

## Data Report #2

# 2013 Blue Box Program Cost & Revenue

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December 8, 2014

### Introduction

Each year, WDO receives financial reports from municipalities on the quantity of printed paper and packaging recycled through their Blue Box programs. The financial data includes the cost of operating the Blue Box program and revenue from the sale of Blue Box materials after sorting.

Annual reports from municipalities are required by WDO and are used to calculate the industry funding to operate their Blue Box programs. The amount of funding is approximately 50 per cent of the program.

This report highlights trends in the financial data associated with the Blue Box program in 2013 and over the previous five-year period. The data used to generate this analysis can be found in the following two spreadsheets available on the WDO website:

1. [2013 Blue Box Financial Data by Municipal Group](#); and
2. [2013 Blue Box Financial Summary](#).

The 2013 results indicate very modest increases in costs and weights of material recycled. As discussed in the 2013 Blue Box Tonnage Highlights report, this trend is mainly indicative of the shifting composition of printed paper and packaging in the Blue Box. Most notably, packaging and containers are moving to lighter-weight plastics. Other traditionally heavier materials, such as printed paper, are collected in lower quantities. These patterns are important for the discussions to develop more accurate waste and recycling metrics.

### Analysis

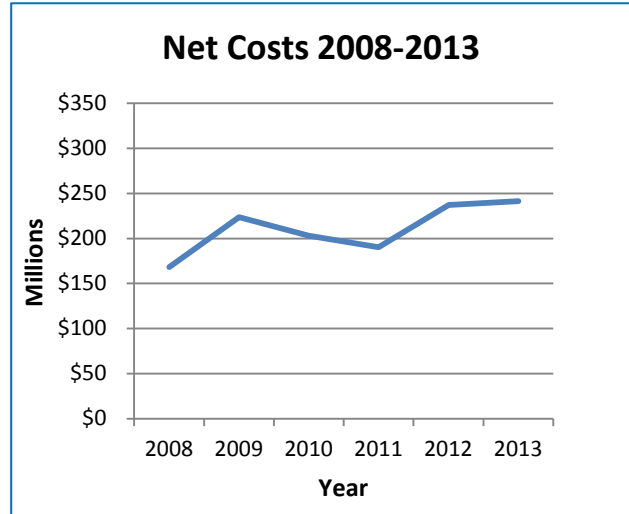
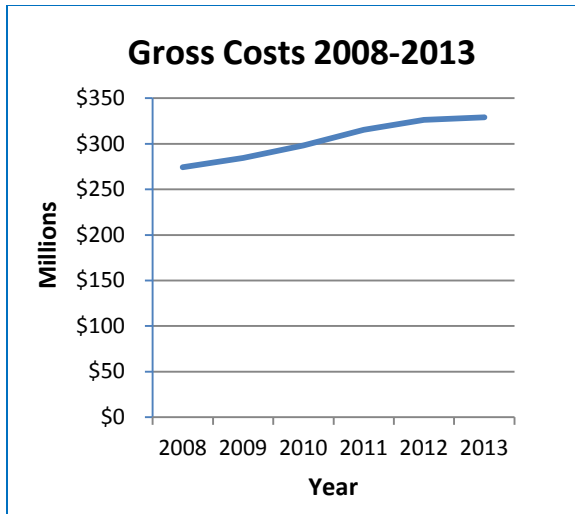
#### Stabilizing costs, less revenue in 2013

Gross costs reported by municipalities to operate the Blue Box program in Ontario increased by 0.8% from \$326.3 million (M) in 2012 to \$329.0 M in 2013. Over the five-year period from 2008 to 2013, there was an average annual increase in gross costs of 4.0%.

Revenue from the sale of Blue Box material<sup>1</sup> reported by municipalities decreased 1.6% from \$89.1 M in 2012 to \$87.7 M in 2013.

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<sup>1</sup>Municipalities also report other revenue associated with the program (e.g., sales of Blue Boxes).



Commodity fluctuations affect revenues

Revenue received for Blue Box materials is subject to fluctuations in market pricing of commodities. Except for aluminium and mixed plastics, the Ontario commodity prices for all other Blue Box materials decreased from 2012 to 2013<sup>2</sup>. These annual variances can have a marked influence on the net costs of operation.

Net costs of the Blue Box program, after accounting for the sale of recycled material and any possible revenue-sharing agreements with contractors, increased 1.7% from \$237.2 M in 2012 to \$241.3 M in 2013. Over the five-year period since 2008, there was an average annual increase in net costs of 8.7%, though the majority of the five-year increase occurred from 2011 to 2012. Municipalities reported a \$35 M decrease (-29%) in revenue from 2011 to 2012, which was largely responsible for the observed spike in net costs in 2012. Revenue was similar in 2013 (\$87.7 M) to 2012 (\$89.1 M).

