

Food Waste Technical Assistance for Small Businesses

As part of the University of Illinois Extension [Building a Culture of Composting in Greater Chicagoland](#), a project funded by an NTAE Extension Foundation Expansion Grant, the [Illinois Sustainable Technology Center \(ISTC\) Technical Assistance Program \(TAP\)](#) worked with five small food businesses on food waste reduction and composting implementation. The purpose of this work was to expand the education and implementation of composting beyond individuals, specifically to small food businesses who may not otherwise seek technical assistance. The goal was for these businesses to not only reduce wasted food and implement composting in their operations, but also to serve as a catalyst in their communities for spreading awareness.

Businesses were selected through an application process and were required to be located in a community overburdened by environmental issues and lacking resources, defined as disadvantaged communities by the [Climate & Economic Justice Screen Tool](#). Technical assistance was provided free of charge to the businesses. After businesses were selected, ISTC followed the 5-step process below.



OVERVIEW OF THE BUSINESS PARTICIPANTS

Abiding Love Food Pantry

Abiding Love Food Pantry serves over 200 families per week and is a choice model food pantry. They provide community members with dry goods, fresh produce, dairy, and proteins, and receive products from a food bank and donations from grocery stores. Located in Zion, IL.



Casa Central is one of the largest Latino social service agencies in the Midwest. With a full scratch kitchen located on-site, Casa Central staff prepares hundreds of meals each day for daycare, after school, and senior services programming. Located in the Humboldt Park community of Chicago, IL.



Food He.ro is a Latino-led culinary school, grocery store, caterer, and event space. Food He.ro serves as a bilingual food incubator and shared kitchen to help Latinos who are new in the food industry or interested in starting a food business. Located in the Little Village community of Chicago, IL.



Khepri Cafe is a cafe and scratch kitchen, serving coffees, teas, smoothies, baked goods, sandwiches, salads, and bowls. Located in the Albany Park community of Chicago, IL.



Tom's Place is a full service breakfast and lunch restaurant. With connections to the culinary programs of nearby high schools and colleges, Tom's Place aims to nurture the development of work force skills in community youth. Located in the Back of the Yards community in Chicago, IL.

"You don't really think about it [food waste] until you have the option to compost. A lot was compostable." – Nathalie Querales, Casa Central

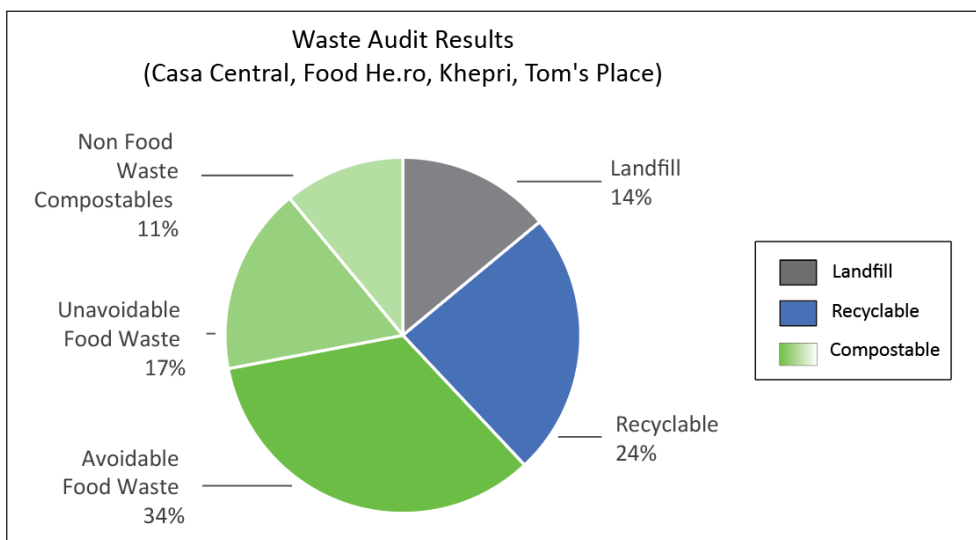
"We are going to continue [composting] once the grants funds are over. We are going to continue making the investment. It's part of our values and we want to share that with our students and the community." – Javier Haro, Food He.ro

