

A Distributed
Infrastructure Is
Key:

Support Small-
Scale and Home
Composting

October 24, 2018

**Mid-Atlantic Food
Recovery Summit**

Bowie State Univ., MD



Brenda Platt, @PlattBrenda
Institute for Local Self-Reliance, @ilsr
Composting for Community Project

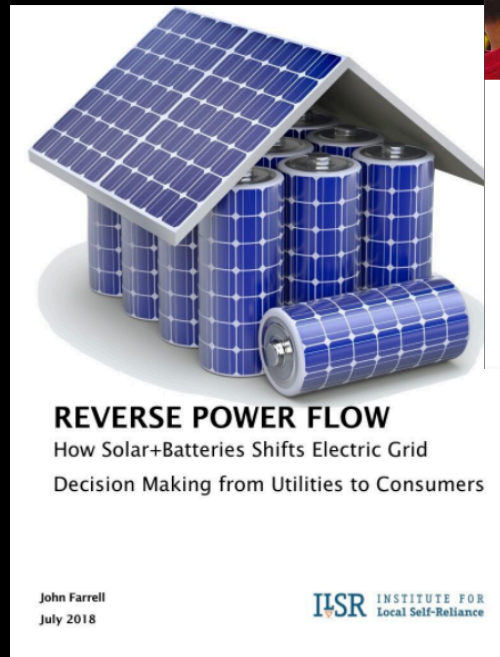


Programs:

- ✓ Community Owned Broadband
- ✓ Energy Democracy
- ✓ Community Scaled Economy
- ✓ The Public Good Blog
- ✓ Waste to Wealth
- ✓ Composting for Community

Our Mission:

To provide innovative strategies, working models and timely information to support environmentally sound and equitable community development.

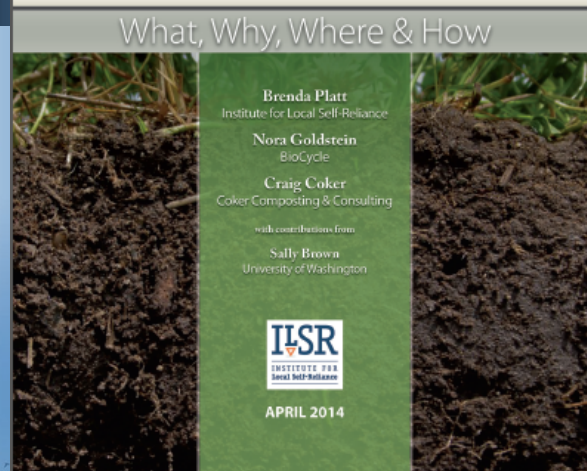
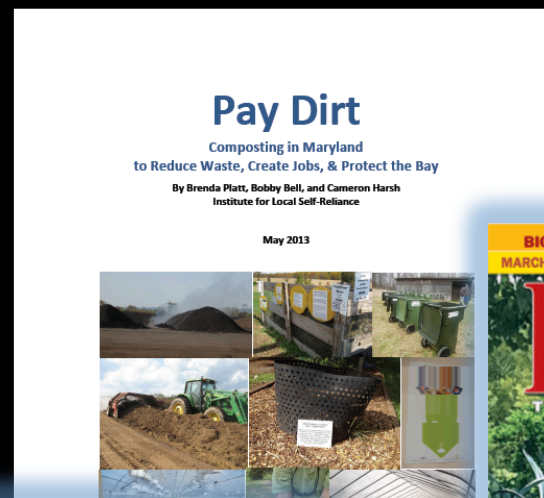
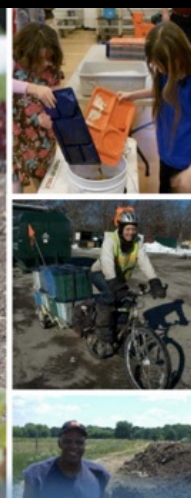


Amazon's Next Frontier: Your City's Purchasing

Amazon is changing the rules for how local governments buy goods — and putting cities, counties, and school districts at risk.

By Olivia LaVecchia and Stacy Mitchell
July 2018

ILSR INSTITUTE FOR
Local Self-Reliance



ILLUSTRATING
THE VISION

PROVIDING
TOOLS

CHANGING
THE RULES



COMPOST: Impacts More Than You Think

Composting is the aerobic decomposition of organic materials by microorganisms. It transforms raw materials—such as leaves, grass clippings, garden trimmings, food scraps, animal manure, and agricultural residues—into compost, a valuable earthy-smelling soil conditioner, teeming with life.

One Person's Trash is...

...another's black gold.

Every year, U.S. landfills and trash incinerators receive **167 MILLION TONS** of garbage.

Landfills and incinerators are dangerous.
Every bag thrown out contributes to:



Pollution of surrounding
soil, air, and water



Climate change



Health hazards to
humans and animals

> 50% of typical municipal garbage set
out at the curb is compostable.

21% is food scraps alone

15% paper/paperboard

8% yard trimmings

8% wood waste

SOURCES:

Brenda Platt, Nora Goldstein, Craig Coker, and Sally Brown, *The State of Composting in the U.S.: What, Why, Where, & How*, Institute for Local Self-Reliance (ILSR), June 2015.
US EPA, *Advancing Sustainable Materials Management: Facts and Figures 2013*, June 2015, pp. 12, 46.
Brenda Platt, Eric Lombardi, and David Ciple, *Stop Trashing the Climate*, Institute for Local Self-Reliance (ILSR), 2008.
Brenda Platt, Bobby Bell, and Cameron Harsh, *Pay Dirt: Composting in Maryland to Reduce Waste, Create Jobs & Protect the Bay*, Institute for Local Self-Reliance (ILSR), May 2013.
Mike Ewall, *Trash Incineration Factsheet*, Energy Justice Network web page, <http://www.energyjustice.net>, accessed April 2016.



ILSR INSTITUTE FOR
Local Self-Reliance

To learn more, visit: ilsr.org/compost-impacts

Infographics / posters:
ilsr.org/compost-impacts



Composting Enhances Soil and Protects Watersheds

Healthy soils are essential for protecting watersheds. Compost is the best way to add organic matter—which is vital—to soils.

When added to soil, compost can filter out urban stormwater pollutants by an astounding **60-95%**



IT'S ALL ABOUT THE SOIL

COMPOST improves biological, chemical, and physical characteristics of soil.

Protects against soil desertification and soil erosion

Enhances plant disease suppression

Increases resilience to floods and droughts

Increases soil fertility

Reduces need for chemicals

Converts nitrogen into a more stable and less mobile form and phosphorous into a less soluble form

Increases microbial activity

Improves water retention

Improves soil structure

Improves ability to store nutrients (such as cation exchange capacity)

Adds humus, keeping soil particles stuck together

Compost serves as a filter and sponge. It immobilizes and degrades pollutants, improving water quality.

Compost helps reduce stormwater runoff because it can hold
~5x its weight
in water.

