

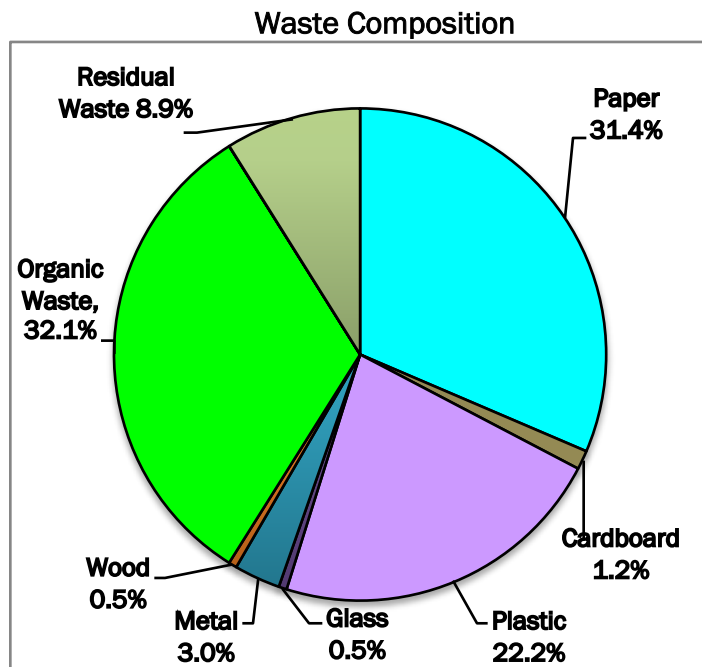
# Georgian Barrie Campus Waste Audit Summary

2cg Inc. was retained by Georgian College to undertake a waste audit and waste reduction workplan for Georgian College Barrie campus.

The goal of this waste audit was to determine waste composition, the success of current recycling programs and to identify possible improvements and additional wastes which could be recycled.

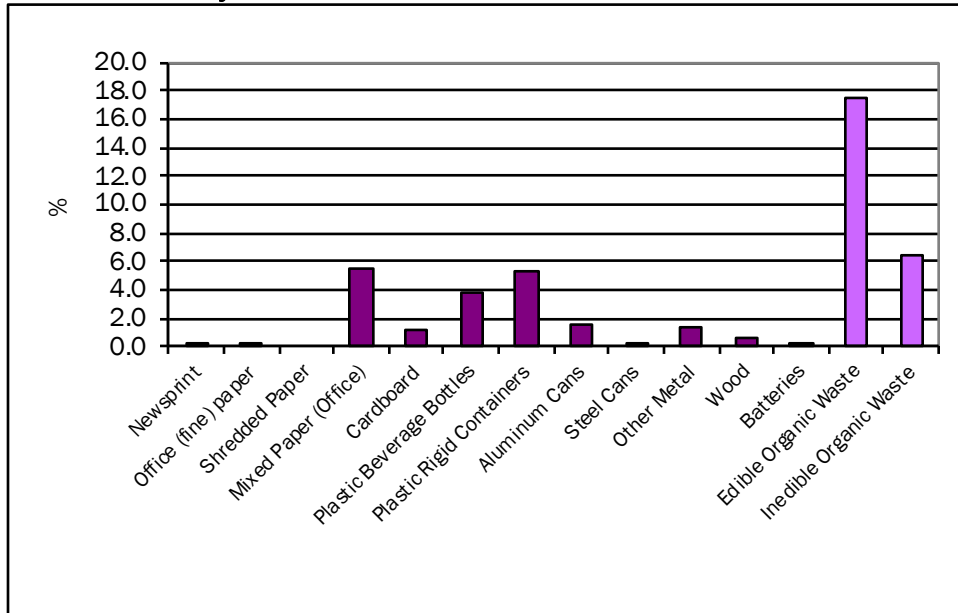
In 2018, Georgian Barrie Campus generated an estimated 428.9 tonnes of waste (disposed and recycled). Of that, an estimated 216.9 tonnes was recycled for a diversion rate of approximately 50.6%.

All non-hazardous solid wastes generated from a 1 day period were sorted on 27-28 November 2018 to assess waste composition. The most prevalent wastes found in the waste stream (black bags) included organics, paper and plastic followed by residual waste, metal, cardboard, glass and wood.



