends to contribute to higher costs or unrealistic submissions that cannot be met by contractors. These uncertainties include:

• the target date for achieving 60% waste diversion and what waste streams (e.g., recyclables, source separated organics, electronics, business recyclables) are being targeted,

• long-term funding for waste diversion noting that the current Waste Diversion Act will be reviewed some time in 2007. In 2007 it is anticipated that a Best Practices Funding Model will be in use; however the best practices will not be identified until 2007. For example, a municipality that uses a recycling centre designed to process a “single stream” of recyclables may be awarded higher levels of funding if it is deemed a best practice. Alternatively, certain recycling trucks may be deemed as contributing to a lower cost recycling system and thus be considered a best practice,
the potential financial savings that may come from a large regional recycling facility
designed to serve a broader area than the City of London (Note: this project is on-going and
a report to Council is anticipated in the 3rd Quarter),
• the implications of processing recyclables from private industry,
• numerous municipal programs examine the entire collection program when source
separated organics are added to the mix to reduce overall program cost. A fleet of new
recycling trucks, dedicated only to recycling, would eliminate any efficiencies gained through
collection,
• the role of source separated organics in achieving 60% diversion and how this will be
funded, and
• how the Ministry of the Environment is going to enforce the Provincial diversion targets
including the potential use of the Environmental Assessment process (e.g., no new landfill
capacity unless 60% diversion is achieved).

Since late 2004, City staff along with many colleagues in Ontario municipalities have been trying
to obtain clear direction from the Province. Since November 2005, City staff have:
• discussed and analyzed the impacts of the composition and quantities of recyclables
materials on Halton Recycling
• examined the recycling trends including reviewing recently signed municipal recycling
contracts in Ontario
• reached consensus on a pricing structure to deliver the same service for an additional two
year period until August 30, 2008.

On a very positive note, London's recycling program is growing with more recyclables being
collected each year. The traditional measurement for growth was the increase in tonnes being
collected. Due to the significant product substitution that is occurring (e.g., many products now
packaged in plastic as opposed to aluminum, steel or clear glass), staff are now tracking
recycling using volumetric estimates. Basically recycling trucks are filling up with lighter
materials. A minor increase in recycling tonnage is having, in fact, a significant increase in the
amount of space from the materials being recycled.

DISCUSSION

The City's recycling program will incur increased costs because of the changes to the
composition and quantities of recyclables materials. The rationale and details of these costs are
presented in Appendix A and summarized below.

Background

In 1999, Halton Recycling was awarded a seven year contract for the City's curbside and multi-
residential recycling programs (with the exception of Lambeth and rural areas in the southern
part of the City).

Since the start of the contract, there has been more a 20% increase in weight and a 60%
increase in the volume of recyclables collected per household. The recyclable materials that
have contributed the most to this change are plastics and cardboard. There has also been a
decline in some materials such as aluminum containers and newspaper. These changes have
increased Halton Recycling's costs. In addition fuel costs have increased by more than 50%
sometimes fluctuating as high as 100%.

The City pays Halton a fixed price, on a per household basis and, in addition, receives a portion
of the increased recycling revenue, as a result of increased tonnes. The City also receives
additional revenue as more tonnes are recycled from Waste Diversion Ontario (WDO). Over the
term of the contract recyclable material revenue and funding from WDO have lowered the net
cost per household and the cost per tonne that the City pays. Halton Recycling has not
received additional payments from the City to compensate for increasing costs.

The existing contract requires re-negotiation of the rates being charged by Halton Recycling if
there is a significant change in the composition or quantities of recyclable materials. This
activity is nearing completion and has been following the terms and conditions in the contract
and the analysis undertaken in this report for the 2 Year extension.
Impact on Recycling Program Costs

The change in materials has increased both collection and processing costs to Halton Recycling as noted below:

*a) Increase in Existing Collection Costs*
Extra time is required to load the additional material being generated by each household and to take additional loads of recyclables to the MRF. The materials that are challenging include plastic containers, oversized cardboard and the growth of the City in the north end (e.g., the recycling centre is in the south end). Halton Recycling has submitted a thorough analysis of the additional collection time to handle the increased volume per household and the associated cost of maintaining this service at $152,600 per year (plus CPI).

