

NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (NCTCOG)

Resource Paper: Drop-Off Programs

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Introduction

The Procurement Process Guidance Document is designed to support municipalities in developing curbside organic waste hauling and recycling programs. However, organic waste recycling programs can take many forms, such as through backyard composting opportunities and community drop-off programs. These alternative approaches offer municipalities small-scale access to organic waste recycling, the ability to pilot initiatives, and grow participation over time. This resource paper provides an overview of food scraps drop-off programs, with recommendations and best practices on implementation, key advantages and challenges, and examples of programs from across the country.

Background

Drop-off food scraps programs are community-based systems that allow residents to collect food scraps at home and bring them to a designated drop-off location for composting. Program structures vary, ranging from locked bins with code access at permanent drop-off locations to staffed temporary stations at community events. Programs are generally managed by municipal governments, waste management agencies, nonprofits, or private haulers, and they can be developed in collaboration with local composting facilities and community-based organizations such as neighborhood associations.

Establishing residential food waste drop-off sites is a relatively low-cost method for providing households with access to composting options. To participate, municipalities identify drop-off locations, provide collection carts, and implement a registration or sign-up system, primarily to ensure that only residents of the community are using the service. Partnered haulers or community groups then routinely move collected food waste to processing facilities for it to be composted.

<u>BioCycle's 2023 Access Study</u> identified 141 programs nationally that provide food waste collection exclusively through drop-off sites, along with 29 programs that offer both curbside and drop-off options. Of the 123 drop-off programs that BioCycle surveyed, 55% operate just one site, typically in smaller or rural communities, while mid-sized and larger cities often maintain multiple locations distributed across their jurisdiction to increase accessibility. Over 90% of programs serve all households, including both single- and multi-family units, and most operate year-round.

Biocycle found that only a small percentage of programs charge a fee, which is generally a flat annual rate. There are also notable differences between drop-off and curbside programs when it comes to accepting compostable liner bags and biodegradable foodservice items, with drop-off programs often more restrictive on these items and certain food scraps, such as meat, bones, and dairy.

To preserve bin capacity for food scraps and streamline operational logistics, many organic waste drop-off programs exclude yard waste, particularly when separate curbside yard waste collection services are already in place. However, communities that also want to include yard waste recycling may adopt a similar drop-off program model while accounting for the need for additional container space and addressing potential challenges related to the transportation of large material bundled by residents. Additionally, municipalities often collaborate with their contracted waste haulers to organize yard waste drop-off events or partner with recycling and processing facilities to facilitate direct yard waste drop-off by residents. A case study illustrating a yard waste drop-off program is provided at the end of this resource paper.



Advantages & Disadvantages

Organic waste drop-off programs offer significant benefits over curbside collection for municipalities aiming to implement small scale organic waste recycling within a smaller budget. However, these programs also face challenges in achieving high participation and may fall short of reaching high diversion rates. Table 1 provides key advantages and disadvantages to implementing drop-off programs.

Table 1: Pros and Cons of Drop-Off Programs

PROS

✓ Cost-Effective: Drop-off programs require lower capital investment and operating costs compared to curbside collection. Additionally, minimal staffing is needed when using secure, unstaffed containers, helping keep ongoing costs low. However, ongoing maintenance is still necessary and should be incorporated into costs to address cleanliness concerns and vandalism. ✓ Pilot Friendly: Drop-off sites offer a valuable opportunity.

- ✔ Pilot Friendly: Drop-off sites offer a valuable opportunity for communities to pilot organic waste collection and gauge community interest before committing to larger programs. The opt-in nature also helps limit contamination, as only motivated and informed participants tend to engage early on. The success of this initiative can lead to greater support from the community and elected officials for curbside food scraps collection services.
- ✓ Flexible and Adaptable: Programs can be implemented in a variety of locations, such as libraries, parks, parking lots, or farmers markets, allowing municipalities to tailor access points to community needs. They can also be easily scaled or relocated based on participation or neighborhood feedback.
- Community-Driven Partnerships: Drop-off programs can foster collaboration with local nonprofits and community organizations that are already invested in sustainability and composting efforts. These partnerships can enhance outreach and provide on-the-ground support without requiring heavy municipal resources.
- ✓ Education and Engagement Opportunities: When hosted at staffed locations (such as farmers market booths), drop-off sites can double as educational opportunities to promote composting and proper sorting. Strong educational components help reduce contamination and increase interest in sustainability initiatives.

