

**From:** [Rafaela Francisconi G Pepinelli](#)  
**To:** [Infrastructure and Environment](#)  
**Cc:** [Councillor McKelvie](#); [Councillor Colle8](#); [Councillor Morley](#); [Councillor Pasternak](#); [Councillor Perruzza](#); [Councillor Saxe](#); [Mayor Chow](#); [Chelsea Rochman](#)  
**Subject:** [External Sender] Comment from U of T Trash Team on Item IE 9.3 Single-Use and Takeaway Items Reduction Strategy  
**Date:** November 28, 2023 4:16:16 PM  
**Attachments:** [Outlook-pbfibzww.png](#)  
[Report\\_food-service-businesses\\_Year1.pdf](#)  
[Single-Use-Foodware-Toronto-Waterfront-2023-Report\\_Year 2.pdf](#)  
[Letter\\_UofTTrashTeam\\_SingleUseStrategy.pdf](#)

---

Dear Chair McKelvie and Members of the Infrastructure and Environment Committee,

On behalf of the [U of T Trash Team](#), we write in support of the City's Single-use and Takeaway Items Reduction Strategy. The U of T Trash Team is a science-based community outreach organization with a mission to increase waste literacy in our community and reduce plastic pollution in our ecosystems. Plastic pollution is a critical issue in our society, including locally. Thousands of metric tonnes of plastic waste enter the Great Lakes annually, posing a risk to wildlife and contaminating sportsfish and drinking water.

**Our research supports policies that reduce plastic waste and pollution in our waterways, and specific to this letter informs a positive impact to our community, local businesses, and the environment when we shift from single-use foodware to reusable materials.**

Our project, [Ditching Disposables: Single-use Foodware](#), in collaboration with the Toronto Environmental Alliance (TEA), aims to understand how Toronto restaurants and consumers are currently using single-use foodware, and the challenges and opportunities local businesses and the public may experience upon reducing single-use foodware by adopting low-waste reusable alternatives. Over the past three years, we have surveyed and interviewed approximately 100 customers and 200 business owners and managers from across Toronto including sit-down restaurants, quick-service restaurants, coffee shops, and bakeries. We have also run models to estimate how proposed policies will reduce waste (likely reducing plastic pollution) and save costs.

Here are key insights from our research:

**1. Businesses and customers support the actions to reduce single-use foodware that make up the Single-Use and Takeaway Items Reduction Strategy.** Our results demonstrate a willingness among businesses to reduce single-use foodware, indicating local support for the Single-use and Takeaway Items Reduction Strategy. We found that many Toronto foodservice businesses are interested in reducing single-use foodware, and most are already taking steps to reduce it. In 2023, 75% of surveyed businesses told us they are thinking about, or are ready, to shift to reusable options. Moreover, some restaurants that already offer reusable options noted that reducing single-use items increase cost savings and customer loyalty. Additionally, customers support actions to reduce waste. 92% of customers surveyed reported that they want restaurants and coffee shops to do more to reduce single-use foodware, while 89% want businesses to use reusable cups and dishes for dine-in.

**2. Restaurants and coffee shops in Toronto want more guidance and support to help them effectively, safely and competitively reduce single-use foodware.** Businesses expressed a need for educational campaigns for customers, information on the safety of reusable foodware from the City, and consistent municipal policies and programs. This suggests that policies will be more successful if the City, which can be in collaboration with local organizations, provides resources to help local businesses make informed choices about sustainable alternatives and relevant public health guidelines. We also recommend the implementation of an educational campaign directed at the public to increase awareness of the program. Finally, if policies are put in place, all businesses

will be equally responsible for reducing, which can alleviate any competitive burden that may be associated with relevant changes across businesses.

**3. Actions associated with the Single-Use and Takeaway Items Reduction Strategy will lead to waste reduction and cost savings.** To quantitatively predict policy benefits, we adapted a model from a US organization to the Toronto context. Specifically, we modelled the benefits of several policy scenarios within a specific area, using the Waterfront business improvement area (with 93 food-service businesses). Here, we share preliminary findings from one scenario – accessories upon request. If all businesses on the waterfront offered accessories upon request, the combined impact would be a reduction of >16 million single-use items, a diversion of 100 tons of waste, and savings of ~\$600,000 annually.

**As you can see from above, reducing single-use foodware will help businesses reduce waste, save money and meet their own goals to engage in environmentally friendly practices.**

For more details, please see the attached research report from [year one](#) and [year two](#).

Thank you so much for your time. We look forward to sharing more about our work with you to inform critical policies to reduce single-use foodware.

Kind regards,

Dr. Rafaela F. Gutierrez

Program Lead: Social Science and Educational Programs for the U of T Trash Team

Dr. Chelsea M Rochman

Assistant Professor in Ecology and Evolutionary Biology

Director of Operations for the U of T Trash Team

**Rafaela F. Gutierrez**, Ph.D. (she/her)

Program Lead: Social Science and Educational Programs (U of T Trash Team)

Postdoctoral Fellow

Department of Ecology and Evolutionary Biology

University of Toronto, St. George

Earth Sciences, Rm 3040

25 Willcocks St

Toronto, ON M5S 3B2

<https://uofttrashteam.ca/>





November 28, 2023

**Re: IE9.3 - Update and Action Plan on the Single-Use and Takeaway Items Reduction Strategy, including the Circular Food Innovators Fund**

Dear Chair McKelvie and Members of the Infrastructure and Environment Committee,

On behalf of the [U of T Trash Team](http://www.uofttrashteam.ca), we write in support of the City's Single-use and Takeaway Items Reduction Strategy. The U of T Trash Team is a science-based community outreach organization with a mission to increase waste literacy in our community and reduce plastic pollution in our ecosystems. Plastic pollution is a critical issue in our society, including locally. Thousands of metric tonnes of plastic waste enter the Great Lakes annually, posing a risk to wildlife and contaminating sportfish and drinking water.

**Our research supports policies that reduce plastic waste and pollution in our waterways, and specific to this letter inform a positive impact to our community, local businesses, and the environment when we shift from single-use foodware to reusable materials.**

Our project, [Ditching Disposables: Single-use Foodware](#), in collaboration with the Toronto Environmental Alliance (TEA), aims to understand how Toronto restaurants and consumers are currently using single-use foodware, and the challenges and opportunities local businesses and the public may experience upon reducing single-use foodware by adopting low-waste reusable alternatives. Over the past three years, we have surveyed and interviewed approximately 100 customers and 200 business owners and managers from across Toronto including sit-down restaurants, quick-service restaurants, coffee shops, and bakeries. We have also run models to estimate how proposed policies will reduce waste (likely reducing plastic pollution) and save costs.

Here are key insights from our research:

- 1. Businesses and customers support the actions to reduce single-use foodware that make up the Single-Use and Takeaway Items Reduction Strategy.** Our results demonstrate a willingness among businesses to reduce single-use foodware, indicating local support for the Single-use and Takeaway Items Reduction Strategy. We found that many Toronto foodservice businesses are interested in reducing single-use foodware, and most are already taking steps to reduce it. In 2023, 75% of surveyed businesses told us they are thinking about, or are ready, to shift to reusable options. Moreover, some restaurants that already offer reusable options noted that reducing single-use items increase cost savings and customer loyalty. Additionally, customers support actions to reduce waste. 92% of customers surveyed reported that they want restaurants and coffee shops to do more to reduce single-use foodware, while 89% want businesses to use reusable cups and dishes for dine-in.
- 2. Restaurants and coffee shops in Toronto want more guidance and support to help them effectively, safely and competitively reduce single-use foodware.** Businesses expressed a need for educational campaigns for customers, information on the safety of reusable foodware from the City, and consistent municipal policies and programs. This suggests that policies will be more successful if

the City, which can be in collaboration with local organizations, provides resources to help local businesses make informed choices about sustainable alternatives and relevant public health guidelines. We also recommend the implementation of an educational campaign directed at the public to increase awareness of the program. Finally, if policies are put in place, all businesses will be equally responsible for reducing, which can alleviate any competitive burden that may be associated with relevant changes across businesses.

**3. Actions associated with the Single-Use and Takeaway Items Reduction Strategy will lead to waste reduction and cost savings.** To quantitatively predict policy benefits, we adapted a model from a US organization to the Toronto context. Specifically, we modeled the benefits of several policy scenarios within a specific area, using the Waterfront business improvement area (with 93 food-service businesses). Here, we share preliminary findings from one scenario – accessories upon request. If all businesses on the waterfront offered accessories upon request, the combined impact would be a reduction of >16 million single-use items, a diversion of 100 tons of waste, and savings of ~\$600,000 annually.

**As you can see from above, reducing single-use foodware will help businesses reduce waste, save money and meet their own goals to engage in environmentally friendly practices.**

For more details, please see the attached research report from [year one](#) and [year two](#).

Thank you so much for your time. We look forward to sharing more about our work with you to inform critical policies to reduce single-use foodware.