*Summary of Staff Analysis:* The submitted cost increase is very reasonable as it amounts to approximately $35 per day per vehicle. This amount represents about an extra 1.5 hours per day per vehicle. This amount is below an average hourly rate that would be expected from a private sector operator.

*b) Increase in Fuel Costs*
Halton Recycling has requested a Fuel Cost Adjustment Factor to compensate for the significant increase in the cost of fuel. The adjustment factor for fuel would be consistent with fuel adjustment clauses used in other contracts with the City.

*Summary of Staff Analysis:* This request is fully warranted. Fuel costs have increased by more than 50% sometimes fluctuating as high as 100% since the start of the contract. The City has saved between $200,000 and $300,000 over the last couple of years as this factor was not in the current contract.

*c) Need for More Recycling Trucks*
Two additional collection vehicles have been in use on a regular basis over the last one to two years. These vehicles have become part of the regular fleet for Halton Recycling.

*Summary of Staff Analysis:* Two collection vehicles over and above what is required in the existing contract are warranted. Staff and Halton Recycling are unable to agree on the cost of providing the additional recycling vehicles and therefore staff are seeking competitive proposals for providing additional recycling trucks and collection crews. This is the only element of the existing contract that City staff have confidence that soliciting competitive proposals will result in a more favourable financial option for the City.

*d) Increase in Processing Costs*
The current mix of recyclables has a higher percentage of materials that are more costly to process, such as plastics, and a lower percentage of materials that are easy to process, such as newspapers and aluminium containers as compared to the original contract. In addition, the reduction of the higher value materials in the recycling program has resulted in a different revenue structure for the changing mix of materials. Halton Recycling has submitted a thorough analysis of the additional processing time to handle the increased volume and the associated cost of maintaining this service at $162,700 per year (plus CPI).

*Summary of Staff Analysis:* The submitted cost increase is very reasonable. It is less than what would have been expected based on typical material processing costs provided by the Waste Diversion Organization (WDO).

**Summary – Total Estimated Increase in Recycling Program Costs**
The additional processing, collection and fuel surcharge costs are expected to increase recycling costs by approximately $750,500 per year or $7.20 per curbside household (as noted on the table on the next page). This amount represents a 16% increase over the current gross cost ($4,650,000) of the recycling program.

*Added to this table is the estimated cost increase for garbage and yard material collection in Lambeth and Area discussed in the section entitled Waste Collection Services in Lambeth and Area.*
d) Increase in Processing Costs

<table>
<thead>
<tr>
<th>Area of Cost Increase - For Households with Curbside Collection</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Increase in Existing Collection Costs</td>
<td>$152,800</td>
</tr>
<tr>
<td>b) Increase in Fuel Costs (using Adjustment Factor)</td>
<td>$135,000</td>
</tr>
<tr>
<td>c) Need for More Recycling Trucks (2 trucks)</td>
<td>$300,000</td>
</tr>
<tr>
<td>d) Increase in Processing Costs</td>
<td>$162,700</td>
</tr>
<tr>
<td>Sub-Total Estimated Increase in Recycling Program Costs</td>
<td>$750,500</td>
</tr>
<tr>
<td>e) Increase in Waste Collection Services in Lambeth and Area</td>
<td>$120,000</td>
</tr>
<tr>
<td>Total Estimated Annualized Cost for Contracted Collection</td>
<td>$870,500</td>
</tr>
<tr>
<td>Services</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>$152,800</td>
</tr>
<tr>
<td>$135,000</td>
</tr>
<tr>
<td>$300,000</td>
</tr>
<tr>
<td>$162,700</td>
</tr>
<tr>
<td>$750,500</td>
</tr>
<tr>
<td>$120,000</td>
</tr>
<tr>
<td>$870,500</td>
</tr>
</tbody>
</table>