CONS

- Accessibility and Equity Challenges: Unlike curbside collection, drop-off programs require residents to actively transport their food scraps, which can be inconvenient and burdensome. This inconvenience may disproportionately affect certain groups, including seniors, individuals with disabilities, low-income households, or those without access to reliable transportation.
- Lower Participation and Impact: Participation tends to be lower than with curbside programs, often restricted to those that are already environmentally motivated. As a result, these programs may struggle to achieve significant diversion rates and fall short of broader waste reduction or climate goals.
- Sanitary Concerns: Drop-off sites require upkeep to remain clean and odor-free, especially if not staffed. Without regular maintenance, sites can become unsanitary or attract pests, deterring use and increasing public complaints. This will be especially critical during hot summer months, when drop-offs will require more frequent servicing.

Implementation Steps

Prior to launching a drop-off program, municipalities should conduct a needs assessment, goal setting, and market research, as outlined in the Procurement Process Guidance Document. The program should ensure the needs of the community and elected officials are met, and the necessary processing and collection infrastructure for the targeted organic waste is available. Like curbside collection programs, extensive education and outreach is essential to minimize contamination and increase awareness and participation, and discussions over the use of endmarket compost should be held. Additional roll-out considerations unique to drop-off programs are provided below:

1. ENGAGE WITH STAKEHOLDERS

Consider partnering with local composters, environmental organizations, or processing facilities that may be able to oversee drop-off, collection, and processing of organic waste. When speaking to potential partners, determine allowable organic materials and collection frequency so you can relay this information to residents. It is recommended that collection be weekly at a minimum, since hot weather can lead to odors and pest concerns, and containers will fill up quickly when multiple households utilize them.

2. DETERMINE FUNDING & COSTS

Drop-off programs may be funded through local, state, or federal grants, municipal budget allocations, subscription fees, or other means. Consider exploring regional partnerships with neighboring municipalities to pool resources, scale operations, and enhance program impact. The North Central Texas Council of Governments (NCTCOG) administers solid waste grants every two years for source reduction and recycling, including a community composting pilot. If supported by grants or external funding, consider offering the program at low or no cost to incentivize participation. However, keep in mind that continued costs, such as with maintenance, labor, hauling, processing, and education and outreach, require stable funding sources. Therefore, if the program is initially grant-funded, consider diversifying funding sources or developing a transition plan for incorporating alternative funding mechanisms, such as subscription fees.

3. SITE SELECTION & ACCESSIBILITY

To reduce inconvenience and encourage participation, choose accessible, high-traffic locations that align with residents' daily routines, such as farmers markets, schools, libraries, recreation centers, community gardens, and publicly owned parking lots. Be mindful of placing drop-off sites too close to residential homes, as this may lead to complaints around odor and high roadway traffic. For larger communities, ensure multiple locations are selected throughout to allow wide access and greater participation.

4. OPERATIONS

Determine the type of setup that best suits each location, such as if the containers will be permanently placed and accessible 24/7, movable and part of a staffed table or booth, or a combination of both. Design distinguishable containers with appropriate signage and decide whether they should have secure locks to prevent misuse or illegal dumping. It is common to use a simple cart with a code lock but consider investing in technologically advanced containers if financially feasible.

Implement a sign-up or registration system to manage access, track participation, or collect subscription fees if applicable. This can be done through a simple online form. Contact information collected can also be used to contact participants regarding other sustainability initiatives or concerns with the composting program, such as contamination.

