

2023 Durables Re+ Mini-Grant Project

Zero Waste Washington

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Project Report

King County Re+

Executive Summary

Zero Waste Washington's Re+ Mini-Grant pilot project sought to reduce restaurant and food establishment waste due to disposable items used for in-house dining.

In 2023, Zero Waste Washington conducted outreach to 981 restaurants, coffee shops, bars, breweries, and wineries in King County cities, excluding Seattle. Staff spoke with owners, managers, and employees to discuss their business's use of disposable items for in-house dining and offered the mini-grant to help owners transition to durable foodware. The mini-grants provided up to \$500 to purchase durable foodware items to replace disposable products including plastic cups, paper plates, and plastic flatware. Businesses that applied could qualify for an additional \$1500 for a dishwasher upgrade, dishwasher racks, or related items. Approved applicants purchased the items they applied for and submitted receipts for reimbursement. Zero Waste Washington ordered products for businesses facing challenges with upfront costs.

Of the restaurants visited, 198 used all disposables, 592 used two or fewer disposable items, while the rest used more than two disposable items. 66 restaurants applied for the mini-grant for durable items, while 29 applied for additional funding for dishwashers or other dish-washing equipment. 54 businesses completed the process: submitting receipts or orders for durables. The mini-grant assisted food establishments previously considering a transition to durables and businesses that hadn't otherwise planned to change.

"I was just wanting to buy dishes. I have them in my cart, but I couldn't figure out how to pay for them. I'm using all compostable now."

- Snoqualmie restaurant owner who applied for the mini-grant

Findings

The mini-grant pilot project provided qualitative data regarding food establishments' use of disposables for in-house dining. This information will be invaluable for future projects. Insights into obstacles and barriers businesses face when considering a switch from disposable to reusable foodware included:

- COVID caused fast casual restaurants to use disposables for both take-out and in-house service. Many have not switched back to durables for in-house dining.
- Concern for the environment, brand fit, and customer preferences are key motivations for owners and managers to transition to durables.
- Labor costs are a common obstacle due to the staffing required to load and unload dishwashers.
- The tight labor market is making it difficult to hire dishwashing staff, preventing the use of durables.
- Coffee shops believe customers prefer disposable cups because they retain heat and are transportable.
- Fast casual restaurants often have small kitchens with limited plumbing, unsuitable for dishwashers.
- Restaurants use disposable children's cups because a straw-less alternative isn't readily available.
- Disposable ramekins are widely used for convenience and because durable ramekins are difficult to clean.
- A strawless, durable children's cup and an effective ramekin dishwasher rack are needed.
- Providing funding for dish storage could help small businesses transition.
- Durable foodware is often thrown away by staff and customers. Providing signage could help.

Introduction

Zero Waste Washington conducted a pilot mini-grant program to food establishments to purchase durable foodware and upgrade dishwashing with the goal to reduce waste generated by single-use foodware products used for on-site dining. Funding was provided by a King County Re+ Grant and the project ran from late 2022 through 2023.

Overall, Zero Waste Washington staff conducted outreach to 981 restaurants, coffee shops, and other food establishments in King County cities, excluding Seattle. We offered businesses a Re+ mini-grant of up to \$500 to purchase durable foodware items to replace disposable cups, plates, plastic flatware, and other items for on-site dining. If these businesses purchased durable items, they could also qualify for up to \$1500 to purchase a dishwasher upgrade, dishwasher racks, or other items to assist with cleaning their foodware.

Methodology

Initially, the plan was to work with high school Green Teams to raise awareness and to conduct the outreach to food establishments. After months of working with schools, it was determined that this approach was not feasible due to the irregular meeting times of these clubs and the lack of time students had to commit to the project. As a result, the project pivoted to a staff outreach approach.

