CASE STUDY: Truro Community Kitchen



BUSINESS PROFILE

Name: Truro Community Kitchen

Location: Christian Union Church Truro, MA

On-site dining: No

Take-out: 100% Meal Delivery

Warewashing: Commercial Dishwasher

Employees: Volunteers Truro Community Kitchen (TCK) is a non-profit food provider on Cape Cod in Truro, Massachusetts. TCK was founded in April of 2020 to combat food insecurity during the COVID-19 pandemic. Founders and volunteers quickly realized the need for their service went beyond the pandemic and committed to long-term free and anonymous meals. Every Tuesday, a team of volunteers carries out the preparation, packaging, and delivery of meals to registered households. Each package contains enough for at least two meals per person.

Changes to serviceware for less waste and more savings:

Single-use black plastic 3-compartment container	→	Reusable plastic 9″x9″ 3-compartment container
Single-use black plastic 3-compartment container	→	Reusable plastic 9"x6" single compartment container
Single-use clear plastic single container	→	Reusable plastic 5"x5"x3" container
Brown paper bag	→	Reusable branded cloth bag*

BEFORE and AFTER: Truro Community Kitchen was able to eliminate 100% of their disposable plastics for reusable alternatives.







THE BOTTOM LINE

- \$6,700 total annual net cost savings (assuming one meal per bag)
- 18,000 disposable items reduced per year
- 1.2 tons of annual waste reduction
- 5.5 month payback period for upfront investment including purchase of 2 full sets,
 288 containers of each size, to replace the 1 size single-use disposable black plastic 3-compartment containers
- Utilizes an honor system with volunteers manually tracking returns; this means zero cost for residents to participate, no on-going costs for TCK, and no QR code or smart phone requirement

*After several months, TCK opted to revert to sending meals to recipients in brown paper bags. They continue to use the reusable bags as container collection bags that are distributed with the meals. The reason for making this change was the difficulty washing and drying the bags each week. A better washable material bag would be recommended for entirely eliminating paper bags.

HOW IT WORKS

One month before the reusable launch, flyers were placed in meal bags explaining the upcoming changes. On the launch day, kitchen volunteers cook, prepare, and package food into reusable containers and place those into reusable bags. Bags are numbered based on the recipients' meal preferences, and which route the household is assigned to. Meals in reusable containers are delivered to residents. Participants are asked to rinse containers clean when done with the meal and place them back into the reusable bag. The following week, a volunteer brings a new meal in reusable containers, and participants place the previous week's bag outside in exchange. Drivers collect the bags on the route and transport them to Truro Central School nearby. The school generously donates the use of their dishwasher each Tuesday to TCK's Green Team, who sanitize and store the containers for recirculation. The Green Team also records numbered bags that are returned. If a resident forgets to return a bag, a reminder is placed into the next week's meal bag.

KEYS TO SUCCESS

- Every food container and bag that is needed for distribution and collection should be reusable. The only exception is the paper-wrapped sandwiches and any pre-packaged nutrition bars, candy etc. that are added to meals. Households don't need to determine if a package can or can't be recycled, all containers are returnable and reusable.
- The program works best when volunteers build relationships with the residents. Drivers who engage with households collect a higher number of reusables. In addition to the reminder flyer, volunteer drivers also prompt recipients to return bags.

"Truro Central School is pleased to support the Truro Community Kitchen in their efforts to reduce waste as they continue to provide such a valuable service to our community. This partnership aligns perfectly with our school's Ocean Guardian education program that is focused on reducing marine debris and protecting our coastal waterways."

Patrick Riley, Principal of Truro Central School





Above: Reusable containers drying at Truro Central School

Left: Green Team volunteer cleaning containers

 Long-term tracking is important. There is no financial incentive nor tech-enabled tracking to get container and bag returns using this system. Therefore, having a manual tracking system for bags returned is essential to prevent a high loss rate.

RESULTS		PACKAGING IMPACTS			COST IMPACTS	
Disposable Product Replaced or Minimized	Recommendation Implemented	Percent Disposable Reduction	Annual Quantity of Disposable Product Reduced	Annual Waste Reduction (Ibs.)	Payback Period (avg. months)	Annual NET* Cost Savings After Payback Period (\$)
Black plastic 3-compartment container	9"x9" reusable 3-compartment container	100%	6,000	984	8.2	\$2,870
Black plastic 3-compartment container	9"x6" reusable single compartment container					
Clear plastic salad container	Reusable salad container	100%	6,000	240	6.6	\$1,280
Paper grocery bags	Reusable cloth bags	100%	6,000	1,206	1.8	\$2,550
*Net Cost Savings considers any associated with the purchase an and capital improvements need Disposable's recommendations.	d care of reusable items ed to carry out ReThink	TOTALS:	18,000 pieces	2,430 Ibs.	5.5 months	\$6,700

on avoided disposable foodware purchases.

"Four years and 26,000 meals after we started, it is more than time for us to transition away from serving our meals in disposable takeout materials. This sustainability initiative is so exciting not only because it will help us hugely reduce the amount of waste we produce, but also because it is proof that TCK is prepared to stick around and support our community for the foreseeable future."

Eli Sobel, Co-Founder and Co-Director of Truro Community Kitchen

"You folks are on the cutting edge of right action."

Emily Beebe, Truro Health & Conservation Agent

ReThink Disposable is a program of Clean Water Action and Clean Water Fund conducted in partnership with local organizations, businesses, and government agencies. Generous support is provided by a changing list of public and private funders. To learn more about the program, its partners, and funders, visit: **www.rethinkdisposable.org**





