

Background

Each year, the Resource Productivity and Recovery Authority (RPR) receives reports from municipalities, recycling associations and First Nations (“municipal programs”) on the amounts of materials diverted under each of their residential waste diversion programs—the Municipal Datacall. This includes submitting tonnage and financial information for residential Blue Box material collected from local residents. In addition, RPR requests the submission of tonnage data for all other non-Blue Box materials the municipal program operates, including hazardous or special waste, waste electrical and electronic equipment, organics, garbage, and other materials.

This report is the second in a series of five reports based on data collected in the 2016 Datacall. It covers the financial data related to the quantity of printed paper and packaging marketed¹ locally. It includes the cost of operating the Blue Box program and revenue from the sale of Blue Box material.

This report highlights trends in the financial data associated with the Blue Box Program over the previous five-year period. The data used to generate this analysis is included in the *2016 Blue Box Program Costs and Revenue* spreadsheet on the RPR website.

Municipal Datacall Reporting

In 2016, 241 municipal programs submitted information to RPR through the Datacall, representing over 98% of Ontario’s total population.

Verification of Data Reported

There are several check points to ensure that the data reported into the Datacall by municipal programs is accurate. After the Datacall reporting period ends, RPR attempts to verify the data provided by each program in its Datacall submission form through a data verification process. Although staff assess each section of the Datacall, the municipal program remains responsible for the correctness of data submitted. The verification process can include the confirmation of any data variances from the previous year and an assessment of costs and tonnages reported.

Trends

Gross Blue Box operational costs reported by municipal programs, shown in Figure 1, increased from \$343.5 million (M) in 2015 to \$347.0M in 2016. Over the five-year period from 2012 to 2016, there was an overall increase in gross Blue Box costs of 6.3%.

¹ Blue Box materials sold by municipal programs to end markets after collection and processing at a material recovery facility.

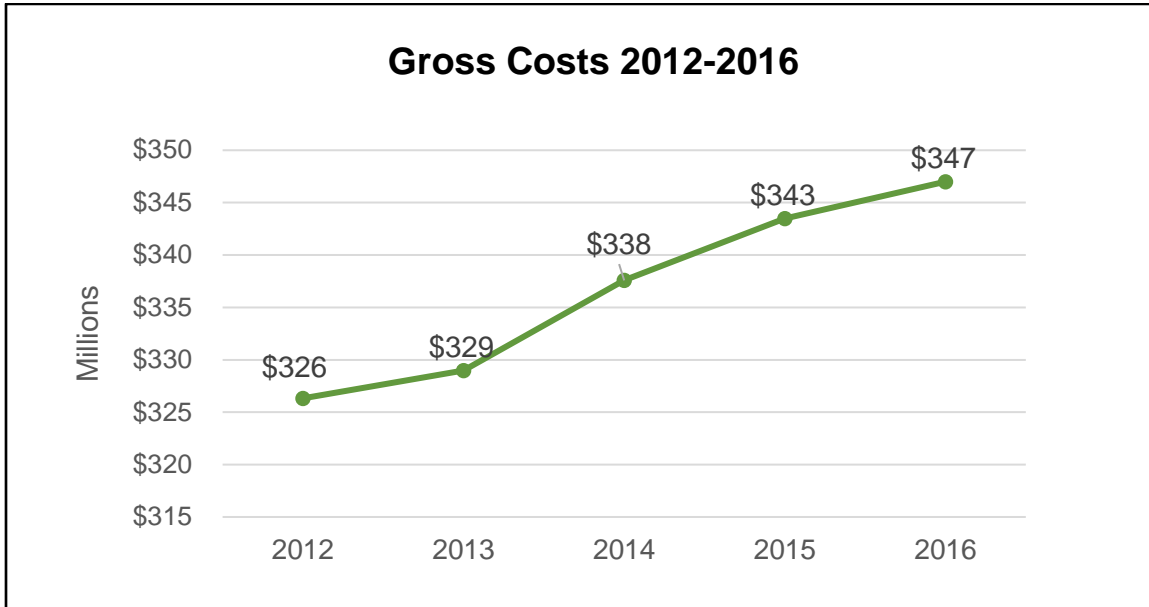


Figure 1: Gross Costs 2012-2016

Revenue received for the sale of Blue Box materials is subject to fluctuations in market pricing of commodities. Compared to 2015, municipal revenue increased in 2016 from \$85.8M to \$95.1M, a 9.8% change.

Commodity prices from 2014 to 2015 for paper products saw approximately a 40% increase in prices, steel and aluminum an increase of less than 5%, and plastics a small decrease of less than 5%². The increased marketed value of mixed paper was the primary driver behind the increase in overall revenue, however this was tempered by a 4.3% and 15.5% decrease in printed paper and mixed paper respectively. Further, while plastic products lost a small amount of value, 0.8% more tonnage was marketed leaving little change in revenue generated through plastics. Finally, aluminum and steel saw relatively stable marketed tonnes totals along with prices, with a small decrease in total tonnage coinciding with a small increase in price.