A list of food establishments was obtained from King County-Seattle Public Health. This list was winnowed down by eliminating institutions, chain restaurants (because previous experience demonstrated that chain restaurants were unlikely to change their practices), and caterers. The outreach list was then further refined by looking at online resources such as Yelp and examining photographs to determine if the restaurants and coffee shops were already using durable serviceware for on-site dining. Then, outreach was conducted city by city using maps of the businesses to maximize efficiency.

Initial outreach flyers and applications were tested and then refined so that they were clearer and answered questions. Flyers were translated into 4 languages: Spanish, Chinese, Korean and Vietnamese. One of our outreach staff is a native Spanish speaker.

Businesses were reimbursed after they submitted receipts for purchases. Later in the project, we also offered to pay for items directly for restaurants.

Summary of outreach

Of the 981 restaurants and coffee shops visited in-person, 198 used all disposables, 592 used two or fewer disposable items, and the rest used more than two disposable items. For those using some or all disposables, staff talked to owners and managers to encourage them to make a shift to durable foodware and offered the mini-grant to help make it possible. See Table 1 for summary of outreach and results.

Reactions from staff and owners was mixed. In many instances, there was some reluctance. During the COVID pandemic, quite a few food businesses had switched to all disposables and were unenthusiastic about the prospect of switching back. They felt that the use of disposable foodware helped them avoid staffing costs involved loading and unloading a dishwasher. Many had kitchens too small to accommodate a machine. Coffee shops were also challenging since most of those we visited were using paper cups in house. They explained that this is what their customers preferred.

Summary of Outreach Conducted	
Total # of restaurants visited	981
Total # of applicants	65
Total # of applicants that completed grant process (submitted receipts)	54
# of restaurants that showed interest but did not apply	35
# of restaurants visited that were all durable (excluding childrens cups)	362
# of restaurants visited that were "mostly durables" (used ≤ 2 disposable items)	231
# of restaurants visited that had "some durables" (used > 2 disposable items)	83
# of restaurants visited that were all disposables	198
# of restaurants visited where durable status was unclear/not recorded	98
# of restaurants that applied that were all durable (excluding childrens cups)	2
# of restaurants that submitted receipts that were all durable (excluding childrens cups)	1
# of restaurants that applied that were mostly durable	32
# of restaurants that submitted receipts that were mostly durable	30
# of restaurants that applied that had some durables	16
# of restaurants that submitted receipts that had some durables	12
# of restaurants that applied that were all disposables	11
# of restaurants that submitted receipts that were all disposable	8

Table 1. Outreach and results summary

To overcome resistance to change, we focused conversations about each business's unique needs and situation, along with their customers' preferences, to help them find ways to transition away from disposables.

The pilot project netted 66 businesses that submitted applications for the mini grants. We found that businesses who already used some durable items were more likely to be willing to change to all durables. Part of the reason is that many already had a dishwasher and the necessary staff. 48 of those that applied had mostly or some durables, while 11 were all disposables.

We received applications over a nine-month period, but business owners were busy and by December, most had still not submitted their receipts. We did follow-up calls and multiple email reminders to encourage applicants to make their purchases and submit their receipts. We also more strongly offered the option for Zero Waste Washington to make their purchases for them. In the end, 54 businesses, mostly small businesses, submitted receipts or an order for durables. We found that businesses selected both standard restaurant plates, glasses, and other foodware and unique pieces that fit their branding (See Appendix 1).

Business managers and owners expressed their gratitude for the funding to help them make the transition. Many of the businesses were owned by people of color and immigrants. While a range of business types applied for the program, the strongest interest came from small independent coffee shops, Mexican restaurants, teriyaki restaurants, and bars. Full-dining restaurants that already used mostly durable items, also showed interest in replacing their disposable children's cups and sauce sachets or disposable portion cups (for ramekins).