Performance of Halton Recycling

From December 2005 until mid-January 2006, Halton Recycling failed to collect recyclables on a regular basis. This situation was noted by many Londoners and raised by numerous elected officials. City staff dealt with the contractor daily and called in other private contractors when vehicles were available. During this period the contractor was dealing with the following issues:

- weekly snow storms
- buried Blue Boxes in snow banks
- icy street conditions
- higher quantities of recyclables, due to the holiday season

These issues were exacerbated by the general trend of the marketplace using high volume, low weight materials as discussed above. Any spare vehicle capacity has been consumed due to the high volume materials.

Summary of Staff Analysis: In March 2006, an audit of curbside practices by Halton collection staff was undertaken. Halton staff — management or operators — were not aware that an audit was being conducted. The audit examined how well collection staff followed contract curbside procedure. The audit also recorded when residents were responsible for loose recyclables on the curb and when litter was noted prior to Halton collection staff arriving for collection. Observations were made over a three-week period, between March 2 and March 24, 2006. Approximately 17,000 observations in 15 different beats were made.

The most significant finding was that there were no visible issues with Contractor performance at 99.4% of the households. Issues were noted at 0.6% of homes and included:

- 60% were Blue Boxes replaced hap-hazardously and/or thrown
- 30% were non-recyclable items not replaced in the Blue Box, but left loose on the ground
- 10% were recyclable materials not collected

Staff have concluded that the performance issues in December and January have been isolated to the issues noted above and are not a reflection of the ongoing performance. As part of the contract extension, Halton Recycling will be subject to a penalty clause for failure to pickup Blue Boxes on the same day under regular weather conditions. In addition, increased monitoring procedures have been put in place since February 2006.

Staff Conclusion – Extend Contract for 2 Years

Staff analysis has confirmed that these cost increases are justified and in fact are lower than what would likely be achieved if the City requested competitive proposals at this point in time. The per household gross cost with the contract extension in London is lower than that typically being paid by other municipalities in recently signed contracts. It is staff's understanding that cost increases in service delivery are anticipated province-wide as municipal contracts are
adjusted due to the changing quantity of recyclables, composition of recyclables and the impact of increasing high volume, low weight materials. For comparative purposes, "estimated gross cost per household" in other Ontario municipalities is as follows:

<table>
<thead>
<tr>
<th>Year Recycling Contract Signed</th>
<th>Estimated Recycling Gross Cost Per Household (all households)</th>
<th>Municipality</th>
</tr>
</thead>
<tbody>
<tr>
<td>After 2003</td>
<td>$49</td>
<td>Region of York</td>
</tr>
<tr>
<td>After 2003</td>
<td>$38</td>
<td>Region of Niagara</td>
</tr>
<tr>
<td>1999 - 2003</td>
<td>$43</td>
<td>Average of 11 large municipalities signed between these years</td>
</tr>
<tr>
<td>September 2006</td>
<td>$38</td>
<td>City of London (with two year extension)</td>
</tr>
<tr>
<td>2005</td>
<td>$31</td>
<td>City of London</td>
</tr>
</tbody>
</table>

Given the number of uncertainties that have been identified and analyzed wherever possible, it is not possible to determine what is the most appropriate long term direction for the City's recycling program at this time. Experience has shown that well designed, longer term contracts (e.g., 7 to 10 years) are the best method to ensure competitive pricing for these types of services.

City staff are also seeking the required clarifications and will report on these as part of the 60% Waste Diversion strategy being prepared for September 2006. It is anticipated that a number of the uncertainties should be resolved within the next one to two years. Extending the contract with Halton Recycling will allow time to determine the most appropriate long term direction for the City's recycling program. An overview of the new and revised contract clauses for the extension of the contract is provided in Appendix B. Staff are confident that the price increase being sought is reasonable.