Neighborhood Soil Rebuilders

COMPOSTER TRAINING PROGRAM



<https://ilsr.org/neighborhoodsoilrebuilders/>



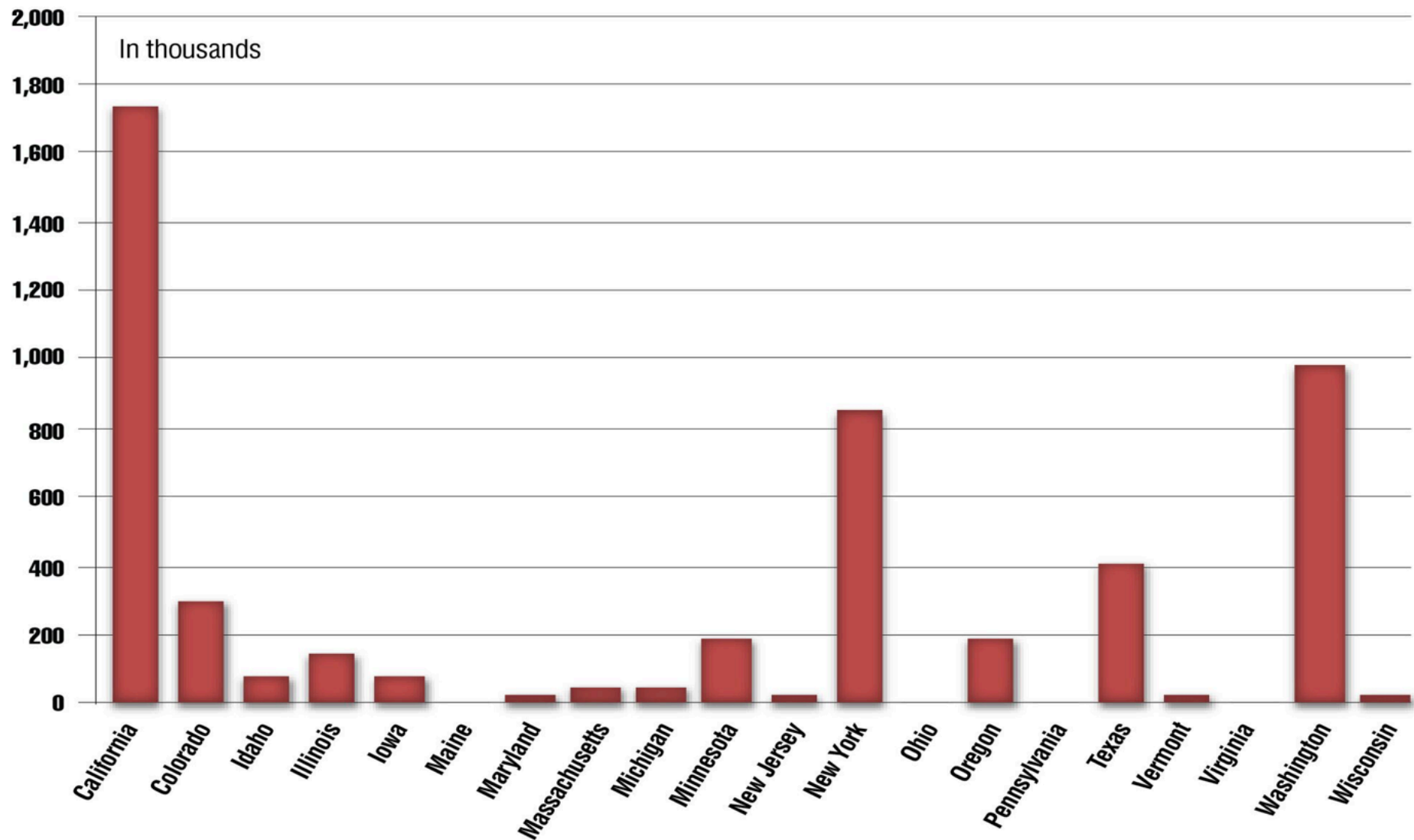
National Cultivating Community Composting
Forums • Webinars • Coalition • Listserve





U.S. households with access to curbside food waste collection by state

148 Programs reporting



Should we rely on only regional mega-facilities?

COMPOSTING

ARTICLE

Failure of the Wilmington Compost Facility Underscores Need for a Locally Based and Diverse Composting Infrastructure

Neil Seldman | 0 Comments | Dec 18, 2014



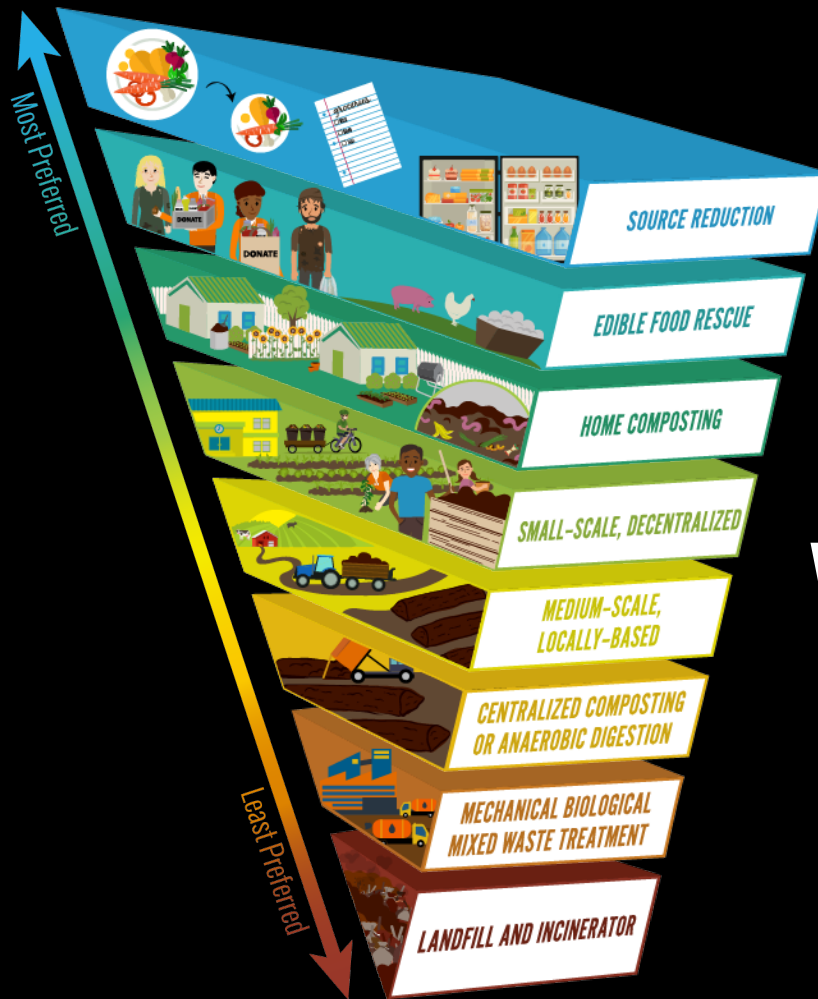
The rapid increase in community-scale composting in the Mid-Atlantic is sorely needed. The recent closing of the [Wilmington Organics Recycling Center](#) in Delaware, due to the loss of its operating permit, has pushed the need for a distributed and diverse composting infrastructure to the fore. Source separated food discard programs from New York City to Washington, DC, are now scrambling to find alternative sites to tip their loads.

The Wilmington Organics Recycling Center was at the center of expanded food discard collections in the Mid-Atlantic region. Developed, sited, permitted, financed and built by The Peninsula Compost Group (TPCG), the facility was designed to receive 600 tons per day of source separated organic materials from government institutions, grocery chains, schools, food processors, sports venues, restaurants, and other large food waste generators. A separate company, named the Peninsula Compost Company (PCC), was set up to own the plant. Its original members included the EDiS Company and Greenhull Compost LLC (both of Wilmington, Delaware), as well as the developers, TPCG. The facility commenced operations in late 2009 composting around 200 tons per day. For the first two years, TPCG was the managing and operations partner. During that time there were no verified odor complaints or Notices of Violation from the State of Delaware and the compost produced met every Federal and State standard for unrestricted use.

Composting, lots of ways



How important is scale and distributed infrastructure?
Where does home composting fit in?