"[Composting] is worthwhile. We want to provide a welcoming space to the community. We want to help the community realize that business isn't just about making money. We want people to realize that business can be part of a larger network. It's something we value." – Angie Kolacinski, Tom's Place

WASTE AUDIT RESULTS

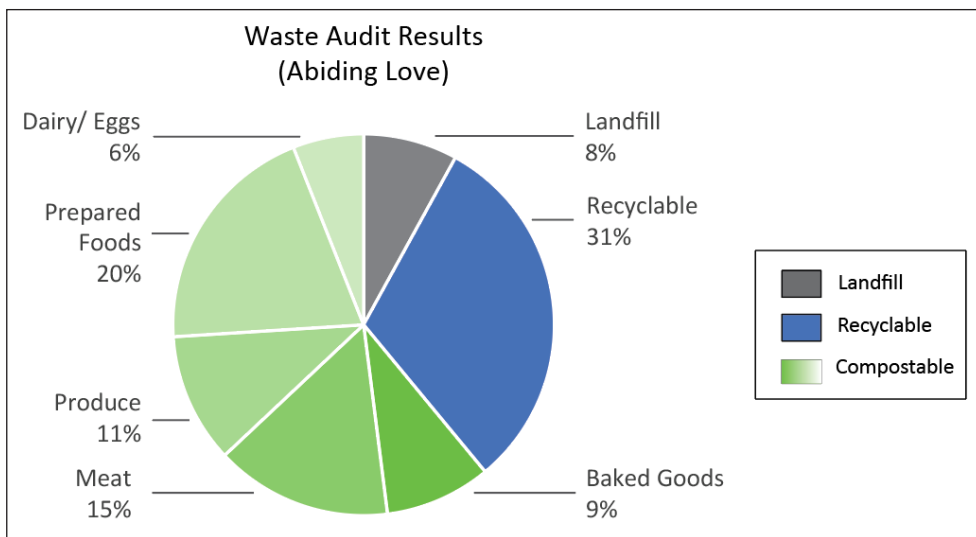
After initial conversations and facility walkthroughs, ISTC collected, sorted, and weighed two days of waste and recycling from each of the five business participants. Four of the businesses' waste and recycling was sorted into the five categories below. (Casa Central, Food He.ro, Khepri Cafe, and Tom's Place)

Sorting Categories	Definition
Landfill	Materials that should go to the landfill
Recycling	Materials accepted by their recycling haulers
Avoidable Food Waste	Food that was at one time considered edible
Unavoidable Food Waste	Food that is considered inedible such as peels, bones, shells, etc.
Non Food Waste Compostables	Food soiled paper such as paper towels and napkins and BPI certified compostable products



62% of all material sorted was compostable.

Due to the nature of operations at Abiding Love Food Pantry where food waste generation is less in their control, their waste was sorted into the 9 categories shown below. The same definitions were used for Landfill, Recycling, and Non Food Waste Compostables. Two categories (Non Food Waste Compostables and Dry Goods) are not shown on the pie chart as they represented less than 1%.

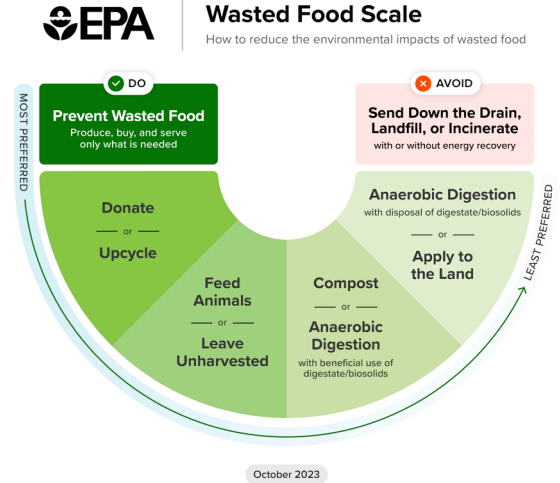


61% of all material sorted was compostable. The food pantry noted that the breakdown of types of food waste can vary greatly from week to week.