With the grant, businesses purchased items such as flatware, plates, and coffee mugs to replace their plastic forks and knives, paper boats, food boxes, paper cups and more. They also purchased dishwashers, dishwasher trays (which can also be used for storage), faucets and sprayers, and in one case, a multi-sink. (See Table 2 for dishwashing purchases)

Dishwasher Upgrade and Dishwashing Items Purchased	
Product	# of Restaurants that Purchased Item
Dishwasher	4
Sprayer	4
Faucet	3
Sink	1
Dish tubs	1
Dish racks	6

Table 2. Dishwashing purchases

Through speaking with 981 businesses, we gathered details about the motivations and obstacles that food establishments face.

Discussion

Business motivations

In conversations with business owners, managers, and staff at restaurants, coffee shops, pubs, wineries, and breweries., we explored motivations for making a switch to durable items. Some owners indicated that they had been thinking about the waste issue and potential solutions. Our conversations helped motivate these businesses to consider a change and take the next step.

Businesses expressed their gratitude for the funding and inspiration to make a change. A small coffee shop owner wrote, “The cups just arrived. The plates arrived earlier and started working. I appreciate all the efforts you made for zero waste and our budget. Please come and see how we are using them. No more paper plates and also in-house cafe drinks are using cups unless customers prefer the paper cups.”

Coffee Shops: Most coffee shops we visited were using paper cups as the default cup for in-house dining. At a small rural coffee shop, we spoke with the owner. She had just a few porcelain mugs on a shelf as a decoration. After a conversation about how her clients tended to prefer paper cups, she said, “I guess I could have mugs and encourage them to use them.” She signed up for the grant and purchased mugs displaying her shop logo. After the conversation, she added, “I would even like to try a bring-your-own cup program.”

In all, 13 coffee and tea shops purchased mugs or coffee cups to make the transition. For cold beverages like ice coffees, almost all coffee shops were using plastic disposable cups. Some shops purchased glasses to replace them. For pastries, coffee shops often used paper bags or disposable plates and used the grant to replace them with reusable plates.

Full-Dining Restaurants: While some full-dining restaurants said they used all durables, further discussion frequently determined that they used disposable plastic portion cups for sauces as well as disposable children's cups. The funding led managers to make the shift and purchase reusable products.

Many felt that the change reflected their concern for the environment, while others could also see an advantage for their branding.

A manager at a restaurant and bar explained, "We are all in. We use Cedar Grove [composting]. I am even putting an herb garden on the roof." He explained that he even used reusable children's cups with disposable lids and compostable straws. For him, metal ramekins would mean he was using all durable foodware. He applied for funding for the ramekins. After he received them, he wrote, "Thank you again, I'm so glad to be using less plastic!!!"

Other restaurants were already considering purchasing durables but needed financial assistance to make the change.

"I was just wanting to buy dishes. I have them in my cart, but I couldn't figure out how to pay for them," explained a restaurant owner. He applied for the mini-grant and switched from compostables to reusables.

Fast Casual Restaurants: The transition away from disposables proved the most challenging for fast casual businesses. (See Barriers section below.) Some, however, took advantage of the grant to shift disposable foodware to reusables. Of these, a few had used durables in the past but had gotten rid of their serviceware during COVID. Others needed more items to complete the transition to durables.

A bagel restaurant, like most fast casual businesses, was using all disposable cups for coffee. The manager listened to our explanation about the grant. She wanted to shift to durable mugs and had been discussing it with the owner. We had come at a good time. After talking to the owner, she said they would take the grant and make the change. "We are going to use the money to purchase porcelain mugs for dine-in guests, in sizes that we sell to-go but don't currently have in porcelain. We are excited to be able to offer this for our dine-in customers!" she explained. "I'm so glad that you caught me the other afternoon as this is a great opportunity!"

A Pho restaurant owner from Vietnam was passionate about trying to encourage customers to use durables and consider the environment. He was already using mostly reusable items. He showed us, however, that he stored all his teas and smoothie ingredients in disposable containers. He asked to use the grant to purchase reusable storage containers. He purchased large tea pitchers and sent a photo. "What do you think? We love them!" he exclaimed.