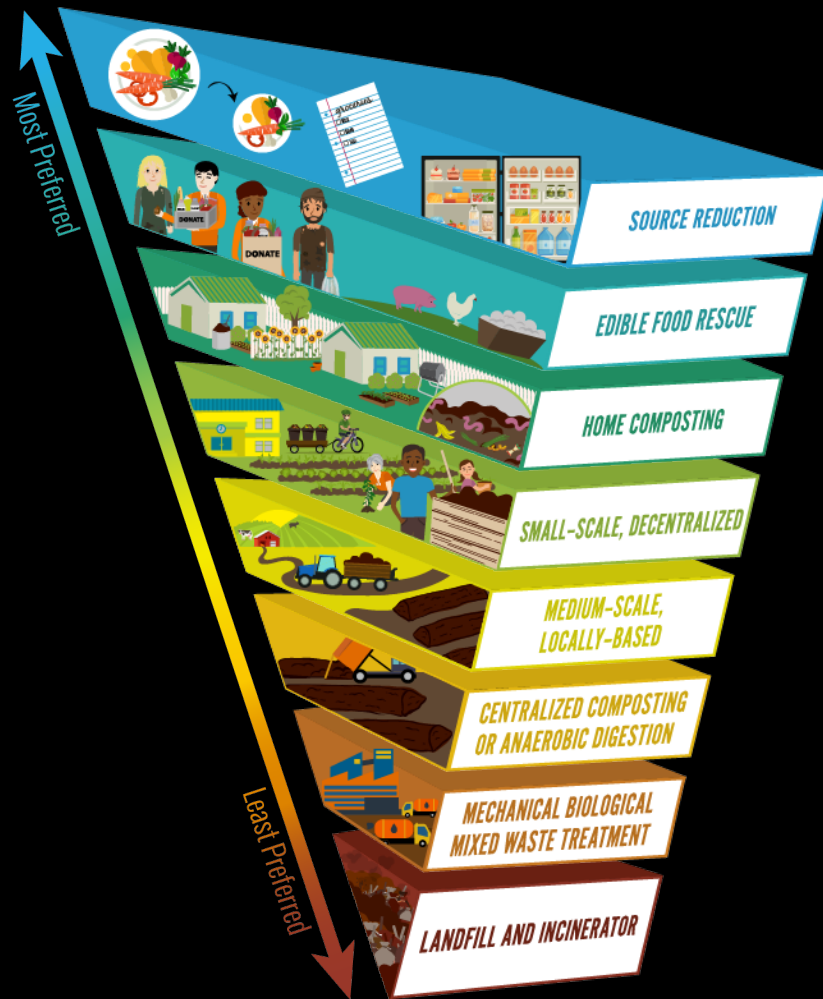


Hierarchy to Reduce Food Waste and Grow Community

IILSR
INSTITUTE FOR
LOCAL SELF-RELIANCE



IILSR





Source Reduction

Prevention. Do not generate food waste in the first place! Reduce portions, buy what you need, and organize your fridge for optimal food usage.





Edible Food Rescue

Feed hungry people. Divert food not suitable for people to animals such as backyard chickens or to local farmers' livestock.





Home Composting

Composting in backyards or in homes.
Avoid collection costs!





Small-Scale, Decentralized

Onsite composting or anaerobic digestion, and community composters can accept material from off-site or simply process their own material.





Medium-Scale, Locally-Based

Composting or anaerobic digestion at the small town or farm scale. These systems handle typically between 10 and 100 tons per week and are designed to serve small geographic areas.





Centralized Composting or Anaerobic Digestion

Facilities serving large geographic areas that typically handle more than 100 tons per week. Material generally leaves the community in which it is generated.





Mechanical Biological Mixed Waste Treatment

Mixed garbage is mechanically and biologically processed to recover recyclables and reduce waste volume and the potential for methane emissions before landfill disposal.





Landfill and Incinerator

Food waste should be banned from landfills and trash incinerators due to their high capital costs, pollution, and contribution to greenhouse gas emissions.

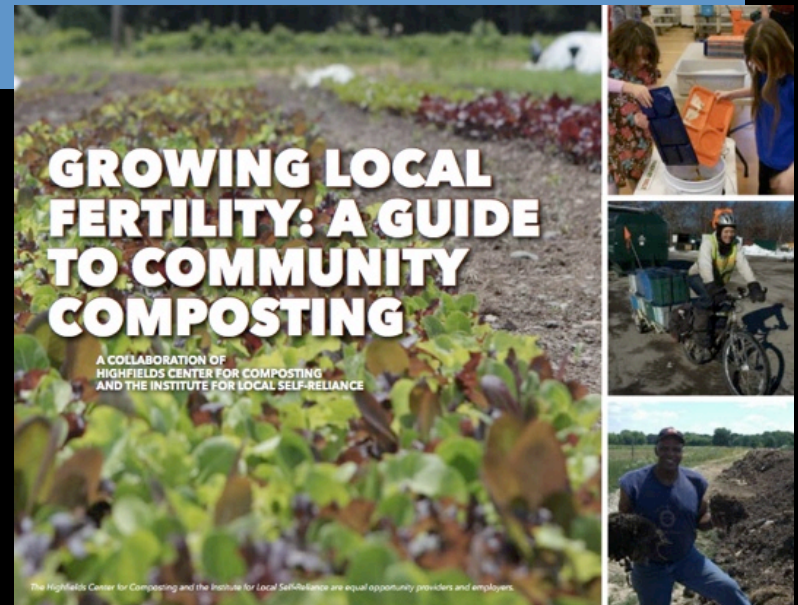


Farmers need investment & support!



Definition of Community Composting

Community composting keeps the process and product as local as possible while engaging the community through participation and education



Download the free Growing Local Fertility: A Guide to Community Composting at www.ilsr.org/growing-local-fertility

NYC Supports Community Composting

2014 NYC Community Composting Report

Submitted January 2015 by NYC Department of Sanitation Commissioner Kathryn Garcia to:

- Mayor Bill de Blasio
- City Council Speaker Melissa Mark-Viverito
- Chair of the Committee on Sanitation & Solid Waste Management Antonio Reynoso



DSNY Organic Waste Diversion Strategy:

DSNY believes that a strong organic waste diversion strategy for NYC will operate at three scales:

- ① at a citywide level,
- ② in communities and neighborhoods, and
- ③ in the home.



Rebuilding our soil,
neighborhood
by neighborhood.