Kind regards,

Dr. Rafaela F. Gutierrez

Program Lead: Social Science and Educational Programs for the U of T Trash Team

Dr. Chelsea M Rochman

Assistant Professor in Ecology and Evolutionary Biology

Director of Operations for the U of T Trash Team



# Food service businesses in Toronto are willing to change their practices around single-use and reusable foodware

March 2022



# Table Of Contents

<b>Introduction</b> .....	<b>1</b>
<b>1. Background</b> .....	<b>2</b>
<b>2. Methods</b> .....	<b>4</b>
<b>3. Results and Discussion</b> .....	<b>6</b>
<b>4. Conclusions and Recommendations</b> .....	<b>15</b>

## Introduction

Forthcoming regulations from federal and municipal governments to restrict and reduce single-use foodware present an important opportunity to address plastic pollution and achieve waste reduction and climate goals. As these regulations will impact local food service businesses in Toronto, data and insights from local businesses are important to shape policies, including Toronto's Single-Use Reduction Strategy.

The University of Toronto Trash Team and the Toronto Environmental Alliance conducted a study to understand the experiences of local business in reducing single-use foodware and switching to reusable alternatives. Through surveys and interviews, this research study gathered insights from local businesses about their challenges and opportunities, opinions on forthcoming regulations, and the support businesses need.



## Background

In 2020, an estimated 24 - 35 million Metric Tonnes of plastic waste entered global aquatic ecosystems (Borrelle et al., 2020). In the Great Lakes specifically, an estimated 10,000 tonnes of plastic waste enter each year (Hoffman and Hittinger, 2017). Increases in littered plastic waste are due to a combination of increased production of plastic, increased consumption of single-use plastic items, and poor waste management (Borrelle et al. 2020). In Canada, single-use packaging accounts for almost 50% of the plastic waste generated (Environment and Climate Change Canada, 2020). In response, national and local governments have committed to reducing plastic waste and pollution, and are advancing policies that focus on reducing single-use foodware and takeout items. The federal government's Canada-wide Strategy on Zero Plastic Waste includes a roadmap to address single-use plastics, and a ban on six single-use plastic items is expected by the end of 2022 (Environment and Climate Change Canada, 2021).<sup>1 2</sup>

The City of Toronto, in line with its Long-Term Waste Management Strategy's target of 70% diversion and circular economy goal, has been developing a Single-Use and Takeaway Items Reduction Strategy since 2018 to address non-recyclable single-use items made of plastic and other materials (City of Toronto, 2019).

In June 2021, Toronto's City Council approved the first voluntary phase of the Single-Use Reduction Strategy

encouraging businesses to voluntarily implement actions to reduce single-use items. As of the time of publication, the City is preparing for Phase 2 of the Single-Use Reduction Strategy, to be considered by City Council in June 2022, which will include mandatory measures to restrict certain single-use items. Proposed regulations would require that food service establishments 'Ask First' before providing single-use accessories such as utensils, straws, and stirrers as well as condiments, napkins, cup sleeves. Regulations would also require businesses to charge mandatory fees for single-use hot and cold drink cups, and single-use and reusable shopping bags (City of Toronto, 2022).<sup>3</sup>

In anticipation of policy changes, and to increase sustainability, some food service businesses in Toronto have already taken steps to reduce their single-use materials both for on-site and takeout food and drink. This includes providing reusable alternatives for takeout orders by allowing customers to 'Bring Your Own' (BYO) cup or container, or by providing services where customers can borrow or rent reusable takeout foodware. However, to meet the goals of the City of Toronto's Long-Term Waste Management Strategy, many more businesses must reduce their use of single-use foodware items. As such, it is critical that policies aimed at reducing single-use foodware are successful.

To help inform City decision-makers regarding the needs of businesses to reduce single-use foodware, the University of Toronto Trash Team and the Toronto Environmental Alliance, a



non-profit environmental organization, conducted a study to identify the challenges and opportunities associated with accepting or offering reusable options for takeout food and drink in local businesses in Toronto. Our study: 1) assessed the level of participation in reducing single-use foodware items in local businesses within Toronto; and 2) assessed the challenges and opportunities that local businesses experience with offering reusable takeout options. **Our findings summarize the potential for success in increasing and sustaining the use of reusable takeout options across Toronto to reduce single-use waste and plastic pollution.**



## Methods

Food service businesses which sell ready-to-eat food (i.e., cafes, dine-in and takeout restaurants) were the focus of the investigation. Ethical approval for interviews was obtained from the University of Toronto Research Ethics Board (REB) and written informed consent was obtained from all subjects before the study.

### **The research included two methods for collecting data from businesses:**

**a) Online surveys.** An online survey with closed and open-ended questions was sent to businesses through different online channels. We aimed to connect through community groups, including: Toronto's Reduces Groups Network, 80 Business Improvement Areas (BIAs), Zero Waste Toronto, and the Toronto Environmental Alliance. We also conducted outreach via social media (Twitter, Instagram and Facebook). Finally, we directly contacted 120 businesses from across the city identified through geo-targeted searches on Google Maps. The purpose of this survey was to determine if and how businesses were participating in activities to reduce single-use items, the types of activities, their motivations, and what challenges they faced. This survey also served to recruit business managers willing to participate in an interview (detailed below).

**b) Interviews.** From the surveys, businesses were identified and categorized based on their current level of participation in activities to reduce

single-use foodware items. Categories were as follows: 1) actively participating; 2) considering/planning to participate; 3) not considering participating yet and/or actively refusing to participate. Twelve businesses agreed to be interviewed. A semi-structured questionnaire was conducted over the phone or video call. Each interview lasted between 20 and 40 minutes, and questions related to the following topics: single-use and reusable foodware items used, motivations, and challenges or assistance needs to reduce single-use foodware. All interviews were conducted between August and October of 2021. NVivo-12 was used to organize and synthesize data.

It is important to note that we observed the effects of the pandemic due to the timing of our study. Precautionary COVID-19 restrictions implemented by public health authorities varied during the multiple waves of the pandemic. At multiple points between March 2020 and the survey period in Fall 2021, the Ontario government mandated food service businesses close all in-person services, allowing only contactless delivery and takeout. While not required by public health authorities, a number of restaurants and major chains suspended the use of reusable cups and foodware for onsite consumption in quick-service restaurants and stopped accepting customer-supplied reusable cups and containers. Both of these actions (i.e., increase in takeout and limiting reusables) caused a surge in consumption of single-use foodware (Molloy et. al, 2022). During the period of this study (August - October 2021), restaurants had reopened for onsite dining, but takeout was still a large

part of their business. Many, though not all, chains and individual restaurants restarted their acceptance of customer-supplied cups, containers and bags. This study was conducted during a period after restaurants had reopened for indoor dining and were preparing for new public health requirements. This affected participation in the survey and interviews, as businesses were focused on work related to reopening and felt they didn't have time to participate. Furthermore, because participation in this research was voluntary, businesses that already take actions to prevent or reduce the amount of single-use foodware items may be over-represented.

## Results and Discussion

Overall, 33 Toronto businesses completed the surveys and 12 agreed to an interview. Interviews were conducted with business owners or managers. All results and discussions below are based on the 12 businesses that participated in both the online survey and interview.

Interviewees represented a range of food service models, including high-end sit-down restaurants, casual restaurants/bars, cafes with or without seating<sup>4</sup>, and a bakery.

These businesses ranged from providing 100% takeout service (4 businesses), to 50 to 70% takeout (2 businesses), to just under 50% takeout (3 businesses), to very

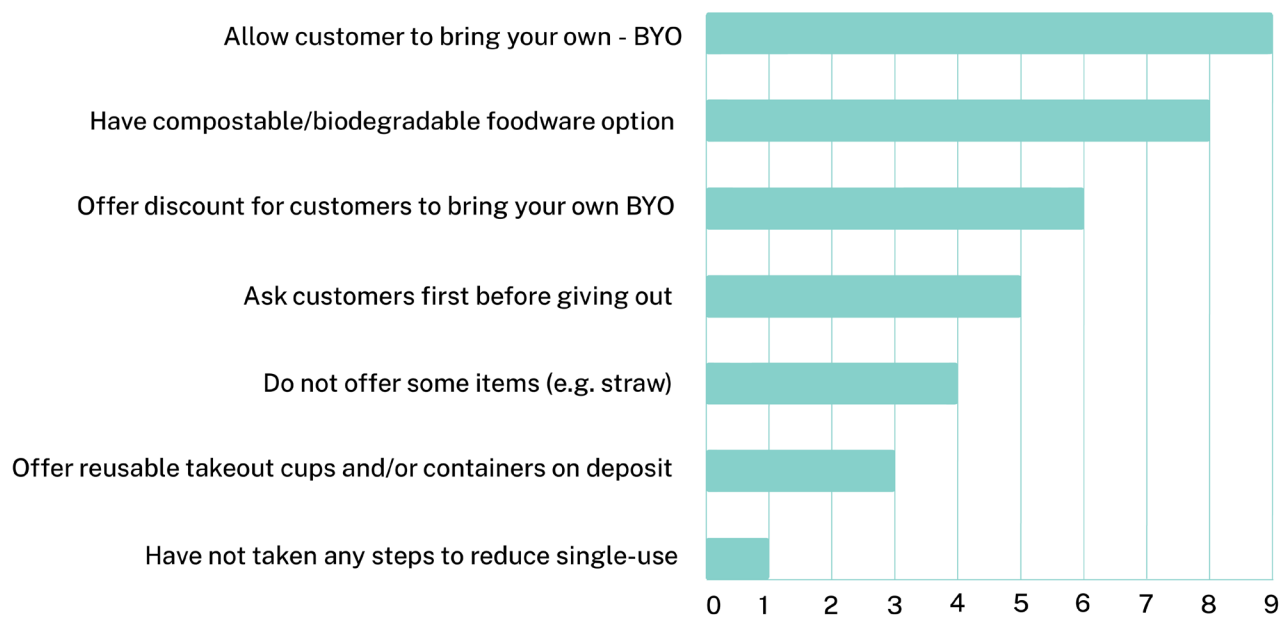
little takeout (e.g., when customers bring leftovers home: 3 businesses).

