

Public Liaison Committee Member Questions

PLC Meeting December 10, 2024

Electrical and Electronic Equipment

With respect to Microwaves the city web site still considers these to be like stoves and refrigerators and does not have them listed as “electronic waste” for free disposal (according to google the average weight of a microwave is 55 pounds, of a refrigerator 250 pounds).

Electronic waste are those items listed in Ontario Regulation 522/20 Electrical and Electronic Equipment (EEE), made under the Resource Recovery and Circular Economy Act. For which producers are ultimately responsible for collecting and recycling. The City allows these materials to be dropped at the WRIC for collection by the Producer Responsible Organization but is not in charge of the list of accepted materials.

Microwaves are not part of the EEE list of acceptable items for the EEE program.

Clear Bags

Surprised to learn that garbage was to be disposed of in clear plastic bags. On a recent trip to [department store] I noted they do not stock clear plastic bags (at least I could not find any) but they do have lots of white bags. Then I checked at [grocery stores], these grocery stores have I would say 70%-80% white bags and a small stock of clear. Stores stock what sells. Strikes me the bulk of bags showing up in the waste stream will be white not clear. How useful is the “clear bag policy”?

The use of clear bags, or no bags, in grey carts allows City staff to see what’s inside. We need to ensure there are no hazardous items that could harm staff or damage our trucks and/or facilities. Clear bags also allow us to see what kinds of materials residents are putting in their garbage, to understand if there are commonly missorted items that we need to address to ensure we are diverting valuable items from landfill.

Bag requirements are part of our regular communication campaigns and tactics. This includes decals on waste collection trucks and social media posts, roadside signs, campaigns on the waste app and waste website (guelph.ca/waste), and the sorting guide magnets available to residents in many City facilities. During our annual *curbside inspection program*, staff visit 2,400 households and inspect waste carts at the curb for compliance, and help educate residents on proper sorting and bag use.

In the past we have communicated with brand owners such as Glad to ensure they continue to stock clear bags in Guelph stores. We also visit retail locations around Guelph on a regular basis to verify that clear bags are available for sale. There are several locations around the city that offer clear bags, and as you note, retailers continue to carry opaque bags due to consumer demand and the open market. We continue to have discussions around how we can better work with retailers and residents to communicate this messaging.

Waste Metrics

The annual environmental reports quantify both waste per person and waste per family. Now by definition a family consists of at least two people, however when you divide waste per person into waste per family you get slightly different numbers for the last two years and just over 1.5 persons per “family”. Suspect denominator is “residential unit”, or is it number of grey bins? While I cannot now locate it, I recall read in a Guelph water report that the family was assumed to be 2.3 people which is consistent with “google search results”. Issue of performance measurement might be interesting to review at one point.

The Waste Resource Innovation Centre (WRIC) Annual Report, prepared for and submitted to the Ministry of Environment, Conservation and Parks in accordance with our Environmental Compliance Approval, provides annual waste quantities managed at the WRIC. This report does not quantify the waste by population.

The Environmental Sustainability Report, prepared by the City to report on progress towards the Race to Zero campaign, publishes total waste per person and total waste per household. Waste per household is a metric that aligns with the Solid Waste Management Master Plan (SWMMP). Historically, environmental targets were based on diversion rate. But the SWMMP concluded that switching to a measure of waste per household provides a better metric to account for waste reduction and circular economy initiatives and focusses on the waste managed by the City. The total number of households will vary each year. Waste per family is not a reliable metric used by the City.

Waste Composition Audits

Does Guelph carry out periodic waste composition analysis...?

Yes. From the SWMMP:

9.3.6.2 – The City will conduct comprehensive seasonal waste audits to gather information on what households are throwing out and how well they are participating in waste diversion programs. This will help the City understand future waste management needs

Guelph's Waste Audits

...assist in working towards the 2024-2027 Strategic Plan objective 11.2:

“Retain and recover as much value as possible from our resources by using circular economy principles identified in our Solid Waste Management Master Plan.”

- Waste program performance is measured by metrics of generation rate, diversion rate, and capture rate
- Currently done by contractor AET Group Inc
- Audits are done seasonally and then averaged to annualize the data
More datasets => less variability between data points => greater accuracy

So, who gets 'audited'?

The areas sampled have diverse demographics

Single-family: 100 households from across the city

Multi-Family: 5 addresses, 2 of which are townhouse complexes

Downtown: includes a stretch of Wyndham St. that has a mix of residences, businesses, and public users.