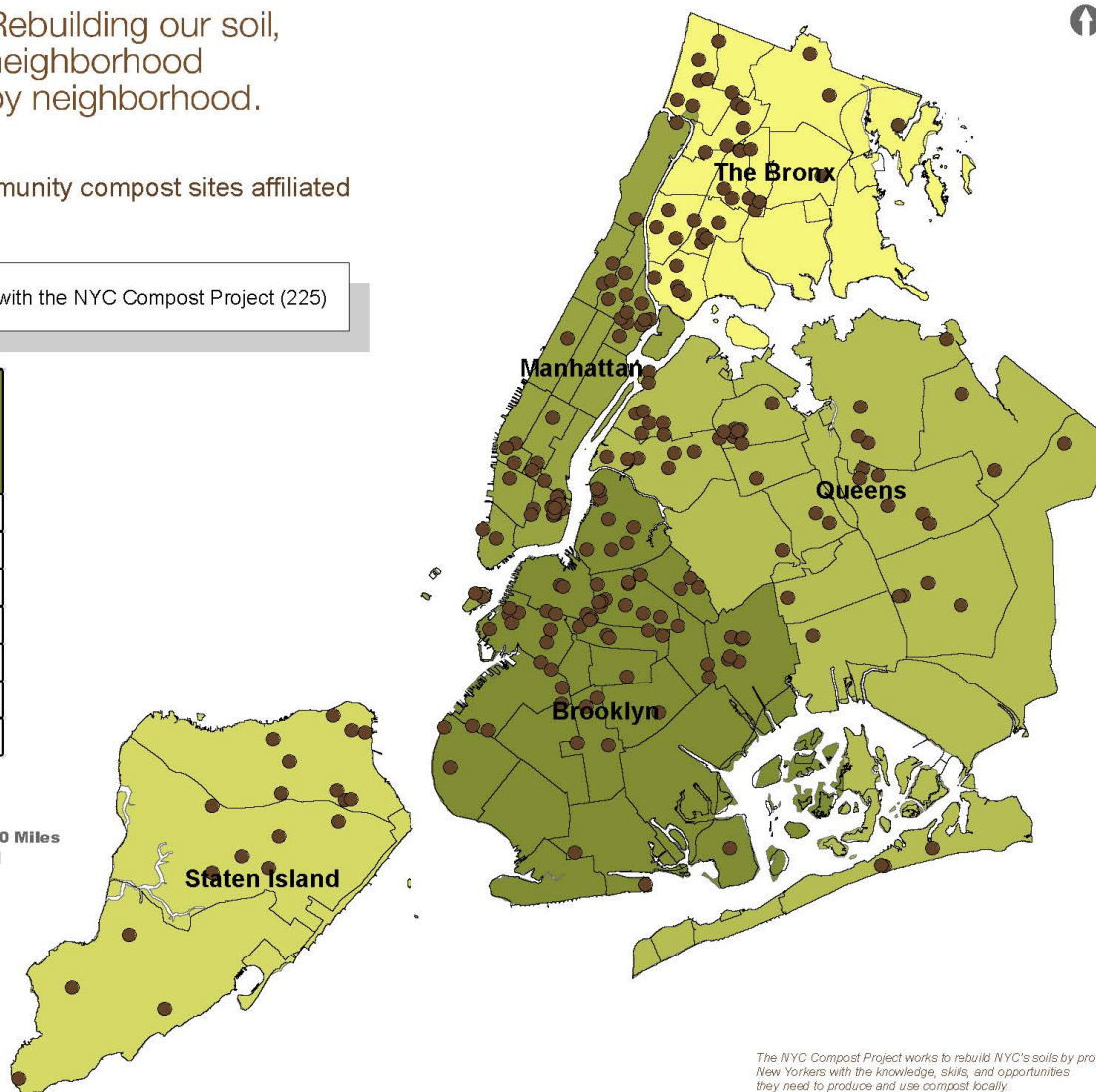
Included in this map are all community compost sites affiliated with the NYC Compost Project.

● Community Compost Sites Affiliated with the NYC Compost Project (225)

**Community Compost Sites
Affiliated with the NYC
Compost Project**

| Borough | Total per Borough |
|---------------|-------------------|
| Brooklyn | 68 |
| Bronx | 37 |
| Manhattan | 48 |
| Queens | 52 |
| Staten Island | 20 |
| Total | 225 |

0 5 10 Miles



The NYC Compost Project works to rebuild NYC's soils by providing New Yorkers with the knowledge, skills, and opportunities they need to produce and use compost locally.

The project is funded and managed by the NYC Department of Sanitation's Bureau of Waste Prevention, Reuse and Recycling. Learn more at nyc.gov/compostproject.

Drop-off Network



[GREENMARKET](#)
[RECYCLE](#)
[GARDEN](#)
[TEACH](#)
[ABOUT](#)
[CONTACT](#)

[f](#)
[t](#)
[i](#)

RECYCLING

[Why Recycle](#)

[What to Recycle](#)

[How to Videos](#)

[Recycling Resources](#)

[Textile Recycling](#)

[Compost](#)

[Dropoff Locations](#)

[Posters](#)

[Stop 'N' Swap®](#)

[School Recycling](#)

[Events](#)



HOME | RECYCLING | RECYCLING RESOURCES | COMPOST | DROPOFF LOCATIONS

Greenmarket Food Scrap Collection Schedule

[f SHARE](#)
[t TWEET](#)
[e EMAIL](#)

[←](#)
[Union Square Greenmarket](#)

Site Name

Union Square Greenmarket

Location

NE Section of Union Square Park

Day

Mon, Wed, Fri, Sat

Duration

Year Round

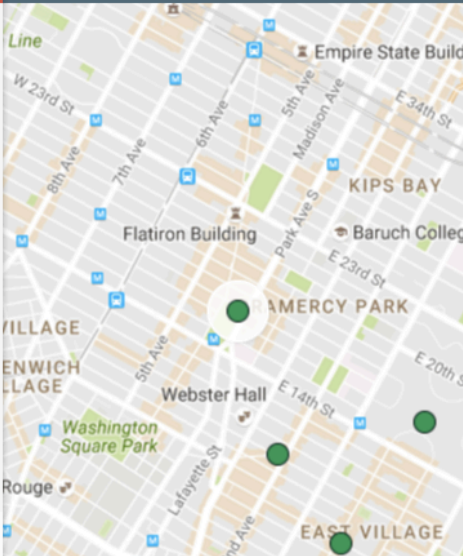
Time

8am-5pm

coordinates

40.736579,-73.989534

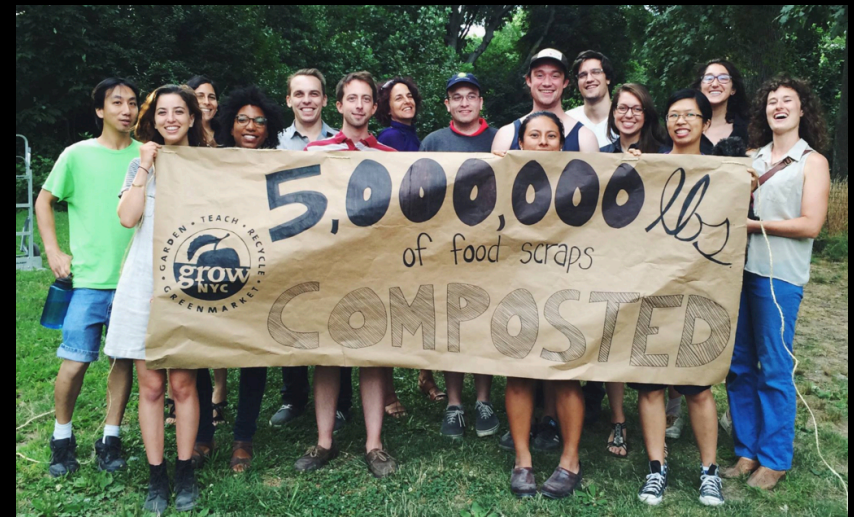
Locations




[GrowNYC Food Scrap Drop-Off Locations](#)



Map data ©2016 Google [Terms](#) 5 mi



Visit a NYC Project Compost Site

Contact any of these sites to take a tour or volunteer:

- NYC Compost Project hosted by **Big Reuse**, Queens
- NYC Compost Project hosted by **Brooklyn Botanic Garden**, Brooklyn
- NYC Compost Project hosted by **Earth Matter NY**, Governors Island
- NYC Compost Project hosted by **Queens Botanical Garden Farm & Compost**, Queens
- NYC Compost Project hosted by **Lower East Side Ecology Center**, Manhattan

Visit a Composting Demonstration Site

Demonstration sites are composting sites that are seen as model locations with strong community relationships.

- **Brooklyn Botanic Garden**, Brooklyn
- **The New York Botanical Garden**, Bronx
- **Queens Botanical Garden**, Queens
- **Snug Harbor Cultural Center and Botanical Garden**, Staten Island

Bike-Powered Collection Growing



Virginia Streeter and Brenda Platt

FOOD scrap collection services have been starting up all over the country, providing an opportunity for residential and commercial customers to divert organics. One segment of this burgeoning sector is bike-powered collection. The Institute for Local Self-Reliance (ILSR) recently interviewed 17 bike-powered food scrap collectors and visited the sites of three. This article summarizes information gleaned from these organizations, and includes their tips for running a food scrap collection service. Tables 1 and 2 provide specific details on each collection service. The ILSR undertook this research to facilitate replication of a bike-powered food scrap collection and community composting program with the Chesapeake Center for Youth Development in the Curtis Bay neighborhood of Baltimore.