Takeout was the primary reason for the consumption of single-use foodware items, including taking leftovers home. Ten of the 12 interviewed businesses said that the amount of single-use foodware increased during COVID-19, due to an increase in takeout during mandated closures, and perceptions around the safety of reusables. Below, we summarize our key findings that can inform future programs and policies.

### 3.1. Businesses are already taking steps to reduce single-use foodware items

The majority of the interviewed businesses, 11 of the 12, reported that

### Have you taken any of the following steps to prevent waste or reduce the amount of single-use foodware you give out?



**Figure 1.** Steps taken by businesses in Toronto to prevent waste or reduce the amount of single-use foodware.



they have already taken actions to reduce single-use foodware items. Actions range from not offering and/or reducing the amount of single-use foodware provided, to shifting away from plastic-based materials, and providing reusable alternatives to single-use.

Five out of 12 businesses reported they usually ask customers if they want single-use foodware before giving them out; eight reported that they use compostable foodware; nine out of 12 businesses confirmed their customers are allowed to bring their own (BYO) container/mug for takeout and six of those provide a discount for customers who do so. Three businesses reported that they offer reusable takeout cups and containers for customers to borrow or rent (figure 1).

### **Reusable Takeout Foodware Services**

**While some businesses allow customers to bring-their-own reusable containers for takeout food or drink, a growing number of businesses in Toronto and around the world offer reusable foodware for customers to borrow or rent. After use, the foodware is returned, either to the same location or another participating restaurant or drop-off location.**

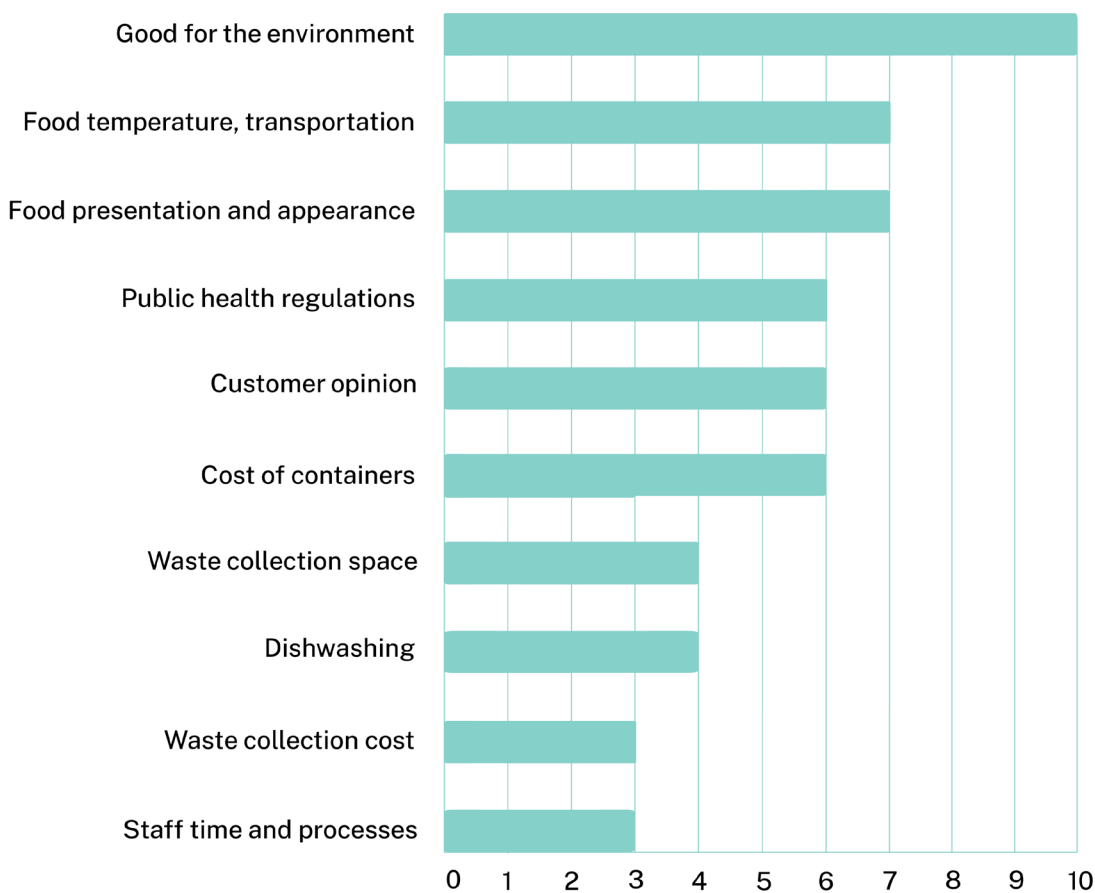
**Restaurants may offer this directly or subscribe to an external reusable takeout service that is offered in more than one restaurant. Some require the customer to join a free or paid subscription for the service and others require a refundable deposit at point of sale.**

**Examples in Toronto include: Muuse and Reego for hot drink cups, Suppli, Inwit and Ozzi for food containers.<sup>5</sup>**

We asked participants what they consider when making purchasing decisions for single-use foodware for takeout. The top answer was “good for the environment”, with 10 out of 12 businesses agreeing (Figure 2). Other top concerns include food temperature, food presentation, public health concerns, customer opinion and cost (Figure 2).

*“First and foremost, it’s about the environment, the extent to which our customers are interested in contributing to that respect. So, it is part of our brand to do things that are good for the environment”. – Restaurant owner, on choosing foodware.*

### What do you consider when choosing foodware for your business?



**Figure 2.** What businesses considered when choosing foodware.

### **3.2. Businesses are choosing more expensive foodware labelled ‘compostable’, believing that it is better for the environment**

Eight of the 12 interviewed businesses purchase bioplastic and/or compostable options for some or all of their single-use foodware items (including containers, cups, straws and utensils) because they believe that it is better for the environment. However, the City of Toronto discourages ‘compostable’ and bioplastics single-use foodware and does not accept them in the municipal organics program, nor in the recycling program (see sidebar).

Three of the businesses that use compostable plastic foodware reported they were aware that the City does not accept compostable foodware in the municipal Green Bin and they need to be placed in the garbage bin, but the others did not mention this. Of these, one had stopped purchasing compostable plastic, one said they were looking for alternatives, and one said the City should change its system.

As ‘compostable’ options are more expensive than other single-use items, this suggests that the businesses interviewed are willing to pay higher costs to meet environmental goals and customer expectations. However, clearer education and information about compostable and bioplastic foodware is needed to ensure that businesses and customers understand the environmental impact and the fact that it does not belong in the organics or recycling bins.

#### **Compostable foodware**

Compostable foodware refers to single-use items labelled and marketed as ‘compostable’ by a manufacturer and includes products made of bioplastics as well as paperboard sometimes lined with bioplastics.

‘Bioplastic’ refers to a variety of plastic materials including: bio-based plastic that is made of plant and biological materials instead of petroleum; biodegradable plastics designed to break down into smaller pieces in the environment; and compostable plastic designed to break down in specific industrial composting facilities leaving no toxic end products (5 Gyres BAN List, 2017).

Bioplastics have been shown to have the same or similar harmful impacts in the environment as plastic when not disposed of properly (National Geographic, 2018), as well as a significant upstream resource and energy footprint.

In Toronto’s municipal waste system, all compostable and bioplastics belong in the garbage bin: bioplastics are not accepted in the recycling stream due to the lowered recycling quality and are considered contamination; compostable foodware will not break down in Toronto’s organics processing in anaerobic digesters.

### 3.3. Businesses are offering reusable takeout options

We assessed the current activities and willingness to offer reusable foodware options for takeout food and drink to replace single-use foodware items. This includes allowing customers to bring their own reusable cups or containers (Bring-Your-Own or BYO) or offering reusable takeout services with cups and containers that customers can borrow and return.

As noted above, **nine of the 12 businesses reported that they allow customers to bring their own (BYO) reusable cups and containers when ordering takeout**, or when taking leftovers home. Six of the businesses interviewed offer a discount for BYO that ranges from 10 to 50 cents. Customer participation is generally low with most businesses estimating that less than 10% of customers BYO, and some estimating less than 1%.

*“As we are moving away from the pandemic, the number is slowly increasing. Right now, it is less than 10%.”*  
– Cafe owner, on the number of customers who bring their own cups.