RECOMMENDATIONS TO REDUCE AND DIVERT FOOD WASTE

After reviewing waste audit results and incorporating notes from initial conversations and facility walkthroughs, ISTC developed recommendations to assist business participants in reducing and diverting food waste. ISTC focused recommendations on three areas of the [EPA Wasted Food Scale](#).

- ▶ **Prevent Wasted Food** – Prevention should always be the first step in addressing food waste. Prevention has the opportunity to provide the greatest cost savings to the business and greatest benefit to the environment. Some recommendations included:
 - ▶ Implement regular staff meetings to discuss opportunities to reduce wasted food, including highlighting foods near expiration and any recent challenges with ordering or overproduction.
 - ▶ Implement knife skills training, place a trim waste bin at each station and review at the end of each shift.
 - ▶ Implement guidelines and train all staff on labeling and storing food.
- ▶ **Donation** – After implementing measures to prevent wasted food, donating surplus food to feed hungry people will ensure the food is put to its highest value. Some recommendations included:
 - ▶ Collaborate with a local donation partner including food pantries, Love Fridges, or other agencies.
 - ▶ Dedicate an employee to manage the donation process.
 - ▶ Work with food donors so they better understand the type and quality of food the pantry can accept.
- ▶ **Recycle Food Scraps** – Even with prevention and donation procedures in place, food scraps and other compostables always remain. Recycling food scraps through composting or anaerobic digestion keeps organics from emitting methane in landfills and important nutrients in the food system. Some recommendations included:
 - ▶ Work with a local food scrap hauler to compost wasted food and other compostables.
 - ▶ Work with all staff members to introduce and educate about the food scrap collection process.
 - ▶ Assign an employee to review food scrap bins at the end of each day to check for contamination.



ISTC and volunteers setting up a waste audit at Casa Central.



Example of **unavoidable** food waste sorted at a waste audit.



Example of **avoidable** food waste sorted at a waste audit.

FOOD WASTE REDUCTION AND COMPOSTING OUTCOMES

With implementation ongoing, several outcomes have already emerged.

► Prevention

- Several businesses mentioned the waste audit process as an “eye-opening” experience that helped them better understand their food waste generation.
- Each business committed to working on some of the prevention recommendations including regular staff meetings and implementing processes for labeling and storing.

► Donation

- Several businesses (particularly the restaurants preparing orders on demand) decided that they have little to no excess food that would be appropriate to donate.
- Casa Central was able to start a daily food recovery program, packaging leftover meals and providing to families experiencing food insecurity.

► Recycle Food Scraps

- In August 2023, ISTC was able to provide Casa Central, Food He.ro, Khepri Cafe, and Tom’s Place with grant funding to begin composting services with The Urban Canopy. Grant funding will last 6-12 months for each of the businesses depending on the level of service required. Each business indicated they plan to continue paying for the service after the grant funding has expired.
- Due to lack of affordable hauling options, ISTC was unable to get composting started at Abiding Love Food Pantry. Due to funding, as well as volunteer capacity, on-site composting was also deemed impractical at this time.

CHALLENGES FROM BUSINESSES

After providing recommendations, ISTC followed up with each business to discuss implementation challenges. While challenges varied, a few themes emerged.

► Lack of Physical Space in the Kitchen

- Multiple businesses found it challenging to add additional waste stations in the kitchen. In particular, it was difficult to place bins in multiple locations convenient for staff.

► Communication Between Staff

- Businesses with multiple shifts found it challenging to ensure consistent communication among staff. One example included making sure that Tuesday’s staff was able to clearly communicate what ingredients should be prioritized for use by Wednesday’s staff.

► Designating a Champion

- Some businesses thought it would have been beneficial to bring other employees or volunteers into the process earlier to ensure buy-in and a designated champion to lead their food waste reduction efforts.

IMPACT OF WORKING WITH SMALL BUSINESSES

While there is often a focus on working with large-scale food waste generators (institutions, manufacturers, government entities, etc.), there can be a complex process involved with implementation. Working with small businesses has shown the potential to work directly with decision makers and implement new processes quickly that both reduce food waste and serve as an example for the local community.

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