Questions asked during the interviews covered starting up, employees and volunteers, composting sites and processes, equipment, customer engagement and marketing, and finances. The majority of interviewees have a residential and commercial customer base. Truman State Rot Riders, a student organization, is one exception—it exclusively serves residential customers. ReSoil Sacramento, one of the programs run by GRAS (Green Restaurant Alliance Sacramento), only serves restaurants and other food providers (e.g. a zoo and a women's shelter) as GRAS' mission is to create a more sustainable food community by working directly with providers. Kristen Baskin of Let Us Compost only offers bike pickup services to residential customers, and uses a truck for commercial customers.

STARTING UP

While each is unique, some existing companies as a model. How long these examples have been around varies. For instance, against taking a year to start, Ivy Post Co. says she has no to anyone into and thus has a little too thin in ing. Several org really trying to hood at a time. neighborhood is for biking serving the distances become too much t. Many interview the difficulty of



The BK ROT model in the Bushwick neighborhood of Brooklyn, NY



Red Hook Community Farm (Brooklyn)



Red Hook Community Farm (Brooklyn)



ECO City Farms (MD)



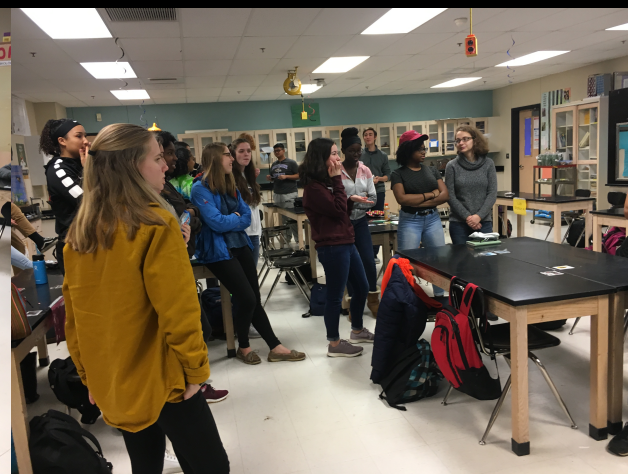
Real Food Farm, Baltimore



Filbert St. Community Garden Baltimore Compost Collective



Youth Engagement



Ramona Unified School District (CA)

2014-2015

- ✖ Source reduction = 2,860 lbs
- ✖ Fed people = 7,280 lbs
- ✖ Fed animals = 3,840 lbs
- ✖ Composted = 6,576 lbs

A cost benefit >\$18,000 in 2015



Compost Connoisseurs



Gloria Quinn, Ramona Unified School District,
"School District Implements Food Recovery
Hierarchy," BioCycle, April 6, 2016, San Diego.



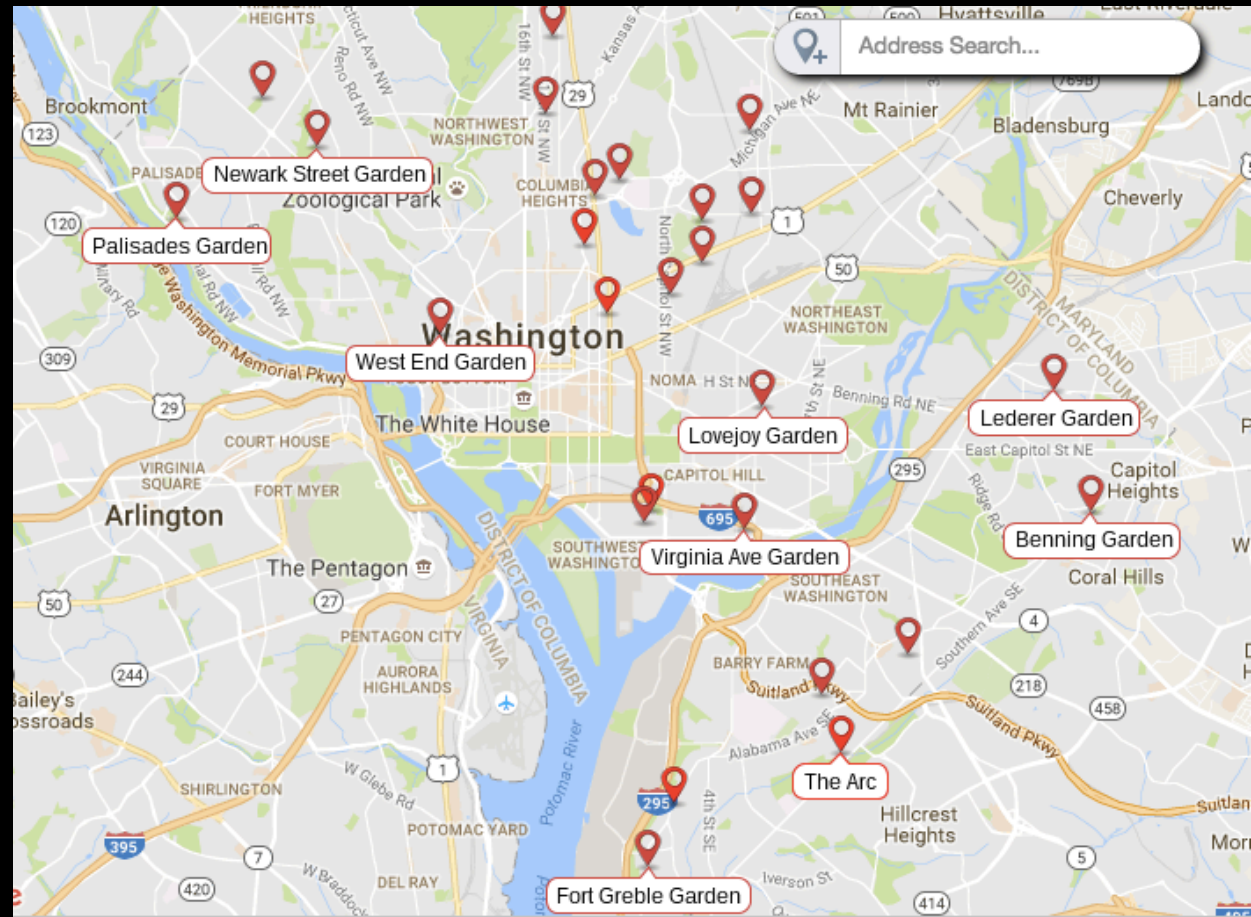
Delivering to the
food pantry.

Howard Co. Dept. of Corrections (Jessup, MD)



DC DPR Community Compost Cooperative Network

- ✖ 50+ DPR gardens have a Compost Knox system
- ✖ Each site has a compost manager
- ✖ Each site has a community compost cooperative



Composting & Training at First DC Urban Food Hub



Sites for home composting workshops



YES! IN MY BACKYARD: ***A Home Composting Guide for Local Government***

- Part 1 – overview and lessons learned
- Part 2 – why local government should support home composting programs
- Part 3 – lessons from profiled programs
- Part 4 – problem of antiquated ordinances and laws to promote home composting
- Part 5 – case studies of 11 city and county programs

- Appendix A - Sample Outreach Materials
- Appendix B - Sample Print Educational Materials
- Appendix C - Reports on Local Programs
- Appendix D - Sample Ordinances
- Appendix E - Miscellaneous



YES! IN MY BACKYARD:

A Home Composting Guide for Local Government

by Brenda Platt and Colton Fagundes

ILSR INSTITUTE FOR
Local Self-Reliance

May 2018
WWW.ILSR.ORG



<https://ilsr.org/yimby-compost/>

<https://ilsr.org/yimby-compost/>



10 Steps for a Successful Program

STEP ONE

Get initial buy-in from those who will be necessary to implement the program. This includes making sure that local ordinances and health and sanitation departments will not impede home composting.