Waste Collection Services in Lambeth and Area

The City's collection contract for Lambeth and rural areas in the southern part of the City will end in August 30, 2008. This contract covers the collection of garbage, recyclables and yard materials for approximately 2,400 homes. This is a basic contract that required about two collection vehicles to serve the area when the contract began in 1999. Significant growth in the area and the distances that must be covered have proven very challenging for the existing arrangement. The current price is about $170,000 per year.

The current service provider has indicated that the cost to provide this service will need to increase by well over 50%. Discussions with other haulers also suggest that a 50% price increase or larger can be expected. This will increase the waste management program costs for Lambeth and surrounding area by approximately $120,000.

A new Request for Proposal (RFP) will be available in late May for the Lambeth and area collection contract. The two recycling trucks required to serve the City of London (approximately 12,000 homes or 2,000 households per Zone) will be added to the RFP process.

ACKNOWLEDGEMENTS

This report was prepared by a team comprised of Anne Boyd, Waste Diversion Coordinator; Wesley Abbott, Manager, Solid Waste Engineering; Dave Mounteer, Solicitor I; Jay Stanford and Pat McNally.
PREPARED BY:

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May 6, 2005

Attachments Appendix A Increased Recycling Program Costs
APPENDIX A
INCREASED RECYCLING PROGRAM COSTS

PURPOSE:
The purpose of this appendix is to provide the background rationale for:

- extending the contract for two (2) years and
- re-negotiation for last year of the existing curbside and multi-residential recycling contract.

CONTEXT:

Rationale for Contract Extension
The direction and timing of recycling and related waste diversion initiatives (e.g., source separated organics) in the Province is unknown with a number of uncertainties that prevent City staff from making recommendations on the future of the recycling program and other programs to achieve 60% diversion. These uncertainties include:

- **60% Diversion Target** - The Province announced a waste diversion target of 60% in the spring of 2004 but has not provided any additional direction/guidance/regulations since then. There is uncertainty with respect to the target date for achieving the 60% waste diversion and what waste streams (e.g., recyclables, source separated organics, electronics, business recyclables) are being targeted.

- **WDO Funding** – The existing agreement between industry and the Waste Diversion Organization (WDO) to fund 50% of recycling costs has less than 2 years remaining. No agreement has been negotiated on what funding would be available in any future agreement.

In 2007 it is anticipated that a Best Practices Funding Model will be in use; however the best practices will not be identified until 2007. For example, a municipality that uses a recycling centre designed to process a “single stream” of recyclables may be awarded higher levels of funding if it is deemed a best practice. Alternatively, certain recycling trucks may be deemed as contributing to a lower costs recycling system and thus be considered a best practice,

- **Regional MRF Study** - The City is examining the viability of establishing its own Materials Recovery Facility (MRF) in order to reduce overall system costs. This study in nearing completion but it will be a couple years before a new facility serving London or a larger area could be established, if that is deemed the appropriate direction by Council.

- **Processing Recyclables from Business** – The implications of processing recyclables from industry must be examined should the City proceed with building its own MRF. This may affect facility design and reduce overall costs.

- **Organics Collection** – Municipal programs typically examine the entire collection program when source separated organics are added to the mix to reduce overall program cost. Collection of source separated organics (often referred to as the “green bin” program) could have implications for recycling collection (collecting organics and recyclables in the same multi-compartment truck). A fleet of new recycling trucks, dedicated only to recycling, would eliminate any efficiency gained through co-collection (i.e., recyclables and organics in the same truck one week; garbage and organics the next week).

- **Source Separated Organics** - The role of source separated organics in achieving 60% diversion and how this will be funded is not clear at this time.

- **EA Reform** – The Province is examining potential reforms to the Environmental Assessment Act. There is the potential for reforms to link waste diversion requirements to approvals for other waste management facilities.
Single Stream Recycling – Many of the larger communities (e.g., City of Toronto, Region of Peel, Region of York) in the province are switching to single stream recycling. Single stream recycling reduces collection costs (no sorting at the curb) but increases processing costs and can potentially have a detrimental effect on the materials being shipped to market. Two stream programs like London may be affected as markets adjust to accommodate materials collected from single stream programs.