5. EDUCATION & ENGAGEMENT

Provide robust education and outreach to ensure residents understand what materials are accepted and how to properly participate in the program. Develop collection guidelines that clearly define acceptable items, rules for participating, and who to contact for additional information. Offer starter kits with educational materials, kitchen pails, or transport containers to help households get started. Consistent, clear messaging through signage, handouts, and digital platforms is essential for minimizing contamination and increasing participation over time. Review and follow the Education and Outreach section of the Guidance Document for additional information.

6. PERFORMANCE MONITORING

Track usage and program performance through data collection tools such as registration logs, feedback surveys, and tonnage reports. Additionally, monitor drop-off stations and carts to ensure proper use and minimal contamination. Data collected should show progress towards goals and objectives, such as annual diversion, participation, or contamination, and help evaluate success and inform future improvements.

Case Studies

FORT WORTH, TEXAS

Through a partnership with Cowboy Compost, Fort Worth offers 21 food scrap drop-off sites for their residents in their Composting Pilot Program. Interested participants pay a one-time, \$20 subscription fee and receive a kitchen counter-top pail, a 5-gallon container for transport, and education material on accepted materials and instructions for composting. All sites have locked carts for collection, and most offer 24-hour access points to ensure convenience. The program boasts a contamination rate of less than 1%, and approximately 2,500 households are subscribed as of 2024.

The program was launched as a pilot in 2019 and was the first of its kind in North Texas. It has been funded through subscription fees, a solid waste grant from the NCTCOG, and a <u>USDA</u> <u>Composting and Food Waste Reduction Agreement grant</u> in 2021. The program's goal is to maximize landfill diversion of compostable items and lead to a city-wide food scraps curbside collection program. Per the city's contract with Cowboy Compost, the initial term is for one year with the option to renew up to four additional year-terms, carts at sites are owned by the city, and total annual compensation for services does not exceed \$60,000.

Additional information on the program is available at the <u>City of Fort Worth's Residential Food Waste Composting Program webpage</u>, as well as the <u>city's contract with Cowboy Compost</u>.



PLANO, TEXAS

Launched in 2023, Plano's Residential Food Scrap Composting Program is managed by the City of Plano and processed through Texas Pure Products. The program features eight drop-off locations, including four fire stations with locked, unstaffed carts accessible daily from 7 a.m. to 9 p.m. Residents can join by paying a one-time \$45 fee, which includes a welcome kit containing a countertop food scrap pail, program guidelines, and a sample of compost from Texas Pure Products. During its pilot phase, the program successfully diverted 39,960 pounds of food waste from the landfill.

The program began as a pilot in 2023 and was funded by a \$60,200 solid waste grant from the NCTCOG. To support its expansion, the city received \$162,800 through the USDA's Composting and Food Waste Reduction Agreement grant program in 2023. Goals with this funding include increasing community awareness of food waste reduction strategies, such as source reduction and composting, and growing participation among both single-family and multifamily households.

Additional information on the program is available at the <u>City of Plano's Residential Food Scrap Composting webpage</u>.



MINNEAPOLIS, MINNESOTA

The Minneapolis Solid Waste & Recycling Division offers a free, opt-in food scraps drop-off program for residents who are not able to participate in their curbside collection program (predominantly residents of larger apartment complexes that do not have city trash services). Participants can choose from 20 drop-off locations, predominantly in parking lots of parks, churches and community centers, register online, and receive instructions, including a lock code if required. According to the city, on average, three 64-gallon carts serviced weekly are sufficient for 150 residents. Some sites remain unlocked, as contamination is minimal in low-traffic areas and require sign-ups. Registration allows the city to maintain an email list for sending updates, contamination alerts with photos, educational tips, and success stories. The city's solid waste collection services team is responsible for emptying the bins and transporting the collected materials to their contracted composting facilities. In 2024, 5,194 tons of food scraps were composted through drop-off and curbside collection.