However, some businesses had higher BYO participation: cafes had had the highest rate of customers actively participating, with one reporting 30% of customers BYO, and another stating that 60% BYO now (this business reported that 90% of customers BYO before the pandemic). These two coffee shops offered the highest discounts - 40 cents and 50 cents - and had the most visible and active promotion of the discount (e.g.

signs, staff ask customers at point of sale).

**Three of the interviewed cafes offer reusable takeout services for customers to borrow and return cups.** Three other businesses (2 restaurants and 1 cafe) reported that they are interested in, or considering reusable takeout services in the future. One other restaurant reported previously allowing customers to borrow reusable dishes without a deposit, but currently does not, citing the difficulty in getting the dishes back.

Based on our interviews, cafes have the highest customer participation in BYO reusable or using a reusable takeout foodware service. This suggests that cafes may face less barriers to shift to reusables, and the experiences in cafes can be shared as lessons for other restaurant types.

### 3.4. Businesses experience benefits and face challenges to providing reusable takeout options

When asked about their experience allowing customers to bring their own reusables or offering reusable takeout foodware services, businesses noted a number of benefits and challenges. Reducing single-use foodware items saves businesses money in the cost of items, but also the cost to order, stock and store the foodware. A few businesses noted that offering reusables was good for customer loyalty and addressing customer concerns about the environment.

In terms of challenges to expanding BYO,

a top priority raised by businesses is the need to shift customer behaviour so that they carry their cups and containers. A few suggested that the City could do more to promote and educate the public on the safety of reusable containers. Businesses noted that public health guidance for businesses on how to safely manage reusables, considering the different setups of many restaurants, would also be helpful. For reusable takeout foodware services provided in-store, there was strong support from multiple businesses for standardizing reusable cup and container sizes, and even a standardized city-wide reusable takeout foodware program.

This would reduce the cost and burden for individual businesses in terms of investment, logistics for processes and storage, and it would allow customers to pick up and drop off reusable foodware at many different restaurants.

***“I think it’s possible, but I think it would have to be standardized throughout the city. So just for efficiency’s sake, that way you know, systems of storage for these things, cleaning the things, stacking them, putting them somewhere, you know it would be interchangeable.”*** – Restaurant manager, on reusable takeout foodware.





### 3.5. Businesses need guidance and support to successfully reduce single-use foodware and shift to reusable options

We asked businesses what they needed in order to reduce single-use foodware. The most common answer was that they needed to better understand public health guidelines on safely managing reusables (e.g. BYO containers) and that they would benefit from help to identify better options (e.g. a list of suppliers for recyclable, compostable or reusable items) (Figure 3).

Business managers noted that guidance and a list of suppliers would save time due to the difficulty of sourcing the best options. This would benefit decision-making by companies that want to reduce single-use foodware in their establishment but don't know where to start.

*“You have to buy from many suppliers, more than 20 of them, because we are always trying to find the best [material] for the environment.”* – Cafe owner, on choosing foodware.

#### What would help you to reduce single-use foodware and choose reusable items in your business?

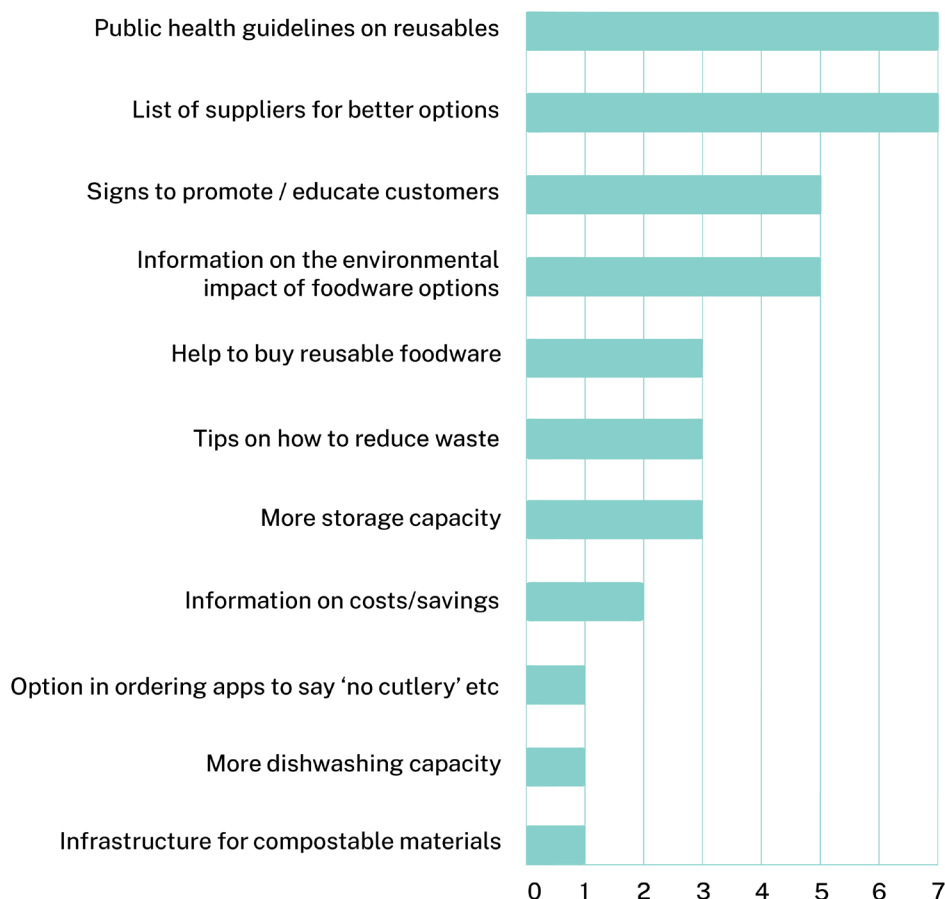


Figure 3. What would help businesses to reduce single-use foodware and choose reusable items.

Other frequently mentioned topics were related to promotion and education to customers about the impact of single-use foodware and the reusable alternatives, and help to purchase reusable foodware (Figure 3).

Some business owners suggested that guidance and education would benefit business owners and help them understand the processes and the potential money savings of reusables and allowing customers to bring their own cup or container.

*“But I think there needs to be an element of education provided somehow [to] get business owners’ attention. To help them understand that one change in the process is not as earth-shattering as they probably think it is, [...] and then to try and demonstrate to them that you do ultimately save a little bit of money by promoting it.”* – Cafe owner, on offering reusable takeout options.

### **3.6. Businesses will benefit from increased literacy on single-use foodware among their customers**

The majority of interviewed businesses do not actively promote their own reusable foodware options to their customers. This likely leads to less participation among customers (i.e. few people bring in refillable cups, or ask about reusable takeout foodware services). Municipal public education campaigns about the benefits of reducing single-use foodware can help businesses grow participation and become more comfortable encouraging customers to bring their own containers. Business owners reported that

It is not easy to change behaviours, and education and outreach may help people decide to take the extra effort in bringing their own containers or using a deposit and return system.

*“It takes a certain mindset [...] it’s a little bit more work for the customer than usual. So that doesn’t necessarily happen overnight. It takes some nudging, whether from government, from businesses making it easier to do that [...] It can take some time [...] So yes, we’re trying to do our part to make it just a little bit more convenient”*  
- Restaurant owner, on customers choosing reusable foodware

As mentioned above, one business interviewed stood out from the others in the number of actions they have taken to reduce waste. This business reported that 60% of their customers currently bring their own reusable containers. They also provide a 50 cent discount to customers who bring their own mug. They promote this programming with signage and train their staff to encourage customers to bring their own or participate in their deposit and refund program. These educational practices are likely a significant reason for customer participation and should be tested and implemented in other businesses in the city.

*“Just really good signage, letting people know that it’s an option. And also just training your staff to say, the first question when, you know, I’d like to have an almond latte. The first question should be ‘did you bring your own container today?’ And then you go forward from that, like, that is our first question”*

– Cafe owner, on their success with promoting bring-your-own containers.

### **3.7. Businesses support efforts by the City to reduce waste, but are unaware of the City’s Reduction Strategy**

During the interviews, we discussed the City of Toronto’s Single-Use Reduction Strategy, and the promotion of measures to reduce waste including “ask-first” policies before distributing single-use foodware, encouraging customers to “bring-your-own” containers, and encouraging the use of reusable takeout foodware services. Most businesses were not aware of the City’s current work, but most saw the Strategy as a positive and viable approach.

***“That will be great. We will support these kinds of programs and I think it will be successful”.*** – Cafe owner, on the City’s Single-Use Reduction Strategy.

We heard from a few businesses that the City’s policies need to move quickly, and that they want more action to be taken. A few noted that setting city-wide regulations and requirements would benefit their business as it would reduce risks of losing customers and costs for businesses if the program remains voluntary.

***“...The government needs to educate and inform the general population and impose a standard such that the restaurant doesn’t look like they’re imposing something on their clients on their own, because the problem is that being a restaurant, it’s all about goodwill.”***

– Restaurant manager, on the need for city-wide regulations.

Businesses noted that funding and targeted support from the government for small businesses is needed as part of the strategy. The suggestions included guidance and support that recognizes the unique needs of small businesses, financial support to purchase reusable foodware or install dishwashers, and a standardized, municipally-run takeout foodware program.