Given the number of uncertainties, it is not possible to determine what is the most appropriate long term direction for the City’s recycling program at this time. Many of the aforementioned uncertainties should be resolved within the next one to two years and/or further details from other municipalities and Stewardship Ontario (i.e., industry funding organization) will be available.

Extending the existing contract with Halton Recycling will allow time to determine the most appropriate long term direction for the City’s recycling program and in turn develop a recycling contract to meet the City’s long term needs.

Requirement for Negotiation in the Last Year of a 7 Year Contract
In 1999, Halton Recycling was awarded a seven year contract for the City’s curbside and multi-residential recycling programs (with the exception of Lambeth and rural areas in the southern part of the City). The contract requires re-negotiation of the rates being charged if there is a change in the composition of recyclable materials as defined below:

A change in the quantity of an individual recyclable material by more than 20% (increase or decrease) in two consecutive years, or at a reduced time frame if approved by the Commissioner, shall form the basis of a re-negotiation of the existing contract...

There has been a significant change in the recyclable materials being collected since the start of the contract and Halton Recycling is requesting that new rates be negotiated given the increase costs being incurred by their company as a result to the change in recyclables being collected.

DISCUSSION:
Change in Material Quantities and Composition
As stated above, a change in the quantity of an individual recyclable material by more than 20% (increase or decrease) in two consecutive years shall form the basis of re-negotiation of the existing recycling contract with respect to the materials that have changed.

There has been an increase or decrease of greater than 20% (per capita) in both weight and volume for several materials. Cardboard/Boxboard, glass and plastics such as HDPE and PET have increased by more than 20% while steel and aluminium cans have decreased by more 20%. Details on the changes in material types are provided in Tables A-1 and A-2.

Overall, there has been more than a 20% increase in weight (35 kilograms/household) and approximately a 60% increase in the volume (0.8 m³ per household) of recyclables collected per household since the start of the contract (see Figure A-1). As shown in Figure A-1, the volume of recyclables is increasing much faster than the weight of recyclables. The rapid increase in the volume of recyclables is the result of a shift to plastics from other materials for containers and packaging and more cardboard being recycled.

The change in materials has increased both collection and processing costs to Halton Recycling. The City has not incurred any extra costs because the City pays Halton a fixed price, on a per household basis. Given the change in quantities and composition of recyclables, Halton Recycling has requested that the pricing for the current contract be renegotiated, as per the existing terms and conditions, for the last year of the contract.

The net cost per household and the cost per tonne charged to the City have declined over the life of the contract because the City receives a portion of the increased recycling revenue and the introduction of Waste Diversion Organization (WDO) funding. The cost per curbside household is presented Table A-3.
Table A-1: Weight Per Household By Material Type

<table>
<thead>
<tr>
<th>Materials</th>
<th>Weight/Household (Kilograms/Household)</th>
<th>RFP</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
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<td>Newspaper</td>
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<td>92</td>
<td>96</td>
<td>100</td>
<td>96</td>
<td>97</td>
</tr>
<tr>
<td>Boxboard/Cardboard</td>
<td></td>
<td>14</td>
<td>28</td>
<td>41</td>
<td>40</td>
<td>43</td>
<td>46</td>
<td>54</td>
<td>50</td>
</tr>
<tr>
<td>Steel</td>
<td></td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Aluminum</td>
<td></td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
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<td>Glass</td>
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<td>26</td>
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<td>PET/Mixed (Plastic)</td>
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<td>HDPE (Plastic)</td>
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<td>3</td>
<td>3</td>
<td>4</td>
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</tr>
<tr>
<td>Total</td>
<td></td>
<td>164</td>
<td>179</td>
<td>173</td>
<td>174</td>
<td>184</td>
<td>194</td>
<td>202</td>
<td>200</td>
</tr>
<tr>
<td>% change from RFP</td>
<td></td>
<td>0</td>
<td>9%</td>
<td>5%</td>
<td>6%</td>
<td>12%</td>
<td>18%</td>
<td>23%</td>
<td>22%</td>
</tr>
</tbody>
</table>

Note: RFP – estimates provided in the Request for Proposal, 1998
Existing recycling contract (clause 4.4 of specifications) states that a change in the quantity of recyclable material by more than 20% in two consecutive years shall form the basis for re-negotiation. This occurred in 2004 and 2005.