Occasionally, we encountered fast casual restaurants that were using all durables (that we had missed in our screening phase). One shop owner explained, "We are already using all reusables in house. We even changed to washable kids' cups without lids because we thought disposables are so wasteful. It is cost effective too."

Bars: Bars, pubs, and taverns are mostly using glassware for their beverages. Some, however, use disposable items like paper boats and plastic portion cups for food. Bars took advantage of the mini-grant to purchase plates and reusable baskets. Many serve simple premade reheated food like pizza. One owner had been using disposable oven liners to warm food. With the grant, he bought reusable silicone oven liners, plates to replace paper boats, and silverware to replace plastic forks and knives. "This program is awesome!" he said.

When we approached owners and managers about their disposable portion cups, some were hesitant to make a change. At a pub that used all durables except for portion cups, the owner said "It comes down to convenience when you're in a fast-paced environment. It's an extra thirty (items) to wash." But after a

conversation, she agreed to give it a try and applied for the grant to purchase metal ramekins to replace the plastic, disposable sauce cups.

Breweries: Breweries used glassware and frequently just served snacks or a limited selection of casual food, often using paper products. One owner proudly told us that he made an effort to keep his business low waste. Even the water glasses were reusable. The only disposable items left were plastic forks and knives. “I don’t need them very often,” he explained, “but I think it would be good to switch.” The grant enabled him to buy reusable flatware that fit with his personal environmental ethic and his branding.

Wineries: Wineries generally have limited food offerings but often use paper plates and plastic flatware for charcuterie and snacks. They also use disposable water cups. A few wineries used the grant to buy reusable water glasses, cutting boards, and flatware. A small tasting room chose eclectic glassware to match the character of her antique furnishings.

Barriers and Obstacles

Space: For fast casual restaurants, a lack of space was the most common barrier we heard related to switching to durables. Kitchens are often so small that there isn’t room for a dishwasher, or even for staff to load and unload the machine without obstructing the path of other workers.

Plumbing: Some businesses explained that their older buildings don’t have the plumbing needed for a dishwasher.

Corporate Restrictions: While some restaurant franchises had the freedom to purchase and use durables, others had to use foodware selected and controlled by corporate management. The owner of a subway shop

Cost of Reorganizing Kitchen Space: Remodeling costs often prevented small fast casual restaurants from purchasing or leasing a dishwasher. A tea shop was interested in installing a dishwasher but needed to reconfigure the kitchen in order to install it. In the end, they found the cost was prohibitive.

Dish Storage: Many small businesses explained that they do not have storage space or a cabinet to keep durable dishes. Breakable dishes need to be stored carefully, within reach. "We are using mostly disposables because we don't have place to store plates," explained the owner of a tiny marina coffee shop. She wanted the grant but needed the funding for storage.

Permits for Dishwashers: Businesses expressed concern about getting a permit for a dishwasher. One business owner explained that she wasn’t sure of the process to get the necessary permit.

Staffing Issues: Almost all the small businesses said that they didn’t use disposables because the cost of staff to load and unload a dishwasher exceeded their budget. They also couldn’t find staff for dishwashing due to the tight labor market. Some mentioned the challenge of paying the high minimum wage.

The owner of a small Indian restaurant explained, "We use metal plates for people eating here. We run out and switch to paper. There are lots of challenges. It becomes a staffing problem. People don't want to do the work (dishes)... We want to do our best for the environment..."

A small Chinese food stand that was part of a mini-food court in Bellevue using all disposables explained, "I would need staff to go out and clear and clean tables. I'm the cook, and I already am spending the whole day doing dishes. I wish I could do something, but it's not possible."

A brewery even noted that the cost of staffing was leading them to switch back to disposables. “We are not financially capable of doing reusables any longer because of how costly it is to run employees in the State of Washington,” she explained. “We can't afford staff to run the dishwasher. \$20 for staff becomes \$90 with the taxes. The combination of inflation with the cost of staff and finding staff makes it impossible to use durables. We have durables but we had to switch. I'm upset about this. The cost is the issue.”