Several neighborhood associations collaborate with the city to support drop-off sites, assisting in site setup, resident registration, ongoing maintenance, and educational outreach. Multiple community groups receive up to \$12,000 per year through Hennepin County's Green Partners grant program and work with the city to promote participation in the program among non-English speaking residents.

Additional information on the program is available at the <u>City of Minneapolis</u>' Organics Drop-Off Sites webpage.



DISTRICT OF COLUMBIA (DC)

DC's Department of Public Work offers residents two options for free food waste drop-off: Food Waste "Smart Bins" that are accessible 24/7 by an app or manual access code and staffed weekend drop-off events. Smart Bins are containers that incorporate technological systems, such as sensors that monitor fullness or weight and notifications that notify collection staff when containers are full to reduce unnecessary pickups. DC offers 31 locations for Smart Bins and 12 locations for drop-off events. Unlike other programs, there is no sign-up required, and residents are able to begin participating whenever they are ready. The bins were installed in February of 2025, and within the span of four months, the program collected nearly 120,000 pounds of food waste and food-soiled paper.

DC contracted Trusted Solutions Group, Inc. in 2024 for the purchase, software, and installation of 31 rodent-proof, 24/7 accessible Smart Bins. The contract is structured as an Indefinite Delivery Indefinite Quantity (IDIQ) agreement, with a base year and four option years, potentially exceeding \$700,000 in total value if all options are exercised. Containers are serviced by DC's Department of Public Works.

Additional information on the program is available at the <u>District of Columbia's Food Waste Drop-Off webpage</u>, as well as the district's <u>Public Space Food Waste Collection Bins contract</u> with Trusted Solutions Group.



MADISON, WISCONSIN

The City of Madison's Streets Division oversees the collection and processing of trash and recycling services for residents, along with a seasonal yard waste collection program. This program allows residents to place yard waste (plant material from lawns or gardens) and brush (sticks and branches) separately on their curbside on designated days throughout the year. Additionally, the city operates a year-round drop-off program for yard waste and brush at three city-owned utilities centers, with hours varying throughout the year. These services are provided at no additional charge to Madison residents who are enrolled in the city's trash collection program, as the cost is covered through property taxes. Residents are required to verify their eligibility with an ID at the drop-off sites and then can selfserve by depositing their separated brush and yard waste into the appropriate areas. The yard waste collected is processed at a regional composting facility, while brush is grinded into wood chips and used as mulch in various city projects.

Additional information can be found on the <u>City of Madison's</u> <u>Drop-off Sites webpage</u>.



Conclusion

Drop-off programs are a flexible and often cost-effective method for diverting organic waste from landfill, particularly for municipalities where curbside collection may not be feasible. These programs can effectively meet community interest and needs in organic waste recycling and serve as an entry point for scaling up to broader waste diversion initiatives. When supported by clear communication, strategically accessible locations, stable funding sources, and strong partnerships, drop-off programs can play a significant role in meeting a municipality's waste reduction goals.

Photo Sources:

"Food Waste Drop Off." BioCycle, accessed 17 June 2025, https://www.biocycle.net/food-waste-drop-off/.

Channel 3000 / News 3 Now. "Yard Waste Drop Off Sites Now Open for Madison Residents." YouTube, 5 Apr. 2023, https://www.youtube.com/watch?v=Ek3M3jrFQH8.

[&]quot;Residential Food Waste Composting Program." City of Fort Worth, accessed 17 June 2025, https://www.fortworthtexas.gov/departments/environmental-services/solidwaste/food-scrap-compost.

[&]quot;Food Scrap Composting Program." Live Green in Plano, accessed 17 June 2025, https://www.facebook.com/livegreeninplano/photos/-want-to-keep-your-households-food-scraps-out-of-the-landfill-enroll-in-the-city/1054166056748263/?_rdr.

[&]quot;Residential Organics Recycling." Hennepin County, accessed 17 June 2025, https://www.hennepin.us/organics/.

[&]quot;Food Waste Drop-Off." Zero Waste DC, accessed 17 June 2025, https://zerowaste.dc.gov/foodwastedropoff.