## Conclusions and Recommendations

In summary, Toronto food service businesses consider the environment and are already taking steps to reduce single-use items, offer reusable options, and noted that this benefits them in cost savings and customer loyalty. Restaurants and cafes in Toronto identified what supports would help them further reduce waste, including education campaigns, consistent municipal policies and programs, and funding support.

Based on our findings, below are recommendations to inform the City of Toronto's actions to reduce single-use and takeaway items.

- **Businesses care about the environment and are seeking guidance to take more action.** Many businesses are already taking steps to reduce single-use items, offer reusables and consider the environment when purchasing products. They would benefit from guidance on suppliers and clearer education about 'compostable' foodware.
- **Local businesses are already offering reusable takeout foodware alternatives - including allowing "bring your own containers" for customers and reusable takeout services - which offer valuable lessons for other businesses.** Businesses noted that using reusable foodware saves them money and is also something their customers

appreciate. The most successful examples of reusable takeout options appear to be in cafes, and lessons from these businesses can be shared with other types of food service businesses.

- **A municipal educational campaign targeting customers and the public on waste reduction would help business and public participation in waste reduction efforts.** Clear messages around the City's Single-Use Reduction Strategy and the benefits of reducing single-use foodware can help increase public participation and support.
- **Businesses want and will benefit from more guidance and information from the City on the safety of reusable foodware.** Public health messages clarifying that reusable foodware can be used safely, with guidance on how, could help businesses more confidently promote reusable options to reduce single-use foodware to their customers. Guidance on how to deal with 'bring your own' and other reusable foodware will support food service businesses in training and implementing those programs.
- **Businesses are amenable to municipal policies to reduce waste and see the City's Single-Use Reduction Strategy as a viable approach.** Some are ready for stricter and less voluntary measures to ensure that all businesses participate in the same actions to **reduce the impact on individual businesses.**

## Credits and References

March 2022

**This report was written by Dr. Rafaela F. Gutierrez (Program Lead of Social Science and Educational Programs from U of T Trash Team), Emily Alfred (Waste Campaigner for the Toronto Environmental Alliance) and Dr. Chelsea Rochman (Head of Operations and the Program Lead of Scientific Programming and Application from U of T Trash Team & Assistant Professor in Ecology and Evolutionary Biology, U of T). Graphic design by Maria Chernova.**

**About the University of Toronto Trash Team:** The U of T Trash Team is a science-based community outreach group made up of undergraduate and graduate students, postdocs, researchers, local volunteers and staff all working together with a common goal to increase waste literacy in our community while reducing plastic pollution in our ecosystems. Our local projects use research to inform policy and management, and education and community outreach to increase waste literacy, engage the public and implement effective solutions. We were founded in 2017 in collaboration with the Rochman Lab, part of the Department of Ecology and Evolutionary Biology at the University of Toronto.

**About the Toronto Environmental Alliance:** For over 30 years, the Toronto Environmental Alliance has campaigned locally to find solutions to Toronto's environmental problems. As a not-for-profit organization, we work with

communities to advocate for a green, healthy and equitable city.

### Acknowledgements

We thank our interviewees for participating in this study. We would like to thank the U of T Trash Team volunteers, Ronglan Cao, Devajyoti Chakraborty and Marcia Pedroza, for helping recruit the businesses and Yingxin Xie for help with transcription. We also want to thank Susan Debrececi and Jolene Cushman for supporting with communication.

### Endnotes

1. The Strategy was endorsed by the Canadian Council of Ministers of the Environment (CCME) in 2020.
2. The six items are single-use plastic shopping bags, utensils, straws, stirrers, some food containers (foam and black plastic) and beverage can ring carriers. These items were selected due to prevalence in litter audits, lack of recyclability and availability of non-plastic and reusable alternatives.
3. Toronto had previously planned to include bans and restrictions on expanded polystyrene foam and black plastic food containers. However, that was dropped from the Strategy when the Federal ban details were announced which would ban those items nation-wide.
4. One of the coffee shops is located inside a zero-waste store.
5. Food containers: Suppli (<https://www.mysuppli.ca/>), Inwit (<https://www.inwit.ca/>) and Ozzi (<https://www.planetozzi.com/>)

### References

5 Gyres (2017, November). Better alternatives now - b.a.n. list 2.0. Retrieved from <https://static1.squarespace.com/>

static/5522e85be4b0b65a7c78ac96/t/5acbd346562fa79982b268fc/1523307375028/5Gyres\_BANlist2.pdf

Alfred, E. (2019, September 19). Fed up with single-use plastics? The City needs to hear from you! Toronto Environmental Alliance. Retrieved from [https://www.torontoenvironment.org/2019\\_plastics\\_consultation\\_tips](https://www.torontoenvironment.org/2019_plastics_consultation_tips)

Borrelle, S.B., Ringma, J., Law, K.L., Monnahan, C.C., Lebreton, L., McGivern, A., Murphy, E., Jambeck, J., Leonard, G.H., Hilleary, M.A. and Eriksen, M., 2020. Predicted growth in plastic waste exceeds efforts to mitigate plastic pollution. *Science*, 369(6510), pp.1515-1518, <https://www.science.org/doi/10.1126/science.aba3656>

City of Toronto. (2016, June). June 20, 2016: Report on Final Long Term Waste Management Strategy. Retrieved from <https://www.toronto.ca/wp-content/uploads/2017/10/9803-Final-Long-Term-Waste-Management-Strategy.pdf>

City of Toronto. (2019, November 15). Reducing Single-Use & Takeaway Items. Retrieved from <https://www.toronto.ca/services-payments/recycling-organics-garbage/long-term-waste-strategy/reducing-single-use-takeaway-items/>

City of Toronto (2020, February). Single-Use and Takeaway Items Reduction Strategy Phase 2 Public Consultation Report. Retrieved from <https://www.toronto.ca/legdocs/mmis/2021/ie/bgrd/backgroundfile-166835.pdf>

City of Toronto. (2021, June 8). Single-Use and Takeaway Items Reduction Strategy - Stage 1. Retrieved from <http://app>.

[toronto.ca/tmmis/viewAgendaItemHistory.do?item=2021.IE22.6](https://www.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2021.IE22.6)

Environment and Climate Change Canada. (2020, February 20). Plastics challenge: Sustainable alternatives to plastic packaging. Retrieved from <https://www.ic.gc.ca/eic/site/101.nsf/eng/00087.html>

Environment and Climate Change Canada. (2021, December 21). Government of Canada moving forward with banning harmful single-use plastics. Retrieved from <https://www.canada.ca/en/environment-climate-change/news/2021/12/government-of-canada-moving-forward-with-banning-harmful-single-use-plastics0.html>

Hoffman, M.J. and Hittinger, E. (2017). Inventory and transport of plastic debris in the Laurentian Great Lakes. *Marine pollution bulletin*, 115(1-2), pp. 273-281, <https://pubmed.ncbi.nlm.nih.gov/27988025/>

National Geographic (2018, November 18). What you need to know about plant-based plastics. Retrieved from <https://www.nationalgeographic.com/environment/article/are-bioplastics-made-from-plants-better-for-environment-ocean-plastic?loggedin=true>

Rethink Disposable. <https://www.rethinkdisposable.org/>

Shen Molloy, Priyanka Varkey, Tony R. Walker. Opportunities for single-use plastic reduction in the food service sector during COVID-19, *Sustainable Production and Consumption*, Volume 30, 2022, Pages 1082-1094, ISSN 2352-5509, <https://doi.org/10.1016/j.spc.2022.01.023>.

# Reducing Single-use Foodware on Toronto's Waterfront

Understanding the challenges and opportunities for local businesses and customers



**Authored by:** Rafaela F. Gutierrez,  
Emily Alfred, Ludovico Behrendt,  
Chelsea Rochman





# Table of Contents

<b>Introduction .....</b>	<b>3</b>
<b>1. Research goals .....</b>	<b>4</b>
<b>2. Methods .....</b>	<b>5</b>
<b>3. Results .....</b>	<b>6</b>
<b>4. Discussion .....</b>	<b>11</b>
<b>5. Conclusions and Recommendations .....</b>	<b>12</b>
<b>6. Acknowledgements and References .....</b>	<b>13</b>

# Reducing Single-use Foodware on Toronto's Waterfront

In 2022, the University of Toronto Trash Team (U of T Trash Team) in partnership with the Toronto Environmental Alliance (TEA) conducted research to understand the challenges and opportunities local businesses experience in reducing single-use foodware and switching to reusable alternatives. Observational data were collected from 90 businesses and surveys were conducted with 45 businesses from the Waterfront Business Improvement Area (WBIA), including sit-down restaurants, quick-service restaurants, and coffee shops. Surveys were also conducted with 100 customers from the same area. Businesses and customers were asked about their current practices, perceptions, and support for regulations on single-use and reusable foodware.

This study is complementary to our previous study with food service businesses across Toronto in 2021. **The data from both studies show that both customers and businesses are interested in reducing waste, and that there is a need for more education and promotion of reusable foodware for takeout.**



# Introduction

**In Canada, single-use packaging accounts for almost 50% of the plastic waste generated and only 9% of plastic waste is recycled ([Environment and Climate Change Canada, 2020](#)).**

In response, as in other jurisdictions around the world, Canadian national and local governments have committed to reducing plastic waste and are advancing policies and strategies focused on reducing single-use foodware. The Canadian national regulation on [single-use plastic items](#) bans the use of commonly used plastic foodware as of December 2023, including utensils, straws and some containers (e.g. foam, black plastic).

