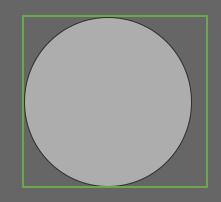


Curbside Organics Collection

Methods, Equipment, and Best Practices







Sam King - Blue Earth Compost - September, 2020



Introduction

Sam King - Co-owner of Blue Earth Compost, Inc.

Private company hauling food scraps and compostable material from:

- Homes subscription-based service
- Businesses and Institutions contract-based service
- Events contract-based service

In operation since 2013 and have diverted over 10M pounds from incinerators and landfills

Currently no municipal contracts, but we are the experts in food waste hauling in CT.



Why Curbside Organics?

Municipal Curbside Collection of organics is one of the most promising ways to increase recycling.

- In 2018, 1.9 Million tons of trash were incinerated in CT and 247,000 tons were shipped to OOS landfills
- According to DEEP, about $\frac{1}{4}$ of MSW is food scraps \cong 540,000 tons/year.
- Towns can no longer rely on MIRA facility \cong 26% of state MSW capacity.
- Incinerators and landfills are a public health and EJ issue.
- The effects of MSW incineration on climate change can't be ignored
- Organics are a resource, not waste



Why Curbside Organics? The Benefits

• Reduce greenhouse gas emissions and still produce energy Composting organic waste is an environmentally sound method of waste disposal and when done with anaerobic digestion can also create energy.

Education

The implementation of an organics program can also allow for educational opportunities regarding recycling, waste reduction, and environmental stewardship. Outreach both encourages participation and decreases the amount of contamination.

• Sale of compost

An opportunity through the curbside collection program is to compost the food scraps "in-house" with brown waste, like leaves and manure from the municipality. This could lead to the use of compost for city projects, as well as the sale of compost to local landscaping companies, residents, and gardens.

Possibility of less frequent garbage pickup

Where organics are collected, there may not be a need for weekly garbage collection as residents can recycle and compost more of their waste. For instance, garbage collection can occur every-other week.



What's Going on in CT?

So far, towns in CT have dipped their toes into food scrap collection for composting. Here are some examples:

- Pilot Programs
 - Bridgewater
 - West Hartford
- Transfer Station Programs
- Our service
 - 17 towns
- In-state composting capacity
 - Quantum
 - New Milford Farms, WeCare, NE Compost
 - Innovation at the gov't level
- CCSMM
- SB298



What's Going on Outside CT?

Municipalities and Gov'ts across the nation have been running curbside organics programs for decades. Every program is unique and there are a wide range of approaches.

Programs can be categorized in 3 ways:

- Who organizes and administers the program?
- Who hauls the material?
- Is there a rule on the books mandating collection?



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- Who organizes and administers the program?
- Who hauls the material?
- Is there a rule on the books mandating collection?

Here are the five categories we have documented:

- 1. Organized by a municipality and hauled by the municipality with an ordinance
- 2. Organized by a municipality and hauled by the municipality without an ordinance
- 3. Organized by a municipality and hauled by contracted hauler(s) with an ordinance
- 4. Organized by a municipality and hauled by contracted hauler(s) without an ordinance
- 5. A municipality passed an ordinance and hauled by "free market" of haulers

Organized by a municipality and hauled by the municipality with an ordinance

Examples: New York, NY and Berkeley, CA

New York, NY

Year Started: 2013

Funding: The funding for this program comes from the tax base.

City Oversight: The curbside program is run by the Department of Sanitation for New York City. The DSNY Sanitation workers are tasked with the collection and transportation of organics from curbside collections. There are a total of 10,000 employees of the DSNY.

Tonnage & Participation: 42,000 tons/year in March of 2020 (pre-suspension) - 3.5 million participants



Organized by a municipality and hauled by the municipality without an ordinance

Examples: Cambridge, MA, Madison, WI, Denver, CO

Cambridge, MA

Year Started: 2015

Funding: The city has a \$1 million capital budget for the organics pickup program. The city also received grants for a feasibility study and implementation.