In 2016, net Blue Box Program costs, after accounting for the sale of recycled material and any possible revenue-sharing agreements with contractors, decreased by 2.28% from \$257.7M in 2014 to \$251.9M in 2015. Over the five-year period since 2011, there has been an overall net cost increase of 35.8%.

The net cost per tonne of material recycled in the Blue Box Program decreased by 0.3% from \$302 per tonne in 2015 to \$301 per tonne in 2016.

²<http://reclaystewardedge.com/wp-content/uploads/2013/05/July-2017-Price-Sheet.pdf>

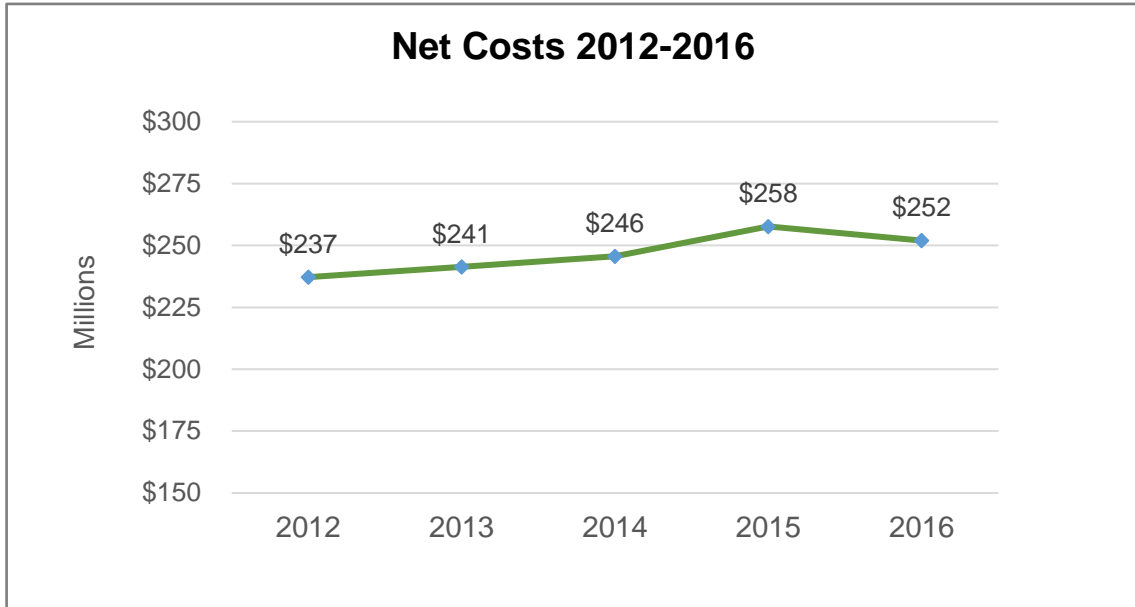


Figure 2: Net Costs 2012-2016

The overall change in net costs from 2012–2016 in net cost per tonne is 13%.

Expanded in Figure 3, net cost per tonne can be shown by municipal grouping. Each municipal program is sorted into one of nine groups using a range of municipal and program characteristics (e.g. population density, curbside collection availability, and North vs. South location). Differences in program characteristics can have significant effects on the net costs of operation, ranging from \$210 per tonne (Urban Regional grouping) to \$524 per tonne (Rural Collection–North grouping). Recycling programs in the North typically have higher recycling net costs per tonne, as longer distances must be travelled to collect, process and market the material, and there are fewer tonnes over which to spread the costs. Denser urban programs collect a higher volume of material within shorter distances.