In addition, the City of Toronto is developing regulations to restrict both plastic and non-plastic single-use foodware at the municipality level through their Single-Use and Takeaway Items Reduction Strategy, currently in a voluntary phase. Regulations being considered by the City of Toronto, and a number of Canadian municipalities, include policies such as requiring that accessories (utensils, condiments, straws) only be distributed upon request, that restaurants charge fees on single-use items, and that restaurants allow customers to supply their own cup or container (Bring-Your-Own).

Increasingly, to reduce waste, governments are going beyond just discouraging or restricting some single-use items, and using regulations to require the adoption of reusable foodware and packaging.

For example, since January 2023, restaurants and events in France are required to only use reusable foodware for on-site food and drink ([CMS, 2021](#)). The municipalities of Edmonton and Banff, Alberta have passed similar requirements for restaurants to only use reusable cups ([Edmonton, 2022](#)) and reusable foodware (Banff) for dine-in orders ([Banff, 2022](#)). Since January 2023, restaurants in Germany have been required to offer reusable, returnable takeout cup or container options at the same or lower cost than single-use for all food and drink orders ([News in Germany, 2022](#)).

In Canada, though not widely required, reusable takeout foodware services are a growing green sector - this includes local enterprises in Toronto providing reusable items such as stainless-steel containers or cups, plastic clamshell containers and plastic takeout containers. These programs are now at a small and local scale, or in pilot phases for larger institutions and chains. To truly replace single-use foodware, deliberate efforts will be needed to scale these up ([Reuse Refill Canada](#)).

To inform effective policies and strategies to reduce single-use items, it is critical to gather data and insights on how food service businesses are planning to, and are currently, taking steps to reduce single-use items in response to consumer demand and new regulations. In addition, it is valuable to assess customer perceptions of business efforts and regulations to reduce single-use items and provide reusable alternatives.

# Research goals

Our research goal was to evaluate the readiness of Toronto businesses and customers for these types of policies passed locally: to discourage unnecessary single-use (ask-first regulations), to adopt reusables for dine-in, and to use reusables for takeout (bring-your-own, or reusable services).

Our research focused on the [Waterfront Business Improvement Area \(WBIA\)](#) - a busy pedestrian area that includes dense residential, employment and recreation (tourist) areas and around 100 food service businesses selling ready-to-eat food. The WBIA represents businesses along the Queens Quay corridor between Bathurst and Cherry Street including the Toronto Island Park. Our study focused on businesses in this region, excluding Toronto Island (Figure 1).

Our study evaluated the attitudes and how ready the food service businesses and their customers are to both reduce single-use foodware, and to adopt reusable alternatives.

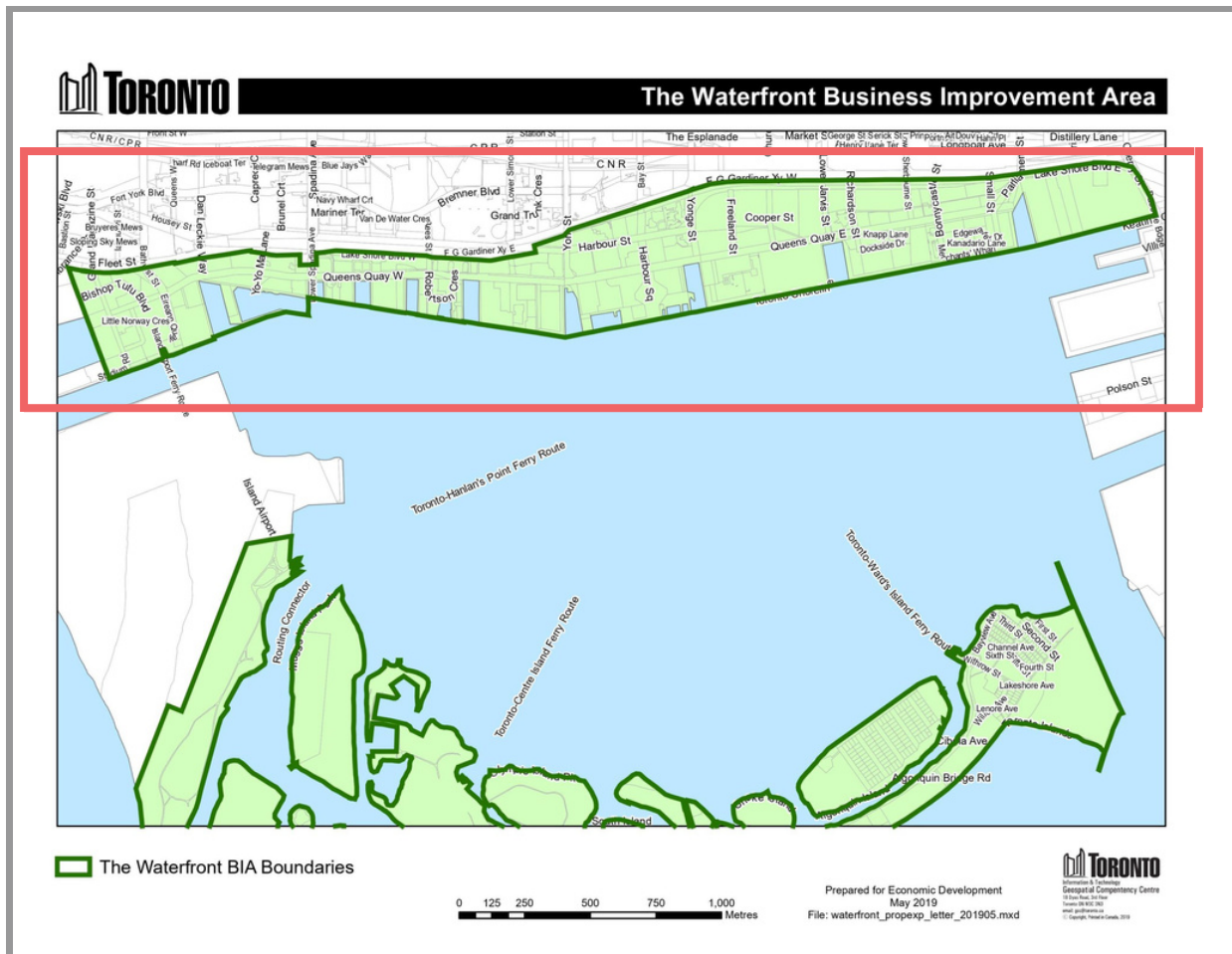


Figure 1: Area of the research with food service businesses and customers.



# Methods

Research was conducted during the summer of 2022 (from June to September). Customers and food service businesses which sell ready-to-eat food (i.e., coffee shops, dine-in and takeout restaurants) in the WBIA were the focus of the investigation. Ethical approval for this research was obtained from the University of Toronto Research Ethics Board (protocol number 41272). The research included different steps for collecting data from businesses:

1. We mapped and gathered a preliminary list of local food service businesses in the area selected. We then walked door to door to observe and collect preliminary data about single-use foodware and dine-in options from all the businesses identified in our list (90 businesses in total).
2. Next, we conducted a closed-ended survey with 100 customers on their perceptions and attitudes to the use of single-use and reusable foodware by local food service businesses, and their support for programs and regulations to reduce single-use items.
3. Later, we recruited businesses to conduct an in-person survey to supplement the observational data. Through both observation and a semi-structured questionnaire, we assessed the businesses' practices and perceptions about waste and single-use foodware, including their perceptions and planned response to forthcoming single-use regulations. We also assessed baseline data about their single-use foodware inventory and use.



## Customers

100 customers were randomly approached in public spaces entering or leaving food service businesses in the WBIA. They were surveyed about whether they live or work in the area, how often they visit local restaurants and asked about their thoughts on local businesses efforts and regulations to reduce single-use items and provide reusable alternatives. Most respondents (63%) live and/or work in the WBIA.

## Key Takeaways

### **1. Customers want businesses to reduce waste and support policy requiring businesses to provide reusables**

When asked about single-use foodware at restaurants for dine-in and takeout, the vast majority (92%) of customers said restaurants should do more to reduce single-use foodware. The majority (89%) also support a law that requires restaurants and coffee shops to serve customers with reusable cups and dishes for dine-in.

### **2. Customers are interested in reusable takeout services, and are looking for systems that are free and convenient <sup>1</sup>**

When asked about whether they would use a reusable takeout cup or container service, 55% of customers reported they would use it. Conversely, 16% and 26% of the participants reported they would almost never use or never use reusables, respectively.

We also assessed what factors would help customers use a reusable takeout service (Figure 2). The top selected answers were about convenience. Most (63%) wanted many locations for the service and drop-off. Most customers (63%) also noted they wanted the service to be free. Relevant to this, 24% of customers reported that being charged a fee on disposables would motivate them to use reusable takeout services. Other answers were about being reminded about and offered the service.