Theft: Business owners and managers mentioned the loss they incur because customers take the reusable metal ramekins and children’s cups home with them.

Waste: At coffee shops and fast casual restaurants, customers often bus their own tables. Many businesses explained that customers throw away ramekins and silverware. One burger restaurant owner explained that he even tried a garbage can magnet, which he felt was only marginally effective. Other restaurant owners added that staff often throw these items away and that the waste was costly.

Damage from Metal Silverware: One business preferred plastic silverware because children scratched the tables with metal forks and spoons.

Advantages of Disposable Coffee Cups: Coffee shops often use disposables as their default cups for in-house dining because they believe their customers prefer them. They explain that clients sit for a while, then take their coffee with them. Some customers tell them that paper cups with lids keep their drinks warmer than reusable cups. Additionally, owners believe that, after COVID, customers feel that disposable cups are more sanitary.

Shops often say they ask customers if they want their coffee for here or to go and provide durable cups if they request “for here.” However, we did not observe this happening.

Advantages of Disposable Children’s Cups with Straws: Wait staff, managers, and owners use plastic disposable plastic cups because they prevent children’s spills. They are practical and it doesn’t matter if the customers take them. An owner of a full-dining Mexican restaurant explained that she used to have attractive, reusable children’s cups, but the customers took them home.

Portion Cups/Ramekins: Disposable portion cups are common at both full-dining and fast casual restaurants. Business owners explained that reusable ramekins and sauce cups are difficult to clean and bounce around in the dishwasher. They also get thrown away by staff and customers. A pub owner pointed out, “We used ramekins before, but people threw them out.”

Some business owners are concerned about the waste the portion cups generate: “They come in small packages but then they fill a whole garbage can,” one explained.

A barbeque restaurant owner, otherwise using all durables, explained another reason he and many restaurants are using disposable portion cups. “I don't have the staff to put sauce in cups when serving. We prepare them ahead.” His restaurant filled plastic disposable portion cups with plastic lids with different sauces ahead of time and had them stacked and ready to add to orders.

Focus on Take Out: Many fast casual restaurants focus on take out. “Our business is 80% take out,” explained a teriyaki restaurant owner. They indicate that the shift to durables doesn’t make sense for them since they do less in-house dining. It is unclear how accurate this assessment is since we observed in-house lunch clients at these restaurants.

A small office lunch spot explained that their clients' preferences have changed since COVID. "90% is takeout...We are trying to do our best to reduce waste. It's challenging... People used to stay, eat, and talk. Now everyone is busy and on their phones. They take their order and go."

Another small restaurant explained, "People are in a hurry and want to take everything to go." A business using boxes in house explained, "We have everything to go because few people eat here and when they do, they want to take it with them."

Cost of Dishwasher and Leasing Option: Small businesses we spoke with hesitated at the cost of purchasing a dishwasher. Consequently, we raised the mini-grant amount for the dishwasher upgrade from \$1,000 to \$1,500. This higher amount got more interest. Still, businesses were reluctant to cover the additional cost of a dishwasher and make the full payment upfront before reimbursement. Restaurants that had dishwashers often leased them because the leasing covered service when the machine broke down.

Customer Preference: A teriyaki shop owner explained that his customers prefer disposables. "I try to give customers reusable glasses, teacups, utensils, and they want disposables." He tried to tell them they are washed but he said, "They don't care." Another teriyaki shop said, "If I don't use disposables, people complain."

Already have Durables: Many fast casual restaurants said they already have durables. However, they stopped using them during COVID and haven't gone back for the reasons mentioned in this report.

Free Paper Cups: Restaurants that sell a given amount of Coca Cola receive free paper cups from the Coca Cola company. We encountered the free cups in many fast casual restaurants and restaurant owners told us of this cost benefit that made durable tumblers less appealing.

