

# SUGGESTED METHODOLOGY: FRONT OF HOUSE WASTE AUDITS AT FOOD SERVICE ESTABLISHMENTS

## PROCESS OVERVIEW



## SELECT FOOD ESTABLISHMENTS

- Determine the scope and size of the project based on the number of businesses and types of restaurants to include.
  - Note: Full service restaurants can serve as a control group for the project if desired.
- Identify members of your team (college students or volunteers are helpful)
- Develop list of potential establishments with existing FOH collection systems under each food service sector. Or, develop a list of potential partners who would be interested in setting up a FOH system.

**TIP** → We do not recommend combining data from existing FOH collections with new systems; depending on what is taking place in your community, choose to study either existing FOH systems or to set up new ones.

- Approach manager at each potential establishment to explain goals of survey. Include one-page proposal. This is best done in person unless you have a strong existing relationship with the food establishment.
  - Note: Most establishments were open to participating.

- Keep these points in mind when talking to managers:
  - Ask if the manager would consider changing the location of the bins or the signage. If they are unwilling to consider changes, find a new location to participate.
  - Ask which day of the week and time of day is best to collect each FOH container. Ask how much material is generally collected at that time.
  - Ask permission to observe customers on two or more site visits.
  - Ensure that all sorting will be done offsite.
  - Ensure all data will be kept private. Data on recycling and composting performance can also be shared with management if interested.
  - Create schedule for pick-ups and confirm with managers

### **LESSON LEARNED → Collect materials over several days.**

Many of the businesses surveyed did not collect all three material streams on a daily basis because of the small amount of materials generated. This resulted in several small survey samples. These results were still included because the percentage breakdown of materials was consistent with other sector-based results, which suggested the sample was still representative. Timing of collections was also an important factor so that materials were collected when the business normally serviced the containers. This provided the optimal volumes with the least disruptions in their systems.

### **COLLECT BASELINE DATA**

- Observe existing FOH collection systems. Record type and location of each bin. Note presence and location of signage. Take pictures of bins and signage.
  - Look at available packaging and make note if there is any packaging that does not fit into audit template. Discuss how to sort new packaging with team.
- Conduct customer observations. Spend 30-60 minutes watching people sort their discards at the bussing station. If possible, sit close enough to hear any conversation between people on where to put materials.
- Make list of suggested improvements to bins and/or signage based on customer interactions.
- Discuss these ideas among team to brainstorm other solutions or improvements.

## CONDUCT FIRST WASTE AUDIT

### SUPPLIES

- Printed waste audit template, pens and clipboards
- Recycling and composting guidelines
- Large folding tables and/or tarps
- 15 buckets/containers for the different items
  - three larger buckets for three streams
  - smaller buckets for subcategories of materials
- Gloves
- Scale big enough to weight a bucket of material
- Large vehicle for pick-ups
- Cell phone or camera to take pictures
- Plastic trash bags for picking up materials found in recycling bins
- Duct tape to label each bag of materials from businesses (trash, recycling, compost)

**TIP** → Plan to sort waste from multiple businesses on the same day, depending on volume. This makes it more efficient since your sorting process is already set up. Just be sure to properly label all your bags when you pick them up with the business name and waste stream.

### STEPS

- Use a large vehicle (box truck or pickup truck) to pick up materials from businesses and transfer to sorting location (most restaurants did not have space for onsite sorting, nor did they prefer this done onsite).
- Label all bags with the business name and the material stream. Bring your own containers for recycled material since many bins are not lined with plastic bags.
  - Note: materials may need to be collected over multiple days to ensure sufficient quantities.
- Weigh each bucket for a tare weight and record on side of container.
- Start with all the material found in the composting bin. Separate into the large buckets by three broad categories: recyclable, compostable and trash. Record weights of all three categories.
- Using smaller buckets, separate each category into sub-categories based on audit template. Weigh each sub-category bucket and record weights.
- Check to make sure all materials were recorded. Set all materials aside into designated areas for recycling, composting and trash for easy clean-up.
- Repeat steps 4-5 for the recycling stream.
- Repeat steps 4-5 for the trash stream.
- Be sure to compost and recycle all collected materials at the appropriate recycling or composting collection centers. Place remaining trash items in dumpster or trash cart.

## ADJUST FOH COLLECTION SYSTEMS

- Input waste audit data into calculation template and calculate data results from first audit.
- Discuss findings with team.
- Compare notes on data findings with suggested bin improvements from customer observations. Agree on a plan to change or adjust signs and/or bins as needed at each location.
- Prepare new bins or signage as needed for each location.
- Meet with manager at each location to adjust bins and signage. Share data on current recycling and composting efforts.
- Take photos of new bin locations and signage.
- If there are other opportunities to improve collection systems and material recovery, such as different packaging, staff training or improvements to customer interactions, present these ideas to managers as well for future consideration.

### **LESSON LEARNED: Prepare to do all the operations.**

Businesses were relatively interested in participating in the program when initially approached. However, they could not be relied upon to do most of the operational pieces, such as collecting the materials from FOH bins and setting them aside, or putting up signs. The original survey was delayed several times in waiting for businesses to re-organize bins or put up new signs. Ultimately the project staff made the majority of the changes. We suggest you arrive at each business ready to make the necessary changes, with the manager's approval.

## CONDUCT SECOND WASTE AUDIT

Repeat process for first waste audit.

## CALCULATE AND SHARE RESULTS WITH APPROPRIATE PARTIES