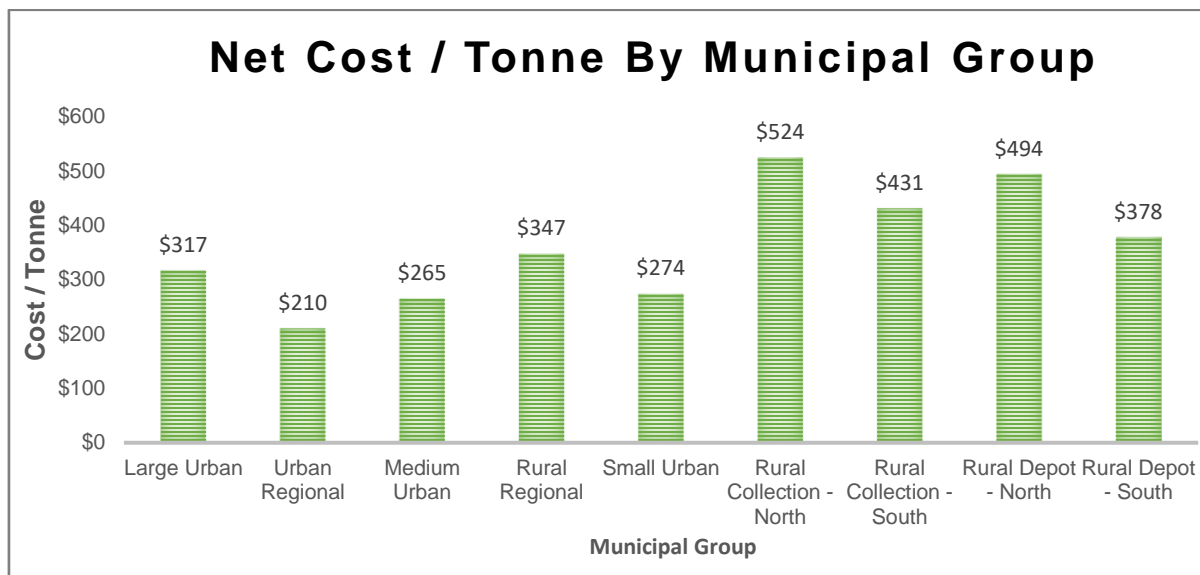


Figure 3: Net Cost/Tonne by Municipal Group - 2016

The Blue Box cost and revenue spreadsheet related to this report outlines the total and per-tonne operating and capital costs spent by each municipal program in 2016 to:

- Collect curbside Blue Box material;
- Process the Blue Box material;
- Manage drop-off depots; and
- Promote and educate their communities about the program.

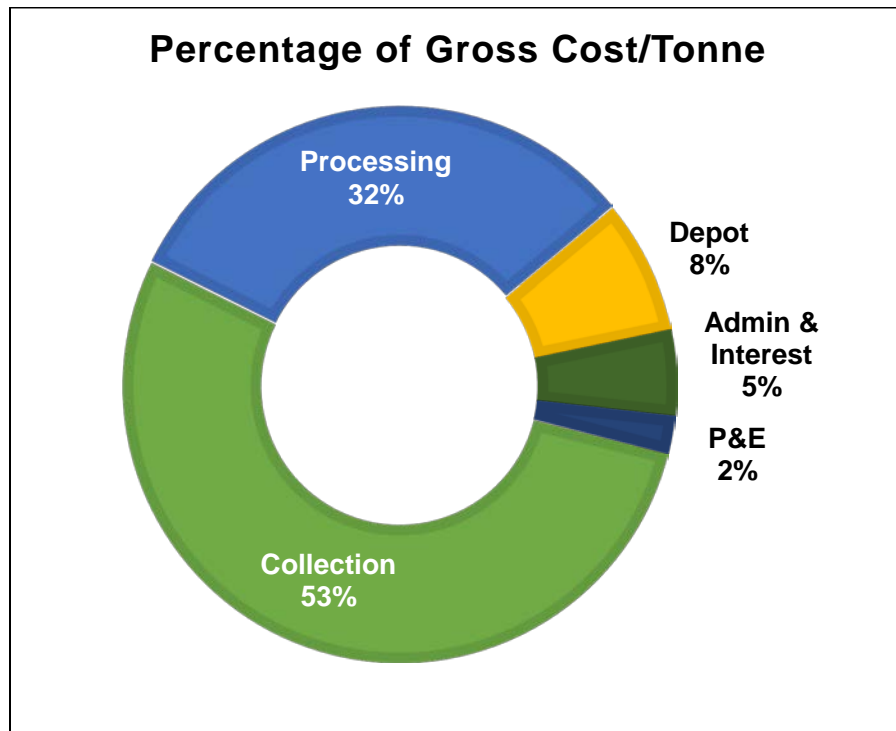


Figure 4: Net Cost/Tonne by Municipal Group - 2016

Additionally, RPRA calculates and includes costs³ for the administration of the Blue Box Program, as well as interest⁴ on the amortization of capital equipment. The average gross cost/tonne spent by Ontario municipalities on the 2016 Blue Box Program is allocated as follows:

- Collection of Blue Box Materials - \$157;
- Depot - \$23;
- Processing - \$98;
- Promotion and Education (P&E) - \$7; and
- Administration & Interest (on capital) - \$15.

For further information, please contact atacall@rpra.ca

³ RPRA calculates administration costs of 3% for services that are contracted out and 5% for services provided by the municipal program.

⁴ Interest is calculated as the prime interest rate of the year of capital purchase.

Note: Some programs have combined collection and processing costs within one contract and therefore report a combined cost under either collection or processing.