- See Part 4, Ordinances: The Good, the Bad, and the Ugly

STEP TWO

Decide how the program is going to fit into your waste reduction strategies. If you have a successful residential organics collection program, the challenge is getting residents to use their home composter rather than putting everything at the curb.

- See Part 2, Home Composting Integrates with Curbside Collection

STEP THREE

Secure dependable multi-year funding. Outside grants and donations can help offset costs.

- See Spotlight - Partnering to Save More Money

STEP FOUR

Secure solid supply lines for compost bins. Either issue a request-for-bids from manufacturers or set up a voucher/rebate arrangement with local retailers to stock home composting bins.

- See Part 3, Composting Bins and Other Equipment: Bin Options, Prices, and Modes of Delivery

STEP FIVE

Decide on a bin type and price, and means of getting into the hands of residents.

- See Part 3, Pricing and Delivery of Bins: Finding the Sweet Spot



▲ New York City's 2006 truck sale. Source: New York City Compost Project

STEP SIX

Set up easily accessible composting education and training. This can include workshops, informational material, and hotlines.

- See Part 3, Education, Training, and Information

STEP SEVEN

Advertise the program.

- See Part 3, Marketing and Outreach

STEP EIGHT

Provide support to residents after they purchase bins. The success of the program is not just how many bins are sold, but how many are in use.

- See Spotlight - Orlando's Troubleshooting Hotline

STEP NINE

Collect data on composted amounts from participating residents and calculate the costs/savings of the program.

- See Part 2, Save Money

STEP TEN

Keep data on as many aspects of the program as possible, such as number of bins distributed, number of attendees in workshops, how residents hear about the program, and program expenses. Use this data to analyze and improve the program.

- See Part 3, Comprehensive Research Agenda

Why Offer a Program?

1. Fast implementation



Why Offer a Program?

1. Fast implementation
2. No commercial facilities needed



Why Offer a Program?

1. Fast implementation
2. No commercial facilities needed
3. Retains organic matter for residential soils



Why Offer a Program?

1. Fast implementation
2. No commercial facilities needed
3. Retains organic matter for residential soils
4. Builds a culture of composting know-how and ingrains composting knowledge in the next generation



Why Offer a Program?

1. Fast implementation
2. No commercial facilities needed
3. Retains organic matter for residential soils
4. Builds a culture of composting know-how and ingrains composting knowledge in the next generation
5. Can divert significant tonnage from disposal – studies indicate 23 to 83 pounds a month per household



Why Offer a Program?

1. Fast implementation
2. No commercial facilities needed
3. Retains organic matter for residential soils
4. Builds a culture of composting know-how and ingrains composting knowledge in the next generation
5. Can divert significant tonnage from disposal – studies indicate 23 to 83 pounds a month per household
6. Cost-effective without requiring intensive municipal services



Why Offer a Program?

1. Fast implementation
2. No commercial facilities needed
3. Retains organic matter for residential soils
4. Builds a culture of composting know-how and ingrains composting knowledge in the next generation
5. Can divert significant tonnage from disposal – studies indicate 23 to 83 pounds a month per household
6. Cost-effective without requiring intensive municipal services
7. Avoids the labor and costs of collecting and handling material, leading to considerable savings



Why Offer a Program?

1. Fast implementation
2. No commercial facilities needed
3. Retains organic matter for residential soils
4. Builds a culture of composting know-how and ingrains composting knowledge in the next generation
5. Can divert significant tonnage from disposal – studies indicate 23 to 83 pounds a month per household
6. Cost-effective without requiring intensive municipal services
7. Avoids the labor and costs of collecting and handling material, leading to considerable savings
8. Saves money by avoiding tipping fees at disposal sites – savings that are cumulative as long as households keep composting



Why Offer a Program?

1. Fast implementation
2. No commercial facilities needed
3. Retains organic matter for residential soils
4. Builds a culture of composting know-how and ingrains composting knowledge in the next generation
5. Can divert significant tonnage from disposal – studies indicate 23 to 83 pounds a month per household
6. Cost-effective without requiring intensive municipal services
7. Avoids the labor and costs of collecting and handling material, leading to considerable savings
8. Saves money by avoiding tipping fees at disposal sites – savings that are cumulative as long as households keep composting
9. Can complement a curbside collection program



Why Offer a Program?

1. Fast implementation
2. No commercial facilities needed
3. Retains organic matter for residential soils
4. Builds a culture of composting know-how and ingrains composting knowledge in the next generation
5. Can divert significant tonnage from disposal – studies indicate 23 to 83 pounds a month per household
6. Cost-effective without requiring intensive municipal services
7. Avoids the labor and costs of collecting and handling material, leading to considerable savings
8. Saves money by avoiding tipping fees at disposal sites – savings that are cumulative as long as households keep composting
9. Can complement a curbside collection program
10. Contributes to a distributed and diverse food recovery infrastructure.



Why Offer a Program?

1. Fast implementation
2. No commercial facilities needed
3. Retains organic matter for residential soils
4. Builds a culture of composting know-how and ingrains composting knowledge in the next generation
5. Can divert significant tonnage from disposal – studies indicate 23 to 83 pounds a month per household
6. Cost-effective without requiring intensive municipal services
7. Avoids the labor and costs of collecting and handling material, leading to considerable savings
8. Saves money by avoiding tipping fees at disposal sites – savings that are cumulative as long as households keep composting
9. Can complement a curbside collection program
10. Contributes to a distributed and diverse food recovery infrastructure.



Diversion Potential?

For every 10,000 households home composting, an estimated 1,400 tons per year could be diverted from disposal, avoiding ~\$72,000 per year in disposal fees alone.

For every 10,000 households receiving personalized hands-on training and support with subsidized bins, this tonnage could grow to as much as 5,000 tons per year, with avoided disposal fees jumping to ~\$250,000.



BioCycle.net
BioCYCLE
THE ORGANICS RECYCLING AUTHORITY.

Search over 2,500 articles on composting, renewable energy and organics recycling.
Search BioCycle

Home • Current Issue • Conferences • Subscribe/Renew • Resources •

Value And Benefits Of Backyard Composting

[f](#) [t](#) [in](#) [d](#) [g](#)

BioCycle October 2011, Vol. 52, No. 10, p. 35

Year-long data collection by 16 households in metropolitan Vancouver reveals that backyard composting is undervalued when considering boost to diversion rates and collection cost savings.

Elizabeth Leboe

The North Shore Recycling Program (NSRP) is a tri-municipal agency of the City of North Vancouver, the District of North Vancouver and the District of West Vancouver in British Columbia. The NSRP administers the residential curbside recycling program and recycling drop-off depot and provides a variety of community education programs that support residential waste reduction. This includes backyard composting, which has a large role to play in partially diverting organics, the heaviest and largest component of the residential waste stream. Thirty-seven percent of the garbage sent for disposal from North Shore single-family homes could be composted at home.

In 2008, the NSRP made a first attempt to estimate the amount of material the average single-family household backyard composts without any training or assistance; the result of this work is considered a "baseline" against which future studies would be





Seattle's 1st master composter class in 1986

Profiled Communities

| City/County | Population (2016) | Program Start Year | Total # All Bins Distributed Since Program Start ^a | Last Reported # Bins Distributed in Single Year ^b |
|---------------------------|-------------------|--------------------|---|--|
| Austin | 947,890 | 2010 | 4,870 | 581 ^c |
| Cheverly (MD) | 6,469 | 2011 | ~400 | leveled off demand |
| Los Angeles County | 10,137,915 | 2005 | N/A | 1,422 |
| Miami-Dade County (FL) | 2,712,945 | 2014 | 445 | N/A |
| Napa (CA) ^d | 80,416 | 1997 | 4,218 | 120 |
| New York City | 8,537,673 | 1998 | 20,299 | 38 ^e |
| Oregon Metro ^f | 1,790,607 | 1993 | 109,090 | 400 ^g |
| Orlando (FL) | 277,173 | 2015 | 5,340 | N/A |
| San Diego | 1,406,630 | 2012 | 1,973 | N/A |
| Seattle | 704,352 | 1989 | N/A (35,644 as of 1996) | N/A |
| Vancouver (Canada) | 631,486 | 1990 | ~53,000 | 286 |

^a As of 2018.