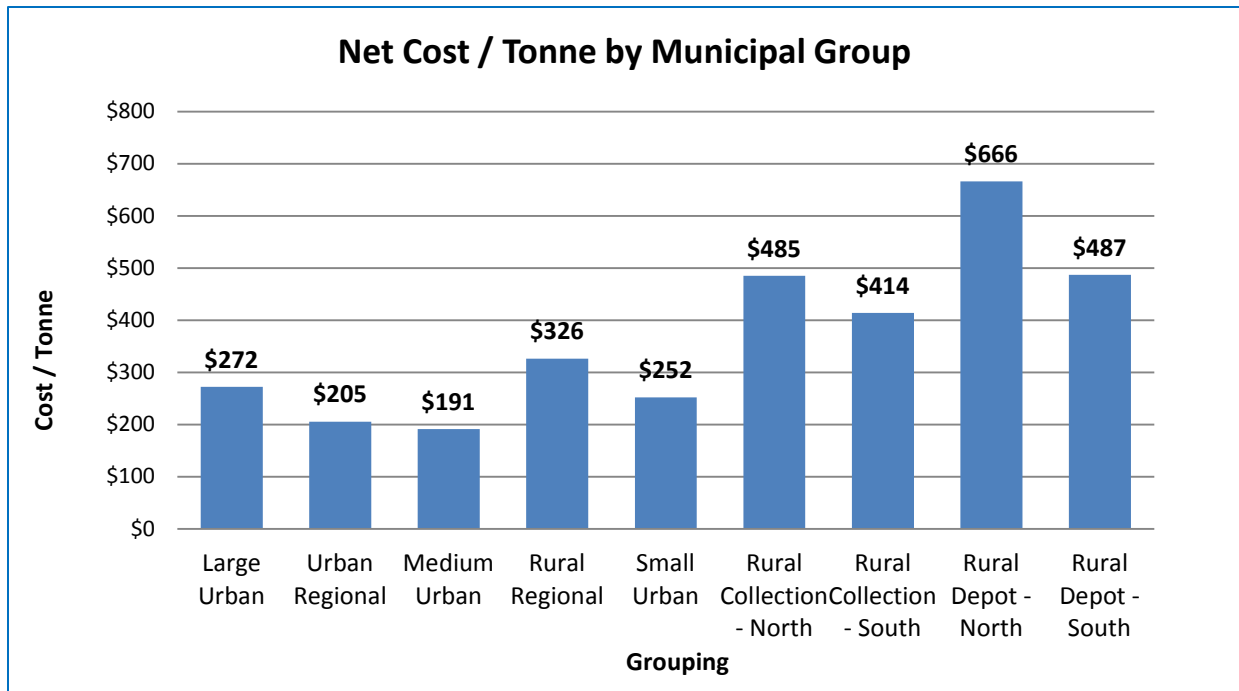
The net cost per tonne of material recycled in the Blue Box program increased 0.9% from \$266 per tonne in 2012 to \$268 per tonne in 2013.

The per-tonne cost trend was similar to the net cost trend. The average year over year growth of the net cost per tonne was 9.6% over the past five-year period.

Different program types affect operation costs

In the chart on page 3, net cost per tonne is shown according to municipal groupings. Municipalities are sorted into nine groupings, each according to a range of municipal and program characteristics (e.g., population density, curbside service, North vs South location) with respect to Blue Box program efficiency and effectiveness. Differences in program characteristics can have significant effects on the net costs of operation, ranging from \$191 per tonne (Medium Urban grouping) to \$666 per tonne (Rural Depot – North grouping). Recycling programs in the North typically have higher recycling net costs per tonne, as larger shipping distances must be travelled to process and market the material, and there are fewer tonnes over which to spread the costs. Denser urban programs can collect a high volume of material within shorter distances.

<sup>2</sup> <http://reclaystewardedge.com/wp-content/uploads/2014/01/Dec-2013-Ontario-Price-Sheet.pdf>



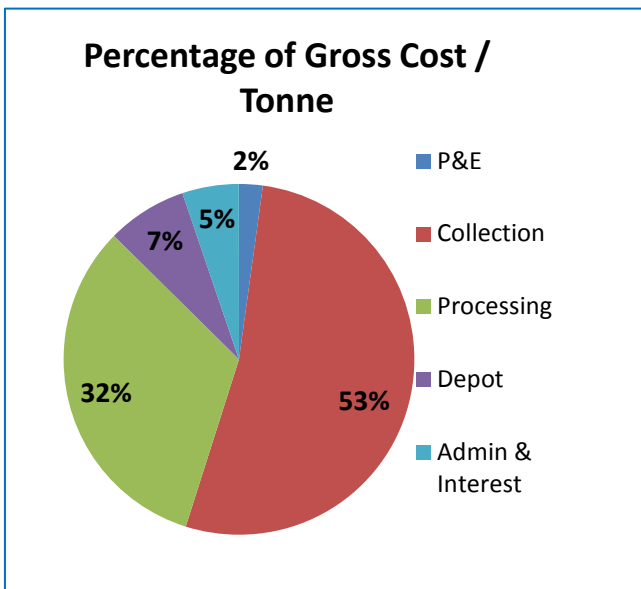
Collection and processing are the two largest costs

The two posted Blue Box financial spreadsheets also outline the reported total and per-tonne operating and capital costs of the Blue Box program needed for municipalities to:

- Promote and Educate (P&E) their communities about the program;
- Collect curbside Blue Box material;
- Process the Blue Box material; and
- Manage drop-off depots.

Additionally, WDO calculates and includes costs<sup>3</sup> for the administration of the program, as well as interest<sup>4</sup> on amortization of capital equipment. The average gross cost/tonne spent by Ontario municipalities on the Blue Box program is allocated as follows:

- P&E - \$8;
- Collection - \$193;
- Processing - \$119;
- Depot - \$27; and
- Admin & Interest - \$19.



While some categories did not change from 2012 to 2013, there was a 2.6% decrease in collection costs/tonne and a 4.4% increase in processing costs/tonne overall.

<sup>3</sup> WDO calculates administration costs of 3% for services that are contracted out and 5% for services provided by the municipality.

<sup>4</sup> Interest is calculated as the prime interest rate of the year of capital purchase.