

## BUSINESS RECYCLING RESOURCES PROGRAM

# Selecting and Using a Waste Audit Tool



Richmond's Business Recycling Resources Program provides support to help businesses increase recycling and manage their waste.

The Business Recycling Resources Program has created two calculators to help businesses assess and manage their waste as a key step towards increasing recycling and waste diversion.

These tools can be used together or separately to determine the best mix of recycling and garbage collection requirements for contracts, and to take the next steps to increase your recycling.

**Waste Composition Calculator**  
Understand the different types of waste generated.

**Waste Diversion Calculator**  
Identify how much is being diverted from the landfill.

## WASTE ASSESSMENT AND PLANNING PROCESS

1 Complete waste audit

Current step

2 Assess business waste

3 Create a Recycling & Waste Reduction Plan

Free customized coaching, support and resources are available at any step.



## About the Waste Composition Calculator

The Waste Composition Calculator helps your business understand the different materials found in your waste stream – an important step in identifying opportunities to increase recycling and decrease waste.

The calculator is easy to use. Simply input information about the different types of garbage and recycling your business generates, and the calculator provides charts showing the percentages for each material.

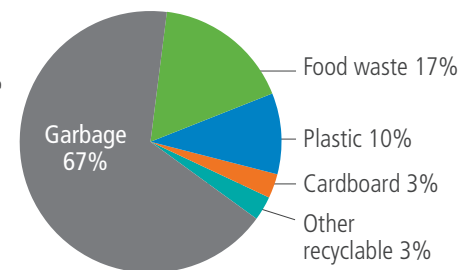
### BENEFITS FOR YOUR BUSINESS

By gaining a better understanding of your waste composition, your business can plan ways to:

- Reduce waste.
- Assess your current garbage and recycling requirements to determine the best mix of collection services.
- Identify opportunities to use services like the Richmond Recycling Depot.
- Train staff to reduce contamination.
- Conserve money and resources.

### Sample waste composition

*Types of waste will vary for each business.*



### SELECT THIS TOOL IF:

- Your business is unsure about what materials are recyclable and what still goes in the garbage.
- Your business wants to increase recycling but needs assistance identifying recycling services available.
- Your business wants to develop a better understanding of the waste generated and the services required to assess waste hauler contract options.



Resources in this document and other information:  
[richmond.ca/BusinessRecycling](http://richmond.ca/BusinessRecycling)





## About the Waste Diversion Calculator

The Waste Diversion Calculator helps your business estimate the total annual amount of waste your business generates and how much is diverted from the landfill.

This calculator will provide businesses with a benchmark percentage of waste diverted, which enables them to create a plan and set goals to increase waste diversion.

### What is waste diversion?

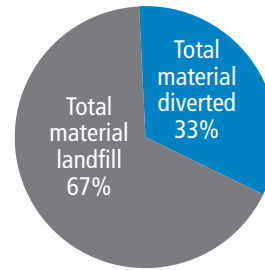
Waste diversion is the process of preventing waste from going into the landfill. Diverting waste by recycling is valuable, but it's also important to assess opportunities for your business to create less waste and to reuse, repair and refill.

### BENEFITS FOR YOUR BUSINESS

Tracking waste diversion regularly can be valuable to:

- Understand how your business waste changes over time.
- Gauge the effectiveness of the actions your business has taken to reduce waste and increase recycling.
- Show customers the steps you're taking to reduce waste and increase recycling.

### Sample waste diversion



### SELECT THIS TOOL IF:

- Your business already has a recycling plan in place.
- Your business is wants to increase waste diversion.
- Your business would like a waste diversion percentage to share with customers.

See Resources section online:  
Reuse, Refill & Rethink Waste



## Using the Data Provided by the Calculators

These tools are just the first step in better understanding the types of waste your business creates and identifying opportunities to increase recycling and waste diversion.

Each calculator has the ability to record and compare historical data so your business will be able to track improvement as you work towards your waste diversion goals.

### NEXT STEPS

See the Business Recycling Resources guides on *Assessing Business Waste* and *Creating a Recycling & Waste Reduction Plan* for your business to better understand your waste audit results and use that information to create a plan.



## WE'RE HERE TO HELP!

Interested in learning more or need assistance with your waste composition or diversion study? Make an appointment for a free coaching visit from the Business Recycling Resources team.

**Online** [richmond.ca/BusinessRecycling](https://richmond.ca/BusinessRecycling)  
**Email** [BusinessRecycling@richmond.ca](mailto:BusinessRecycling@richmond.ca)  
**Phone** 604-276-4010



# Using the Waste Composition Calculator

The Waste Composition Calculator is an Excel spreadsheet that helps businesses calculate and understand the different types of waste they generate. This calculator is available for download at [richmond.ca/BusinessRecycling](http://richmond.ca/BusinessRecycling).

## Instructions

### STEP 1

Collect all your garbage and recycling for a typical day.

### STEP 2

Separate the items into categories and add them to the table in the calculator. The table includes pre-populated categories that you can customize for your business.

### STEP 3

Weigh each category (you can use pounds or kilograms, as long as it is consistent).

### STEP 4

Record your findings in the table under the current year. The calculator allow for entries over multiple years to allow you to monitor your waste composition over time.

### STEP 5

Record how many days per year your business operates in the Annual Days of Operation cell.

### Recommended Tools

- Scale
- Sorting surface, such as plastic sheets
- Rubber gloves
- Tongs
- Protective clothing
- Face masks

Fill in only the current year. Sample shows entries for multiple years for demonstration purposes.