It was estimated that approximately 19.8% of wastes audited had established recycling programs.

### Overview of Recyclable Wastes in the Overall Waste Stream



### Waste Reduction Work Plan and Recommendations

The time-line for this waste reduction work plan is from **1 January 2016 to 1 January 2020**. This work plan sets out the framework to meet this goal.

Based on this audit, it is estimated that approximately 19.8% of wastes destined for landfill are readily recyclable with existing programs. This results in about 42 tonnes (i.e. 19.8% \* 212 tonnes of waste) being potentially available for additional waste diversion. This does not include another 51 tonnes of food waste that could be diverted through an expanded (i.e. to include post-consumer food waste) organics program. In total, 93 tonnes of waste could be reduced from the 429 tonnes of waste generated by Georgian College in 2018 by utilizing these programs.

### General Initiatives

To facilitate continuous improvement it is **recommended** that Georgian-Barrie campus set a goal and engage in a process to:

- Increase waste diversion rate to 70%

To help develop a more accurate estimate of waste diversion it is **recommended** that the tracking of waste and recycling weights (i.e. garbage, printed paper and packaging, cardboard etc.) be improved. This could include using monthly reporting from waste haulers and density estimates from dumpsters to estimate annual tonnage for the various waste diversion programs.

It is **recommended** that Georgian staff document all recycling activities (i.e. number and type of carts emptied, weights of mixed container bin etc.) to improve the accuracy of future waste diversion rate calculations.

It is **recommended** that Georgian continue to replace individual garbage and recycling cans in offices to centralized waste stations at all of Georgian's locations. Georgian has started this process and can continue it across the rest of the campuses.

In general, it is **recommended** that Georgian prepare and update communications and education material annually (i.e. for Earth Week). This should include information on reduction, re-use and recycling programs, successes, missed opportunities and areas for improvement. Refined communications and education material could include posters, printed materials and displays that report on progress to date and provide a call to action for students and employees on Georgian's diversion goal and how they can best participate.

According to Ontario Regulation 102/94 the waste reduction work plan should have regard to:

- Reduction as the first objective;
- Re-use as the next objective; and
- Recycling as the final objective.

To facilitate continuous improvement it is **recommended** that Georgian-Barrie Campus undertake the following efforts to reduce, re-use and recycle wastes:

#### **Reduction Initiatives**

The amount of paper used could be reduced through ensuring efficient use of paper. Students and staff will be encouraged to use both sides of paper when printing and photocopying documents.

#### **Re-Use Initiatives**

It is **recommended** that Georgian investigate forging links with community organizations such as Habitat for Humanity (building materials) and Goodwill Industries (furniture, other items) to facilitate additional re-use of wastes.

#### **Recycling Initiatives**

It is **recommended** that Georgian strengthen its recycling programs.

For instance, 3.8% of the waste stream consists of beverage containers that can be easily recycled, up from 3% in 2017.

For instance, 7% of the waste stream consists of paper that can be easily recycled, down from 13.3% in 2017.

For instance, 24% of the wastes generated at the Barrie campus consist of food waste, up from 21% in 2017. There are diversion opportunities for much of this waste. This does not include paper towels and tissue and compostable containers. In the winter of 2015, a pilot study was created to look at post consumer food waste but it was discontinued. A pilot study has been commissioned for the beginning of 2018 and is so far successful. It is **recommended** that this post-consumer organics program pilot continue to capture this waste stream and be developed into a permanent program.

Improved communications and education materials (i.e. posters etc.) described above will help better advertise and educate students and staff of available programs and how best to participate. Additional bins to divert organic wastes could be set out and the organics diversion programs could be expanded to residences.

### **Implementation Plan**

The work will be coordinated by:

Mr. Shawn Watkins, Manager, Physical Resources, Georgian College

The work includes Georgian staff meeting with relevant staff to update the plan to reduce, re-use and recycle wastes and to update communications and education material by **1 July 2019**. This should include a summary of waste audit results.

A copy of the full Waste Audit Report and Waste Reduction Work Plan is available to all staff upon request.