2024 Season	Audit	Duration	Date
Winter	Single Family	2 weeks – 8 days	March
	Multi Family	2 weeks – 2 days	
	Downtown	2 weeks – 2 days	
Spring	Single Family	2 weeks – 8 days	June
	Multi Family	2 weeks – 2 days	
	Downtown	2 weeks – 2 days	
Summer	Single Family	2 weeks – 8 days	September
	Multi Family	2 weeks – 2 days	
	Downtown	2 weeks – 2 days	
Fall	Single Family	2 weeks – 8 days	December
	Multi Family	2 weeks – 2 days	
	Downtown	2 weeks – 2 days	

How does waste get collected & sorted?

The Contractor gathers all required material on collection day in their truck (MR garbage and recycling are brought to them by City trucks).

At the WRIC, they separate the material based on source and stream...

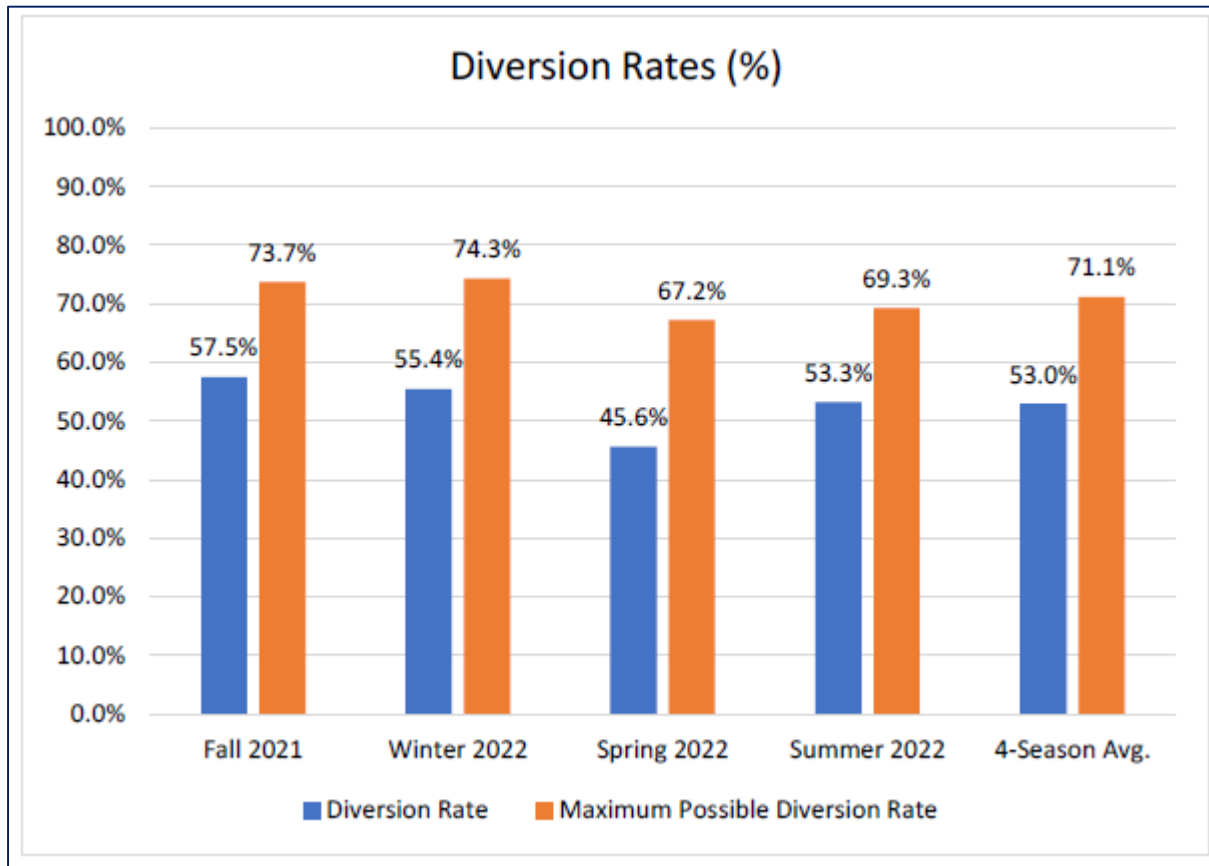
...then it is sorted according to a category list of 79 materials (ie. #2 plastic beverage bottles, paper laminate packaging, avoidable food waste etc.)



Above: 'Containers with food' found in the SF recycling stream

Left: 'Avoidable' and 'Unavoidable' food waste in the SF organics stream

2021/2022 Audit Summary



Recycling capture rate =

$$\frac{\text{Recyclable materials in recycling carts}}{\text{Total recyclable material found in all carts}}$$
 = 80.7 %

Organics capture rate

$$= \frac{\text{Organic materials in organics carts}}{\text{Total organic material found in all carts}}$$
 = 71 %

Overall capture rate for all
divertible materials = 77.2%

The most recent audit

Multi-residential organics stream data from the last audit:

The fourth and final audit of the year is currently underway. Results can be presented after the 4-season audit report is completed in 2025.