Disposable Cups for Smoothies and Teas: Special machines for bubble teas and smoothies use disposable cups. An owner explained, "I use disposable smoothie cups because I would need special ones that seal. The machines use disposable cups and seal them. There is a machine for reusable smoothie cups, but it is expensive."

Opportunities

Placing Orders for Businesses: Business owners and managers sometimes hesitated to take the mini-grant because it required them to make the initial purchase followed by a reimbursement. When we offered to place their order and make the purchase for them, many businesses took advantage of this option. We also offered to search for products for them since some owners felt they were too busy.

Children's Cups: There does not appear to be a strawless, reusable children's cup that washes well in a dishwasher. Most of the available cups come with reusable straws. Restaurants can substitute disposable straws, but that still creates waste. Traditional sipper cup lids are unsanitary for restaurants because they don't come out clean in the dishwasher. Potential solutions: a children's cup with a reusable, washable lid that resembles a coffee cup lid; a reusable dishwasher-safe lid that resembles a coffee cup lid and fits a tumbler.

A less ideal option are tumblers or reusable children's cups with disposable lids and compostable straws.

Ramekins and Sauce Portion Cups: Most businesses we visited use disposable sauce portion cups. They have mentioned that ramekins are difficult to clean in the dishwasher. A special dishwasher rack that stabilizes durable ramekins in the dishwasher would address one of the cleaning issues.

Public Awareness: Since many restaurants say that their customers prefer disposables, educating consumers on the environmental benefits of reusables may be beneficial. Additionally, a campaign encouraging consumers to request durable coffee cups, glasses, and other foodware could help to motivate businesses.

Funding for Storage: Future grants might include funding for cabinets or shelving for dishes and glassware.

Adjusting Restrictions for Dishwashers and Kitchen Remodels: Easing permitting restrictions for dishwashers or providing guidance on the permitting process may be helpful to restaurants that want to switch to durables.

Interest in Reusable Takeout: A number of restaurants asked us about a reusable take-out service. A manager of a small Indian restaurant asked, "If you know a local vender for reusable takeout, we would like to know, so we could support a local business."

Thus, there are opportunities for companies providing reusable takeout service in King County.

Reusable Containers for Storing Food and Beverages: Future grants could include funding for reusable storage containers. Some food establishments use disposable plastic containers to store food and beverages. A pho restaurant that otherwise used all durables explained that the exception was for storage and smoothy cups, "I use the disposable containers to store tea and other items because I can't afford the reusable containers."

Conclusion

The mini-grant pilot project provided qualitative data regarding food establishments' use of disposables for in-house dining. This information will be invaluable for future projects. It provides insights into obstacles and barriers businesses face when considering a switch from disposable to reusable foodware.

Key findings:

- COVID caused fast casual restaurants to use disposables for both take-out and in-house service. Many have not switched back to durables for in-house dining.
- Concern for the environment, brand fit, and customer preferences are key motivations for owners and managers to transition to durables.
- Labor costs are a common obstacle due to the staffing required to load and unload dishwashers.
- The tight labor market is making it difficult to hire dishwashing staff, preventing the use of durables.
- Coffee shops believe customers prefer disposable paper cups because they retain heat and are transportable.
- Fast casual restaurants often have small kitchens with limited plumbing, unsuitable for dishwashers.
- Restaurants use disposable children's cups because a straw-less alternative isn't readily available.
- Disposable ramekins are widely used for convenience and because durable ramekins are difficult to clean.
- A strawless, durable children's cup and an effective ramekin dishwasher rack are needed.
- Providing funding for dish storage could help small businesses transition.
- Durable foodware is often thrown away by staff and customers. Providing signage could help.

Appendix 1: Examples of foodware items purchased by businesses

COFFEE CUPS, GLASSES, AND TUMBLERS



PLATES, BOWLS, SOUP MUGS, RAMEKINS AND SALSA BOWLS