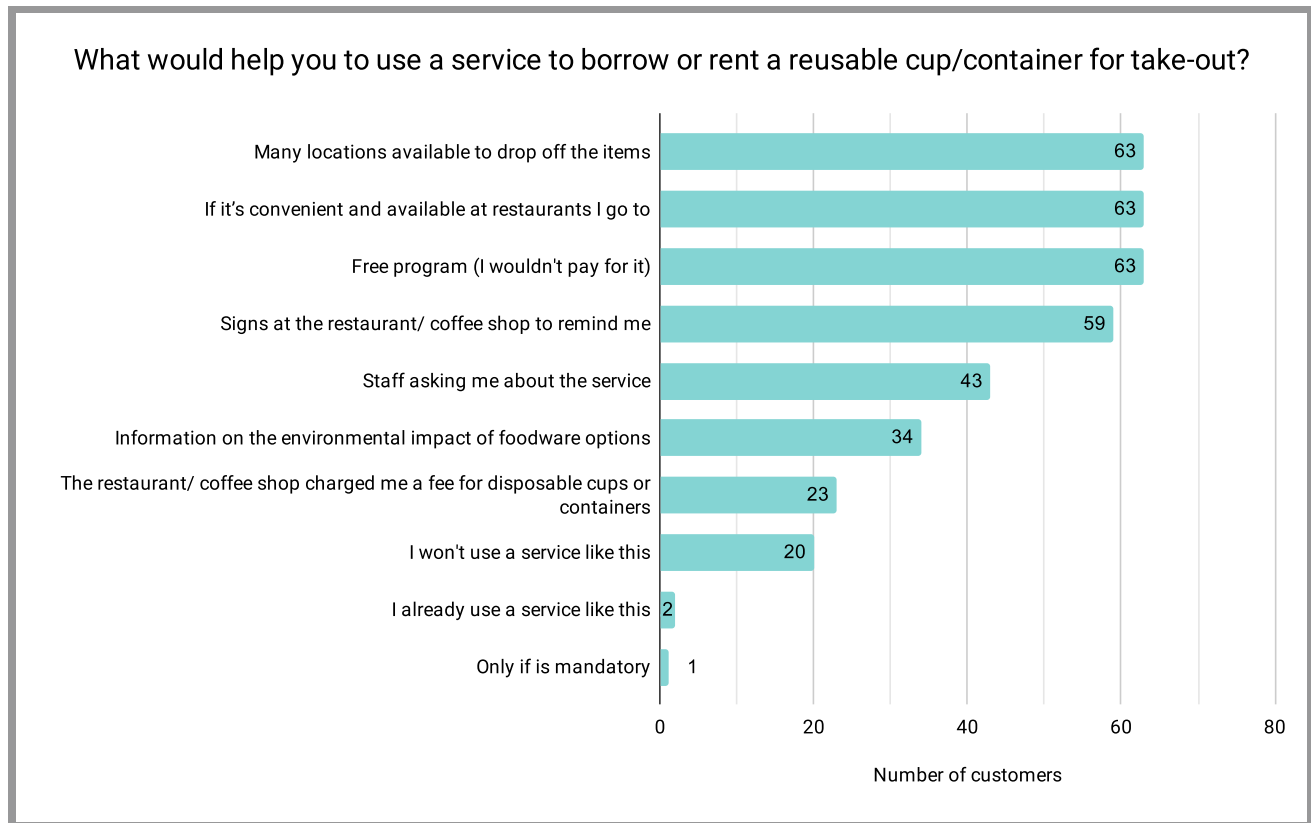
---

<sup>1</sup> The reusable deposit-return takeout system is a reusable foodware for customers to borrow or rent. After use, the foodware is returned, either to the same location or another participating restaurant or drop-off location. Restaurants may offer this directly or subscribe to an external reusable takeout service that is offered in more than one restaurant. Some require the customer to join a free or paid subscription for the service and others require a refundable deposit at point of sale. Examples in Toronto include: Muuse and Reego for hot drink cups, Suppli, Inwit and Ozzi for food containers.

### 3. Customers say that businesses can do more to promote reusables and help them choose reusable foodware for takeout

Customers also noted that restaurants could play a key role in helping them to choose reusables by posting signs at the restaurant with reminders, and having staff offer or ask about reusable options when ordering. This applied to both bringing their own cup or container for the order, or if the restaurant offers a reusable and returnable takeout container or cup service. For example, 88% of customers think restaurants and coffee shops should let customers bring their own cups/containers.

At the same time, when asked what would help them to bring their own cup or container to restaurants or coffee shops, the most common answer was that a discount would help (84%), followed by all restaurants/coffee shops accepting their cup or container (70%), staff asking the customers if they have their own cup or container (59%), signs at the restaurants/coffee shops to remind them (54%), and businesses offering reusable for rent/buy (38%).



**Figure 2:** Types of help customers need to use a service to borrow or rent a reusable cup/container for takeout (n = 100).

## Food Service Business

A total of ninety food service businesses were observed and categorized based on their business type and single-use items used. Fifty percent of the businesses, participated in an interview about their current practices and challenges to reducing single-use items, to shifting to reusable options, and to the [federal plastic ban](#).


The food service businesses in the WBIA included a mix of quick-service (fast-food) restaurants, fast casual restaurants with some on-site dining, coffee shops, and full-service bars and restaurants. These included both national chain (40%) and independent restaurants (60%). While serving food for takeout was the primary reason for using single-use foodware, it is important to note that a significant portion of businesses (42%) are quick-service businesses that use single-use items for dine-in as well. Fast casual restaurants are those that use a combination of single-use foodware for takeout and have some, or all, reusable foodware for dine-in, with wide variation among them. Full-service restaurants and bars are primarily dine-in with reusable foodware, with minimal single-use items (such as straws) used on-site or for takeout orders.

The businesses ranged from providing 100% takeout service (15 businesses), to 70 – 90% takeout (10 businesses), 40 – 60% (6 businesses), 10% – 30% (5 businesses) to less than 10% takeout (8 businesses). Takeout was the primary reason for the consumption of single-use foodware items, including taking leftovers home. However, it's important to note that a good portion of fast food and fast casual businesses use single-use foodware for dine-in.

### Key Takeaways

#### 4. Businesses are taking some steps to reduce waste and single-use foodware

When asked about their current practices to reduce waste, 90% of surveyed businesses reported they are taking some steps to reduce waste and single-use foodware. Actions range from not offering and/or reducing the amount of single-use foodware provided, to shifting away from plastic-based materials, and providing reusable alternatives to single-use. Thirty (60%) out of 45 businesses report that they ask customers first before giving out accessories (cutlery, condiments, etc), 18 businesses (40%) have changed foodware to a recyclable option, 18 businesses (40%) allowed customers to bring their own reusable item, four (9%) already offer a reusable takeout cup or container program and 12 (27%) provided compostable options (under the assumption that it is a more sustainable option). These results are similar to findings from our [study in 2021](#), where the majority of businesses were taking steps to reduce waste.



**5. Most businesses expect the federal single-use plastic ban will have minimal impact on their business, however they will need guidance to transition towards sustainable, reusable options**

We asked businesses about the forthcoming federal plastic ban on some types of single-use plastic foodware and how it might affect their business. The vast majority (84% – 38 businesses) expect the impact would be minimal as they use few single-use plastic items that will be banned. The rest (16% – 7 businesses) believe the ban will have a significant impact.


When asked what action they plan to take in response to the ban, most (62%) reported they will look for non-plastic options, 17% said they will look into reusable takeout options, and 17% said they will look into reusable dishes for dine-in.

**6. Businesses want more information about reusable options, how to reduce waste and how to handle reusables**

We asked businesses what support they needed to reduce single-use foodware and adopt reusable foodware (Figure 3). The most common answers were relevant to information to help them understand their options. For example, information about the costs and savings (56%), public health guidelines regarding reusables (53%) and tips on how to reduce waste (47%).

**7. Businesses also want practical help and guidance to choose and purchase reusables, train staff and educate customers**

Other frequently mentioned topics were related to more practical support to adopt reusables, such as funding and additional support to buy reusable foodware (51%), training for staff on waste and safe handling of reusable (49%), a list of suppliers with more sustainable options (42%), and signs to promote and educate customers about reducing waste (40%).