Table A-2: Volume Per Household By Material Type

<table>
<thead>
<tr>
<th>Materials</th>
<th>Volume/Household (m$^3$/Household)</th>
<th>RFP</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
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<tr>
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<td>0.35</td>
<td>0.37</td>
<td>0.38</td>
<td>0.37</td>
<td>0.37</td>
</tr>
<tr>
<td>Boxboard/Cardboard</td>
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<td>0.23</td>
<td>0.47</td>
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<td>0.67</td>
<td>0.71</td>
<td>0.76</td>
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</tr>
<tr>
<td>Steel</td>
<td></td>
<td>0.10</td>
<td>0.09</td>
<td>0.08</td>
<td>0.08</td>
<td>0.08</td>
<td>0.09</td>
<td>0.09</td>
<td>0.08</td>
</tr>
<tr>
<td>Aluminum</td>
<td></td>
<td>0.08</td>
<td>0.07</td>
<td>0.06</td>
<td>0.06</td>
<td>0.06</td>
<td>0.06</td>
<td>0.06</td>
<td>0.06</td>
</tr>
<tr>
<td>Glass</td>
<td></td>
<td>0.09</td>
<td>0.06</td>
<td>0.06</td>
<td>0.08</td>
<td>0.08</td>
<td>0.09</td>
<td>0.09</td>
<td>0.10</td>
</tr>
<tr>
<td>PET (Plastic)</td>
<td></td>
<td>0.13</td>
<td>0.11</td>
<td>0.15</td>
<td>0.16</td>
<td>0.19</td>
<td>0.21</td>
<td>0.28</td>
<td>0.30</td>
</tr>
<tr>
<td>HDPE (Plastic)</td>
<td></td>
<td>0.20</td>
<td>0.16</td>
<td>0.12</td>
<td>0.15</td>
<td>0.16</td>
<td>0.20</td>
<td>0.23</td>
<td>0.20</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1.23</td>
<td>1.40</td>
<td>1.53</td>
<td>1.56</td>
<td>1.66</td>
<td>1.79</td>
<td>2.03</td>
<td>1.95</td>
</tr>
<tr>
<td>% change from RFP</td>
<td></td>
<td>0</td>
<td>13%</td>
<td>24%</td>
<td>27%</td>
<td>34%</td>
<td>45%</td>
<td>64%</td>
<td>58%</td>
</tr>
</tbody>
</table>

Figure A-1: Percentage Change in Curbside Household Recycling Rates
Table A-3: Recycling Program Costs, 2000 - 2005

<table>
<thead>
<tr>
<th>Cost Component</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Households (Curbisde and Multi-Residential)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross Cost</td>
<td>$3,670,000</td>
<td>$3,880,000</td>
<td>$4,130,000</td>
<td>$4,310,000</td>
<td>$4,500,000</td>
<td>$4,650,000</td>
</tr>
<tr>
<td>Revenue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross Cost/Hhd</td>
<td>$35</td>
<td>$36</td>
<td>$37</td>
<td>$38</td>
<td>$39</td>
<td>$39</td>
</tr>
<tr>
<td>Revenue/Hhd</td>
<td>$1,690,000</td>
<td>$1,360,000</td>
<td>$1,590,000</td>
<td>$1,720,000</td>
<td>$2,020,000</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>WDO Funding</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$790,000</td>
<td>$1,320,000</td>
</tr>
<tr>
<td>Net Cost</td>
<td>$1,620,000</td>
<td>$2,060,000</td>
<td>$2,000,000</td>
<td>$1,990,000</td>
<td>$1,060,000</td>
<td>$650,000</td>
</tr>
<tr>
<td>Net Cost/Hhd</td>
<td>$17</td>
<td>$21</td>
<td>$21</td>
<td>$20</td>
<td>$11</td>
<td>$6</td>
</tr>
</tbody>
</table>

Increase in Existing Collection Costs:
Extra time is required to load the additional material being generated by each household and to take additional loads of recyclables to the MRF. The materials that are challenging include plastic containers, oversized cardboard and the growth of the City in the north end, noting that the recycling centre is in the south end of the City. Halton Recycling currently uses up to 3 more trucks to collect recyclables on any given day than what was anticipated in the current contract. The collection trucks also work overtime or extended shifts on a regular basis.

