Food Scrap Diversion and Management – Tip Sheet #6

Financial Considerations for Municipal Food Scrap Recovery

Overview

Financial considerations for initiating and sustaining a municipal food scrap diversion program vary depending on the type of program - on site composting, contracted pick up service, delivery to a community facility or farm, or curbside collection. There are potential savings in tipping fees that can be realized by diverting food scraps from the waste stream, depending on program scale.

Financial Consideration Estimates - Municipal Food Scrap Diversion

Education to Save

On average, the American household throws out 6.2 cups of edible food, which comprise 75% of discarded scraps. This is significantly reduced for households who regularly eat leftovers.

- Education on the cost of food waste and food prep methods can be valuable to reduce your community's wasting of edible foods.
- Commercial entities can also donate to area non-profits. If businesses are not donating already, direct them to area non-profits or explore national programs that focus on food rescue such as the <u>MEANS database</u>.
- Education is key as contamination in food scraps diverted to compost requires regular communication with users.

Estimate Quantity of Food Scraps Wasted

<u>Residential</u>: 8.8 cups per week (Average American household) or 30-40% of household trash. This can also be converted to an EPA estimate of 335 pounds per year per person.

<u>Commercial</u>: Request information from sample businesses (e.g., conducts a food scrap audit). On average restaurants discard between 4% and 10% of inventory.

Estimate Costs of a Food Scrap Diversion Program

Administrative Fees

Education, marketing, staffing, and start up costs are an essential consideration.

On-Site Program

Quantifying cost impacts in a standardized way is tough because there are many variables at play. With composting facilities, processing efficiency tends to increase with scale, so in some cases there may actually not be cost-savings for small-scale municipally-run composting facilities. For assistance in estimating an on-site program's costs, contact UVLSRPC.

Central Drop-Off Location

There are four known haulers working in the region. These commercial entities transport to a private composting facility, the Lebanon composting facility, a Maine anaerobic digester, or Hartland VT facility. Based on yearly rates with a regular pickup, the price per pound ranges widely from \$0.84 to \$2.00. For rates specific to your needs and location, contact these companies directly through information found on Tip Sheet #3 : Collection & On-Farm Composting for Municipalities.





Estimate Savings of a Food Scrap Diversion Program

Landfill Savings

Cost Per Ton = ((Tipping Fee x Tonnage) + Transportation) / Tonnage

Avoided Landfill Cost = (Population x 335 pounds per year) * Cost Per Ton

Additional savings may be derived from user fees and the sale or municipal use of finished compost.

The Final Balance = Savings – Cost of Food Scrap Program

View two examples on Tip Sheet #2 : Municipal Pilot Program Case Studies

Identify Externalities Difficult to Account for

The management of food scraps is not a closed system where all costs and benefits are easily accounted for. There are external costs to community and environment that are difficult to quantify or standardize.

- <u>Production Costs</u>: With so much wasted food scraps being edible, there is a high cost for the related costs of production to grow, process, and transport that food to market. This inefficient system drives up the cost of food on the market and also represents a loss of revenue to commercial grocers and restaurants.
- <u>Waste Management</u>: The presence of any degree of food scraps increases the amount of space, material, and time needed to manage that waste whether in a landfill or compost pile.
- <u>Environmental Impacts</u>: Food scraps in a landfill release the greenhouse gas methane. The loss of land to edible food that is thrown in the trash or compost pile. The impact on soil and water resources from unproductive land use.
- <u>Community Morale</u>: Humans are psychologically connected to places and people, and when that connection is distorted by the waste of a valuable resource, there are psychological impacts on the individual and communal psyche.

Evaluation

It is good practice to start small. While savings can increase with scale, logistical and educational concerns are worth evaluating early. To determine whether a municipal pilot program is feasible to continue and where improvements are needed, it is useful to collect information throughout the pilot period, which usually lasts 8-16 weeks. Data that can be collected include:

- Type of Program
- Collection Method
- Towns with Access
- # Pounds Collected Weekly
- Resident Kit

- End Use
- Staff Commitment
- Expenses, Cost Savings
- Resident Feedback

Grants/Financial Assistance Resources as of 2024

- USDA Solid Waste Grant Pilot program staffing and material expenses
- NH the Beautiful Facility signage reimbursements
- Upper Valley Lake Sunapee Regional Planning Commission 60-gallon tote and resident collection bins



February 2024. A program of the Upper Valley Lake Sunapee Regional Planning Commission Providing technical assistance on food scrap diversion from landfills. * Funded by USDA Solid Waste For more information contact <u>info@uvlsrpc.org</u> or visit us at <u>www.uvlsrpc.org/food-scrap</u>