	2024	2025	2026	2027	2028	2029
Paper	1	2	5			
Cardboard	2	2	2			
Food Waste	9	7	5			
Containers	2	4	7			
Glass	5	5	3			
Soft Plastic	6	7	6			
Depot Items	1	4	2			
Aluminium	7	4	7			
Other Metals	8	4	7			
Garbage	7	9	9			

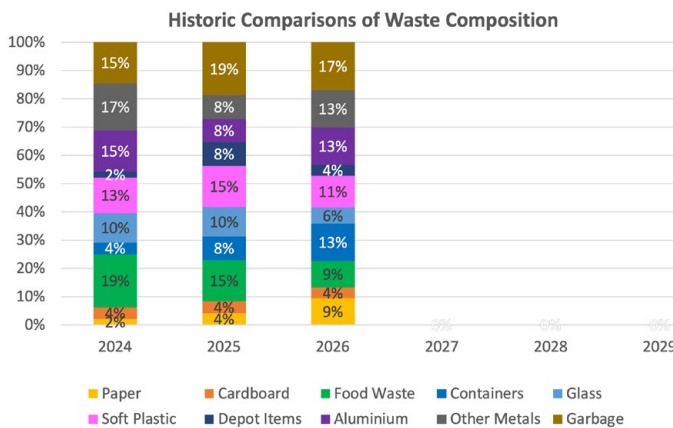
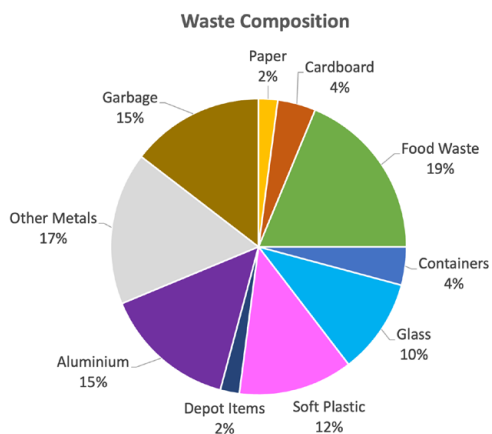
Annual Days of Operation: 260  
Total Annual Waste Weight: 12480

As you add in the weights, the table below will calculate the percentages.

	2024	2025	2026
Paper	2%	4%	9%
Cardboard	4%	4%	4%
Food Waste	19%	15%	9%
Containers	4%	8%	13%
Glass	10%	10%	6%
Soft Plastic	13%	15%	11%
Depot Items	2%	8%	4%
Aluminium	15%	8%	13%
Other Metals	17%	8%	13%
Garbage	15%	19%	17%

## Results

Your results will be displayed in a pie chart as well as bar charts showing how your waste composition changes over time, if you continue to use the calculator each year.





## Using the Waste Diversion Calculator

The Waste Diversion Calculator is an Excel spreadsheet that helps businesses estimate the total amount of waste they generate and how much they divert from the landfill.

$$\text{WASTE DIVERSION} = \text{RECYCLE} + \text{REUSE} + \text{REPURPOSE}$$

### Instructions Using Data from a Waste Hauler or Waste Composition Calculator

**STEP 1:**

Contact your waste hauler and request your latest hauling numbers for garbage and recycling (e.g., cardboard, food waste/organics, etc.). If you have already completed the Waste Composition Calculator, you can use that data here.

**STEP 2:**

Record the weights into the waste categories in the table (you can use pounds or kilograms, as long as it is consistent). The table includes pre-populated categories that you can customize for your business.

	Weight	%
Paper	1	3%
Cardboard	2	6%
Food Waste	6	17%
Containers	3	8%
Glass	4	11%
Soft Plastics	4	11%
Depot Items	5	14%
Other:	4	11%
Other:	5	14%
Garbage	2	6%
<b>Total Weight</b>	<b>36</b>	<b>100%</b>

Annual Days of Operation:

*As you add in the weights, the column to the right will calculate the percentages.*

**STEP 3:**

Record how many days per year your business operates in the Annual Days of Operation cell.

### Instructions for Manual Calculation

**STEP 1:**

Collect all your garbage and recycling for a typical day.

**STEP 2:**

Separate the items into two categories:

- Waste that goes into the garbage
- Waste that can be diverted from the landfill (e.g., recycling, organics, donated, reused etc.)

**STEP 3:**

Weigh each category and record the weights in the table, using the Other category for waste that can be diverted (you can use pounds or kilograms, as long as it is consistent).

**STEP 4:**

Record how many days per year your business operates in the Annual Days of Operation cell.

- #### Recommended Tools
- Scale
  - Sorting surface, such as plastic sheets
  - Rubber gloves
  - Tongs
  - Protective clothing
  - Face masks

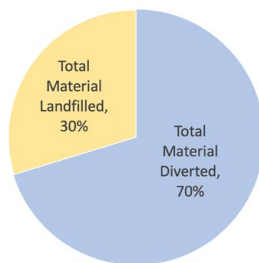
	Weight	%
Paper		0%
Cardboard		0%
Food Waste		0%
Containers		0%
Glass		0%
Soft Plastics		0%
Depot Items		0%
Other:		0%
Other:	25.9	70%
Garbage	11.1	30%
<b>Total Weight</b>	<b>37</b>	<b>100%</b>

Annual Days of Operation:

*As you add in the weights, the column to the right will calculate the percentages.*

## Results

Your results will be displayed in a pie chart as well as a table showing how your waste diversion changes over time, if you continue to use the calculator each year.



Year	Total Waste Generated (kg or lbs)	Total Waste Diverted (kg or lbs)	Total Waste Landfilled (kg or lbs)
2024	9620	26	11
2025			
2026			
2027			
2028			
2029			