City Oversight: The City's Department of Public Works runs the program and handles collections. There are 2 collection trucks for food scraps, which typically have 3 employees on them at any given time. They also have one employee that oversees the organics program.



Tonnage & Participation: 1,768 tons/year - 27,000 households

Organized by a municipality and hauled by contracted hauler(s) with an ordinance

Examples: Seattle, WA, San Francisco, CA, Brattleboro, VT

Seattle, WA

Year Started: 2005

Funding: The collection service is funded from <u>PAYT</u> and from the fee that residents pay for the service based on bin size. The PAYT system functions as an incentive for composting and recycling, because the prices are lower than that of trash. Seattle also received a grant for outreach.

City Oversight: The curbside program is housed under the Seattle Public Utilities office. There are approximately 18 employees that perform the administrative work.

Tonnage & Participation: 175,000 tons per year - 3.4 million participants



Organized by a municipality and hauled by contracted hauler(s) without an ordinance

Examples: Portland, OR, Falls Church, VA

Falls Church, VA

Year Started: 2015

Funding: The City has a budget of \$30,000 for the curbside organics collection program and \$8,500 for the drop-off location. The residents that receive curbside pickup pay about \$6/month for the service.

City Oversight: The organics collection program is run by Public Works. There are two city staff members assigned to it.

Tonnage & Participation: 110 tons per year - 640 households



A municipality passed an ordinance and hauled by "free market" of haulers

Examples: Boulder, CO, Hennepin County, MN

Hennepin County, MN

Year Started: 2003

Funding: For the early pilot curbside programs, Hennepin County paid for kitchen bins, a 3-month supply of bags, and signage for carts. Many programs since then are grant funded to start.

County Oversight: The programs are overseen by the Hennepin County Public Works, Environment & Energy Department.

Tonnage & Participation: 18,000 tons per year - 35 towns





Trends

Every program has its unique aspects, but here are some universal threads:

- Contamination can be solved with thorough education.
 - Use clear, picture-based materials that are bi- or tri-lingual
 - Utilize online tools
 - Community engagement is essential to success.
 - Punitive measures should be a last resort
- Grants are an important way to get a program started, but a municipality cannot rely on them.
- Start small, with a limited scope of accepted materials. It's much easier to add than subtract.
- Resident's concerns tend to be related to smell and potential for pests.
- Of the municipalities studied, 6 utilize PAYT programs.
- Some municipalities have been able to switch their MSW service to every-other-week collections because of successful recycling

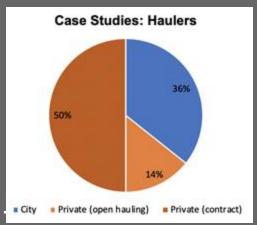


Trends - (cont'd)

- Of the municipalities included, 50% contract with private hauling companies, 36% have city hauling, and 14% have open hauling systems, where residents contract individually.
- The average difference between MSW and food scrap tip fees is \$33.39/ton
- Ordinances encourage participation in the organics collection program. Seven of the municipalities included in the case

studies have an ordinance (or law) that mandates participation in an organic collection program or backyard composting.

- Of the municipalities included in this study, 7 accept compostable bags or dining ware.
- 32-gallon rolling carts are the standard.





How Would Curbside Organics Look For Me?

You've seen what others are doing. What is the right path for your municipality? What are your goals? What are the motivating factors?

Economics, Sustainability, Politics, and Logistics all come into play. Here are some key questions:

- What are you paying now? What will you pay in the future?
- What investments are needed to keep the status quo viable?
 What investments are needed to change the status quo?
- Is PAYT right for me?
- Is an ordinance right for me?
- How and where will the material be processed?
- How can I ensure reliability to my residents?
- Who will partner with me to make this a success?
- How can I do what's right for people and planet?
- How can I positively engage residents in this transition?



We're Here to Help

We want to see you succeed!

Feel free to reach out with questions or for consultation about our services, equipment considerations, or anything else.

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