Halton Recycling has submitted a thorough analysis of the additional collection time to handle the increased volume and the associated cost of maintaining this service at $152,800. This covers the costs associated with running, on average, each vehicle approximately 1.5 hours overtime a day.

Summary of Staff Analysis: The submitted cost increase is very reasonable as it amounts to approximately $35 per day per vehicle. This amount represents about on extra 1.5 hours per day per vehicle. This amount is below an average hourly rate that would be expected from a private sector operator.

Increase in Fuel Costs:
The change in fuel prices since the start of the contract are shown in Figure A-2. When Halton was preparing its bid to the City in the fall of 1998, diesel fuel was approximately $0.50 per litre. The price for diesel at the time of preparing this report was over $0.90 per litre. The City has saved between $200,000 and $300,000 over the last couple of years as the current contract does not include any adjustment factor for increased fuel costs.

Halton Recycling will extend the contract provided there is a Fuel Cost Adjustment Factor to compensate for the significant increase in the cost of fuel. It is proposed that the adjustment for fuel costs be calculated monthly by multiplying the difference between the current fuel price and the fuel price from September 1998 using the Ontario Ministry of Energy diesel fuel price index, (minus the CPI rate for Ontario), by the typical monthly fuel consumption. The adjustment factor for fuel is consistent with the fuel adjustment calculations used in other contracts with the City and would take effect September 1, 2006.
Summary of Staff Analysis: Summary of Staff Analysis: Payment of a Fuel Cost Adjustment based on the Ontario Ministry of Energy diesel fuel price index as part of any contract extension is fully warranted. Fuel costs have increased by more than 50% sometimes fluctuating as high as 100% since the start of the contract.

Need for More Collection Vehicles
As noted above, Halton Recycling currently uses up to 3 more trucks to collect recyclables on any given day than what was anticipated in the current contract. This has saved the City over $500,000 the last couple of years. Staff and Halton have agreed that an increase of two collection vehicles over and above what is required in the existing contract is warranted.

Staff and Halton Recycling are unable to agree on the cost of providing the additional recycling vehicles and therefore staff are seeking competitive bids for providing additional recycling trucks and will report back to Committee on the outcome.

Under the current contract, each truck collects recyclables from approximately 6,000 homes. Therefore collection of approximately 12,000 homes within the area currently collected by Halton Recycling Limited has been added to a Request for Proposals (RFP) being released in late May.

Summary of Staff Analysis: The removal of approximately 12,000 homes (about 2,000 households per Zone) from the Halton Recycling contract is warranted. Collection of recyclables from these homes will be inserted into the RFP that previously dealt with Lambeth and Area. It is noted that the recyclables from these homes represent the portion of recyclables that are over and above that anticipated by the existing contract and that soliciting competitive proposals is practical for this portion of the recycling program. This is the only element of the existing contract that City staff have confidence in by soliciting competitive proposals.

Processing Costs
The current mix of recyclables has a higher percentage of materials that are more costly to process, such as plastics, and a lower percentage of materials that are easy to process, such as newspapers and aluminium containers as compared to the original contract. In addition, the reduction of the higher value materials in the recycling program has resulted in a different revenue structure for the changing mix of materials. Halton Recycling has submitted a thorough analysis of the additional processing time to handle the increased volume and the associated cost of maintaining this service at $162,700.
The increase in costs is approximately $6.5 per tonne processed. This increase in costs is less than what would have been expected given the change in composition. The increase in processing costs was estimated using typical material processing costs provided by the Waste Diversion Organization (WDO), insight from the ongoing Regional MRF Feasibility Study and experience from professionals in the business.