^b For 2017, unless noted.

^c For fiscal year 2015 (July 2014 - June 2015).

^d Napa's program is run by the City but covers Napa County. Population figure represents the City's population. The County's population was 142,166 in 2016.

^e For fiscal year 2016.

^f Oregon Metro is the regional government for the Oregon portion of the Portland metropolitan area. It serves 25 cities in Clackamas, Multnomah, and Washington counties (as well as unincorporated parts of those counties).

^g Average per year since 2012.

Source: Institute for Local Self Reliance, 2018.

Key Take-Aways & Recommendations



- Make home composting bins accessible to residents
- Educate and train
- Outreach and market
- Measure, evaluate, and improve
- Address antiquated ordinances



Bin Types & Prices



▲ Many stationary compost bins come packaged in easily transportable and stackable packaging, such as the Soil Saver bin pictured here in Napa. Source: City of Napa



▲ A family tending to a FreeGarden™ Earth compost bin provided by Oregon Metro in their backyard. Source: Oregon Metro



▲ The Earth Machine™ (pictured here at the Earth Matter NY demonstration site on Governors Island in New York City) is the most commonly offered standard design backyard compost bin of the programs reviewed in this report. Source: Institute for Local Self-Reliance



▲ The Can-O-Worms composting bin is offered by Los Angeles County and San Diego. Source: gstore.com.au

| City | Current Type of Backyard Composter (price) |
|--------------------|--|
| Austin | Voucher/rebate for any bin (up to \$75 off) |
| Cheverly | Earth Machine™ (\$20), FreeGarden™ Earth (\$20) |
| Los Angeles County | Soil Saver (\$40) |
| Miami-Dade County | Earth Machine™ (free) |
| Napa | Earth Machine™ (\$20), Soil Saver (\$20) |
| New York City | Earth Machine™ (\$65), Garden Gourmet (\$65), assembled in-house metal trash can composter (\$20) |
| Oregon Metro | FreeGarden™ Earth (\$49) |
| Orlando | Earth Machine™ (free) |
| San Diego | Vouchers for Soil Saver (\$47.99 after \$30 voucher), Terra Dual Batch Composter (\$129.99 after \$50 voucher) |
| Seattle | Green Cone (\$119), Beaver State Plastic Recycler Yard Composter (\$80) |
| Vancouver | Earth Machine™ (\$25 with free aerator) |

Source: Institute for Local Self-Reliance, 2018



Seattle yard composter



Green Cone



Terra Dual Batch

Worm Bins Too



▲ Worm bins – manufactured by Transform Compost – provided to Vancouver residents for \$25



| City | Current Type of Worm Bin (price) |
|--------------------|--|
| Austin | Voucher/rebate for any bin (up to \$75) |
| Los Angeles County | Can-O-Worms (\$40) |
| Napa | Rebate (\$30), and option to construct own for free at workshops |
| New York City | Assembled in-house (\$55) |
| San Diego | Can-O-Worms (\$59.99 after \$40 voucher, comes with mail-in voucher for free pound of worms) |
| Vancouver | Provided by Transform Compost Systems (\$25 with worms) |

Source: Institute for Local Self Reliance, 2018.

Bin Distribution – many options

- Vouchers/rebates (freedom to choose bin types)
- Subsidized bins for residents to buy at below market-value price
- Bulk purchased bins with savings passed on to residents
- Pre-order program of discounted bins, delivered to a central location
- Truck sale events (bins sold at discounted prices at pre-planned locations)
- Free bins



COMPOST BIN VOUCHER PROGRAM

HOW TO REDEEM THE COMPOST BIN VOUCHER

- Choose one of three Dixieline Lumber and Home Center locations to purchase the discounted compost bin:

| | | |
|--|---|---|
| 7292 Miramar Road San Diego, CA 92121 858-695-0600 | 3250 Sports Arena Blvd San Diego, CA 92110 619-224-4161 | 4888 Convoy Street San Diego, CA 92111 858-279-5010 |
|--|---|---|
- Bring the following to the Dixieline in order to successfully complete the transaction:
 - City of San Diego issued Compost Bin Voucher (below) – and remember that the only person who can redeem the voucher is the person listed on the voucher.
 - Picture ID
 - Utility bill
- Purchase your discounted compost bin and start composting.*

*If you chose the worm bin option, make sure you redeem the coupon for the one pound bag of worms (also submitted in this packet) so you can start using your new bin.

Questions about composting? Call the Hotline! (760) 436-7986 ext. 222

For more information about composting or to sign up to attend a FREE composting workshop: www.RECYCLINGWORKS.COM – click on "Backyard Composting"

COMPOST BIN VOUCHER

VN1234

Name: Mr. and Mrs. Compost

Address: 11000 Global Drive, San Diego, CA 92123

Proof of Residency Required

| | |
|--------------------|----------------------|
| COMPOST BIN | VOUCHER VALUE |
| Soil Saver | \$30.00 |
| | EXPIRES |
| | 10/31/2016 |

This voucher must be redeemed by the person listed and is only valid at a Dixieline Lumber and Home Center location within the City of San Diego limits. This coupon may not be reproduced or transferred and must be surrendered to the store at time of purchase.

Cheverly, MD, shows 25% of residents will backyard compost, saving money on collection and disposal fees

- ✖ April 2011, backyard composting program
- ✖ 25% of 1,600 single-family homes participating
- ✖ ~100 tons per year composted
- ✖ ~\$6,000 in avoided disposal fees/year
- ✖ Total savings expected to be \$120,000 over 20 years
- ✖ A dozen municipalities have implemented the program (including Bowie, Greenbelt, Mount Rainier, Berwyn Heights, Colmar Manor & Brentwood).



Educate & Train

| City | Free In-person Workshop Available | Workshop Required to Get Bin | Master Composting Course | Demo Site ^a | Compost Hotline | Online and/or Print Educational Materials |
|--------------------|-----------------------------------|------------------------------|--------------------------|------------------------|-----------------|---|
| Austin | ✓ | ✓ | | | | ✓ |
| Cheverly | | | | | | ✓ |
| Los Angeles County | ✓ | ✓ | | ✓ | | ✓ |
| Miami-Dade | ✓ | ✓ | | | | ✓ |
| Napa | ✓ | ✓ | | | | ✓ |
| New York City | ✓ | | ✓ | ✓ | ✓ | ✓ |
| Oregon Metro | | | ✓ | ✓ | | ✓ |
| Orlando | ✓ | | | | ✓ | ✓ |
| San Diego | ✓ | | | | ✓ | ✓ |
| Seattle | ✓ | | ✓ | ✓ | ✓ | ✓ |
| Vancouver | ✓ | | | ✓ | ✓ | ✓ |

^a Permanent sites where the public can see compost bins in use.

Source: *Institute for Local Self Reliance*, 2018.



SPOTLIGHT - Austin's Diverse and Evolving Training Options

Austin's program offers several options for home composting training. To receive a composting bin voucher or rebate, residents must take either an in-person or online class. Program coordinators also collect data to frequently improve the training and how it is provided. Other cities and counties starting a home composting program can learn from the flexibility and adaptability of Austin's approach to composting education.