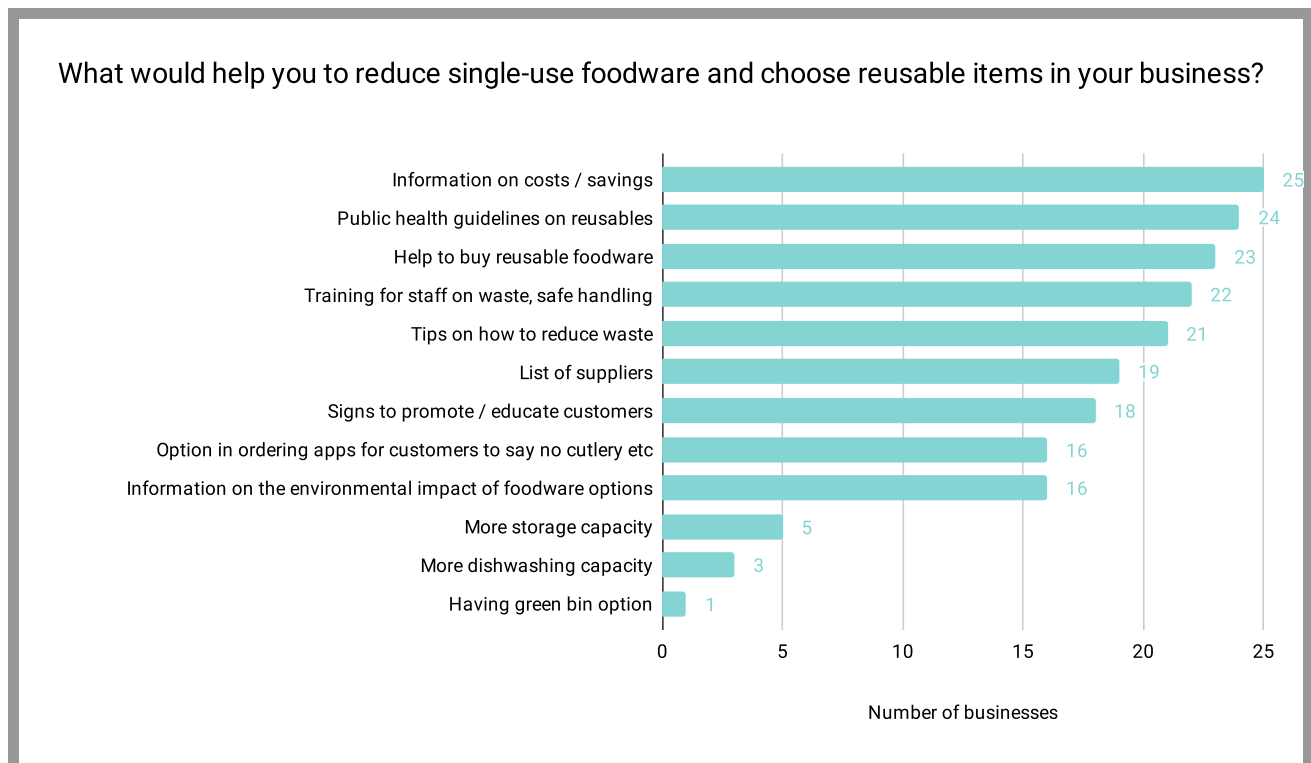


## 8. Businesses will benefit from increased literacy on single-use foodware among their customers

We asked businesses if they allow customers to bring their own foodware, and 58% of the businesses do, however 69% of businesses do not proactively encourage their customers to bring their own foodware for dine-in or takeout. This likely leads to less participation among customers (i.e. few people bring in refillable cups, or ask about reusable takeout foodware services).

Public education campaigns about the benefits of reducing single-use foodware can help businesses grow participation and become more comfortable encouraging customers to bring their own containers. Both customers and businesses identified that signs to inform and promote this option to customers would be beneficial.

Notably, to help encourage the choice of reusables over single-use foodware, information about the environmental impact of various foodware options was not a top priority for businesses (36%) or customers (34%). Factors such as cost, convenience and ease of use were noted as more important factors in their decision to choose reusable options. This suggests that the availability and scale of reusable systems need to be addressed.



**Figure 3:** Types of help businesses need to reduce single-use foodware and choose reusable items (n = 45).

# Discussion

## **The majority of businesses are already prepared for and taking actions to reduce waste and are interested in taking further action.**

Notably, many of these reported actions are in congruence with forthcoming federal single-use plastic prohibitions and proposed municipal single-use regulations, for example, many have already sought out single-use plastic alternatives, allowed customers to bring their own cups and containers, and a number of businesses reported they offer accessories upon request / that they ask before giving out accessories (utensils, condiments, etc.) with takeout orders.

Most businesses expected the impact of the federal plastic ban to be minimal for them, as they use few single-use plastic items listed in the ban. However, switching from single-use plastic options to non-plastic single-use items was the action mostly reported by businesses that have taken or plan to take in response to the federal ban on plastics regulation. Unfortunately, efforts to reduce single-use plastic can have unintended consequences. Many non-plastic single-use items, marketed as ‘compostable’ or ‘bioplastics’ fail to meet biodegradation standards and need special facilities to allow them to degrade ([Haider et al., 2019](#)), they are not actually composted in most parts of Canada ([Environment and Climate Change Canada, 2020](#)), they can cost the business more than plastic ones ([U of T Trash Team, 2022](#)) and still generate the same amount of waste as regular single-use plastic.

This reflects a gap in the regulation, as the single-use plastic ban alone can incentivize substitution with other single-use items, each with its own environmental impacts, and therefore not result in a reduction of waste and resource use overall. Therefore, more guidance is needed to help businesses understand reusable alternatives and seize this opportunity to move away from single-use items.

Businesses were open to shifting to reusable foodware and customers support more actions to reduce single-use foodware for both dine-in and takeout, however there is currently a low level of experience with reusable takeout services, and adoption of these services is currently quite low. This suggests that there is a need for more guidance and information on reuse options, not only for businesses but for customers as well. In addition, opportunities to demonstrate and share reusable options with businesses will increase familiarity and may help adoption. Convenience with many food service businesses offering and accepting reusable takeout foodware was a top priority for customers to use this program. At the same time, help to purchase reusables was a top necessity for businesses to adopt more reusable foodware options. These suggest that supporting businesses to adopt reusable takeout services will improve access for customers and help scaling up reusable programs across the city.

Finally, most customers support policies that require businesses to reduce single-use foodware. This indicates that there is a support for policies to require more reusable programs in food service businesses.



# Conclusions and Recommendations

In summary, local businesses in the WBIA want and are already taking some steps to reduce waste and single-use foodware – in particular, by adopting reusable foodware alternatives for dine-in and takeout. Businesses also expressed a need for and benefits from access to information and guidance on public health, and costs/savings on reusable foodware. Access to this type of information can help businesses more confidently choose and promote reusable options to their customers.

At the same time, customers feel that businesses should do more to reduce waste. Convenience, incentives, and information were the customers' priorities, both regarding bringing their own cups/containers and using reusable programs. Moreover, policies that require or incentivize the use of reusables on-site are widely supported by customers.

Our research suggests that nationwide and local policies and programs will be accepted and adopted by businesses and that customers support regulations and policies that reduce waste. Considering the forthcoming federal single-use plastic ban coming into force later this year, education and guidance on single-use plastic alternatives is a high priority to support businesses.

To encourage widespread adoption of reusables to reduce single-use, efforts should focus on supporting businesses to scale up reuse options by providing guidance and education campaigns, internal staff procedures and how best to promote them to customers. Giving support to businesses in scaling up reusable options will also ensure convenience and ease of use for customers.

Based on our findings, below are some recommendations for municipalities/governments to support local food service businesses to reduce single-use and takeaway items, especially as small businesses look to comply with the federal single-use plastic ban.

- **Provide promotion and education to the public and businesses on the problems with single-use foodware, especially single-use items marketed as ‘compostable’, to combat misguided substitution.**
- **Provide promotion and education on the benefits of reuse and the range of waste-free reusable options including reusables for dine-in, BYO, and reusable returnable foodware for take-out.**
- **Provide guidance and tools to help businesses incorporate prompts into the sales process to reduce waste (accessories on request) and to offer reusables (BYO, reusables on-site or take-out).**
- **Support the adoption of reusable, returnable takeout foodware through demonstration projects to build familiarity, funding, and targeted support to achieve the scale of availability needed to improve customer adoption.**



# Acknowledgements

**We thank our interviewees for participating in this study.  
We would also like to thank Parker Scott and Renee Jagdeo for  
collecting data for this research.**

# References

City of Banff. "Single-Use Items Reduction Strategy." Banff, AB - Official Website. (2022).  
<https://banff.ca/1273/Single-Use-Items-Reduction-Strategy>

City of Edmonton. "Single-use Item Reduction." (2022, October).  
[https://www.edmonton.ca/programs\\_services/garbage\\_waste/single-use-items](https://www.edmonton.ca/programs_services/garbage_waste/single-use-items)

Environment and Climate Change Canada. Science assessment of plastic pollution. Canada, (2020), <https://www.canada.ca/en/environment-climate-change/services/evaluating-existing-substances/science-assessment-plastic-pollution.html#toc14>

Haider, T.P., Völker, C., Kramm, J., Landfester, K., Wurm, F.R. "Plastics of the future? The impact of biodegradable polymers on the environment and on society." *Angew. Chem. Int. Ed Engl.*, 58 (1) (2019), pp. 50-62, [10.1002/anie.201805766](https://doi.org/10.1002/anie.201805766)

"Plastic and packaging laws in France." (2021, 30 June), CMS. <https://cms.law/en/int/expert-guides/plastics-and-packaging-laws/france>

Reuse Refill Canada. "Barriers and Opportunities for Driving Reuse in Canada" (2022, April) [https://www.reuserefill.ca/s/rcc\\_driving-reuse-refill-canada-report.pdf](https://www.reuserefill.ca/s/rcc_driving-reuse-refill-canada-report.pdf)

"Takeaway: Customers are now entitled to Reusable Packaging - economy." (2022, December 29). News in Germany. <https://newsinGermany.com/takeaway-customers-are-now-entitled-to-reusable-packaging-economy/>