Summary of Staff Analysis: The submitted cost increase is very reasonable. It is less than what would have been expected based on typical material processing costs provided by the Waste Diversion Organization (WDO) and other related sources.

Summary – Total Estimated Increase in Recycling Program Costs
The additional processing, collection and fuel surcharge costs are expected to increase recycling costs by approximately $750,500 per year, as summarized on the table below, or $7.20 per curbside household. This amount represents a 16% increase over the current gross cost ($4,650,000) of the recycling program that services all households.

<table>
<thead>
<tr>
<th>Area of Cost Increase - For Households with Curbside Collection</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Increase in Existing Collection Costs</td>
<td>$152,800</td>
</tr>
<tr>
<td>b) Increase in Fuel Costs (using Adjustment Factor)</td>
<td>$135,000</td>
</tr>
<tr>
<td>c) Need for More Recycling Trucks (2 trucks)</td>
<td>$300,000</td>
</tr>
<tr>
<td>d) Increase in Processing Costs</td>
<td>$162,700</td>
</tr>
<tr>
<td><strong>Sub-Total Estimated Increase in Recycling Program Costs</strong></td>
<td><strong>$750,500</strong></td>
</tr>
<tr>
<td>e) Increase in Waste Collection Services in Lambeth and Area</td>
<td>$120,000</td>
</tr>
<tr>
<td><strong>Total Estimated Annualized Cost for Contracted Collection Services</strong></td>
<td><strong>$870,500</strong></td>
</tr>
</tbody>
</table>

Comparison to Other Municipalities
Figure A-3 and Table A-4 present a comparison of the recycling program costs between the City and other municipalities in Ontario. The table shows that London’s recycling costs (prior to WDO funding and recycling revenue) will still be below typical costs in other municipalities. It is staff’s understanding that cost increases in service delivery are anticipated province-wide as municipal contracts are adjusted due to the changing quantity of recyclables, composition of recyclables and the impact of increasing high volume, low weight materials.

Figure A-3: Comparison of Private Sector Delivery Costs – Gross Cost Per All Households
### Table A-4: Summary of Estimated Recycling Program Gross Costs for All Households

<table>
<thead>
<tr>
<th>Year Recycling Contract Signed</th>
<th>Estimated Recycling Gross Cost Per Household (all households)</th>
<th>Municipality</th>
</tr>
</thead>
<tbody>
<tr>
<td>After 2003</td>
<td>$49</td>
<td>Region of York</td>
</tr>
<tr>
<td>After 2003</td>
<td>$38</td>
<td>Region of Niagara</td>
</tr>
<tr>
<td>1999 - 2003</td>
<td>$43</td>
<td>Average of 11 large municipalities that signed contracts between these years</td>
</tr>
<tr>
<td>September 2006</td>
<td>$36</td>
<td>City of London (with two year extension)</td>
</tr>
<tr>
<td>2005</td>
<td>$31</td>
<td>City of London</td>
</tr>
</tbody>
</table>

**Summary**

Staff analysis has confirmed that cost increases are justified and, in fact, are lower than what would be achieved if the City requested competitive proposals at this point in time based on a review of similar jurisdictions in Ontario. The per household cost with the contract extension is lower than that typically being paid by other municipalities in recently signed contracts.

Given the number of uncertainties that have been identified and analyzed wherever possible, it is not possible to determine what is the most appropriate long term direction for the City's recycling program at this time. Experience has shown that well designed, longer term contracts (e.g., 7 to 10 years) are the best method to ensure competitive pricing for these types of services.

City staff are also seeking the required clarifications and will report on these as part of the 60% Waste Diversion strategy being prepared for September 2006. It is anticipated that a number of the uncertainties should be resolved within the next one to two years. Extending the contract with Halton Recycling will allow time to determine the most appropriate long term direction for the City's recycling program.