Online Classes

The online class includes a 15-minute video and brief quiz. In Austin's program, more people claim compost bin vouchers or rebates through the online class than in person. Providing classes online is a potential cost-efficient option for home composting programs that may lead to more people claiming bins, but it is uncertain if such classes are as effective of an educational experience as in-person classes. Austin still sees a significant number of people participating in their physical workshops; some do not claim the subsidized voucher/rebates, but simply attend to learn about composting. Therefore, online classes are not a replacement for in-person classes. Requiring that residents take an online class ensures that new composters have some understanding of the composting process. By hosting



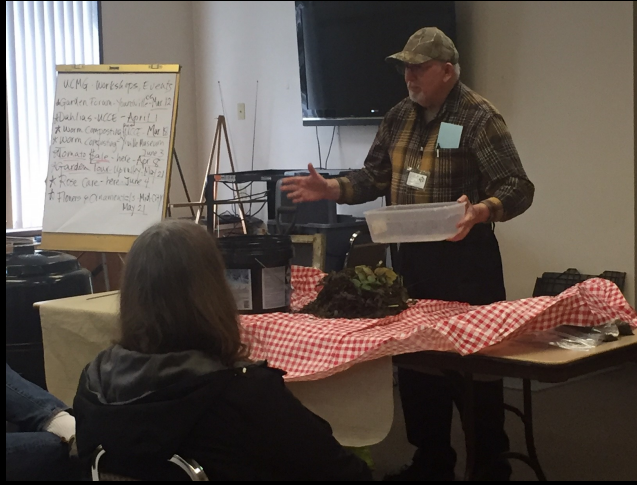
▲ When the weather is nice, Austin Resource Recovery holds compost workshops outside in parks and farmers' markets. During the rainier months, Austin holds the workshops in frequented in-door locations such as libraries. *Source: Austin Resource Recovery*

in-person workshops in targeted locations, a program can also provide the opportunity for a more thorough educational and hands-on experience and reach those residents that are already composting but wish to gain more training.

Community-taught Workshops

One more option Austin residents have is to hold their own classes using materials provided by the City. These community classes have the choice to use either the online class video, an AV projector presentation, or fact sheet handouts. A community member only needs to sign up online, choose which materials they would like to use, and the City will email that person the appropriate attachments and an Eventbrite link.

Training & Demo Sites



Napa compost class



Vancouver worm composting workshop



Los Angeles class



San Diego demonstration site

Orlando – Get Dirty for Valentine's Day



- × FREE bins to City of Orlando residents
 - Free home delivery
 - Assembled
 - The Earth Machine
- × Launch February 14, 2015 “Get Dirty” Campaign
 - Get Dirty for Valentine's Day
 - Get Dirty with Your Neighbors
- × 5,300+ delivered



Policies help set the stage

Bill No. 28-16
Concerning: Solid Waste
Strategic Plan to
Composting, Compost Use
Waste Diversion
Revised: 8/20/2016, Draft 1
Introduced: June 28, 2016
Expires: December 28
Enacted: _____
Executive: _____
Effective: _____
Sunset Date: None
Ch. _____, Laws of Mont. Co

COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND

Lead Sponsor: Vice President Berliner
Co-Sponsors: Councilmembers Katz and Hucker

AN ACT to:

- (1) require the Director of the Department of Environmental Protection to Strategic Plan to Advance Composting, Compost Use and Food Waste in Montgomery County
- (2) generally amend County laws related to Solid Waste (Trash).

By adding

Montgomery County Code
Chapter 48, Solid Waste (Trash)
Section 48-17B

| | |
|-------------------------------------|--|
| Boldface | <i>Heading or defined term.</i> |
| <u>Underlining</u> | <i>Added to existing law by original bill.</i> |
| [Single boldface brackets] | <i>Deleted from existing law by original bill.</i> |
| <u>Double underlining</u> | <i>Added by amendment.</i> |
| [[Double boldface brackets]] | <i>Deleted from existing law or the bill by amendment.</i> |
| * * | <i>Existing law unaffected by bill.</i> |

The County Council for Montgomery County, Maryland approves the following

(c) Considerations. The Strategic Plan must consider the following areas in its legislative, policy, metrics, and cost recommendations:

- (1) home composting;
- (2) community-scale composting;

- 3 -

BILL NO. 28-16

- (3) on-site institutional and commercial composting;
- (4) on-farm composting;
- (5) small-scale commercial composting facilities;
- (6) support for existing and new composting businesses in the form of grants, loans, and land;
- (7) models and best practices, including methods and materials, used by other jurisdictions;

Strategic Plan to Advance Composting, Compost Use, and Food Scraps Diversion in Montgomery County, Maryland



April 2018

Montgomery County, Maryland
Department of Environmental Protection, Division of Solid Waste Services

For information in an alternate format, contact Eileen Kao at (240) 777-6406.

♻️ Printed on recycled and recyclable paper.



In-Home, Backyard, and Community-Scale Composting



Findings

Montgomery County has promoted grasscycling (leaving grass clippings on the lawn after mowing), backyard and community-scale composting of yard trim materials through training, compost workshops and demonstrations, distribution of educational materials, and vermicomposting to recycle kitchen food scraps in-home. Over the long-term, the County has successfully used education and training to encourage residents to grasscycle and compost yard trim materials. At the Montgomery County Composting Facility, a maximum of 77,000 tons of materials may be processed annually, and DEP's efforts have encouraged many residents to manage their grass and leaves at the source. In fact, since 2007, DEP has also distributed over 38,000 backyard compost bins to residents to use for backyard composting. According to the County's most recent Waste Composition Study, yard trim materials accounted for less than 2% of the County's overall disposed waste stream, indicating that most yard trim is recycled through composting (via backyard/on-site, community, or composting facilities) or grasscycling. The County should evaluate the feasibility of encouraging residents to recycle food scraps through at-home, backyard, and community-scale composting programs.



Recommendations

- Continue educational efforts on all forms of in-home, backyard, and community-scale composting, including providing compost training workshops and demonstrations on best practices for backyard and community-scale composting, as well as research and evaluation of other types of compost bins that are suitable for composting food scraps.
- Conduct a coordinated inter-agency review of existing requirements and restrictions pertaining to backyard/community-scale composting, and recommend regulatory changes to County zoning and applicable County codes to clarify, and support activities to include food scraps.
- Consider implementation of regulatory changes or modifications to promote and encourage proper backyard and community-scale composting activities.
- Consider increased collaboration with community-based stakeholders and other pertinent groups (i.e., The Maryland-National Capital Park and Planning Commission - Montgomery Parks, Montgomery County Public Schools, and interested residents, multi-family properties, and businesses or organizations) to establish community-scale composting demonstration projects throughout the County.



Resources

Resources which may include staffing, operating, and/or capital funds that are needed to support these recommendations are dependent on the specific details that should be determined in the development of an implementation plan.

MD Infrastructure Bill

| | |
|---|---|
| HOUSE BILL 171 | |
| M3 | 7lr0704 CF SB 99 |
| By: Delegates Robinson, Cassilly, Barkley, Carr, Fraser-Hidalgo, Gilchrist, Kelly, Kramer, Lam, Luedtke, Moon, Morhaim, Pena-Melnyk, Platt, Reznik, and Waldstreicher | |
| Introduced and read first time: January 19, 2017 | |
| Assigned to: Environment and Transportation | |
| A BILL ENTITLED | |
| 1 | AN ACT concerning |
| 2 | Department of the Environment – Yard Waste and Food Residuals Diversion |
| 3 | and Infrastructure – Study |
| 4 | FOR the purpose of requiring the Department of the Environment, in consultation with |
| 5 | certain persons, to study, review, explore, identify, and make recommendations |
| 6 | regarding certain matters that relate to the diversion of yard waste from refuse |
| 7 | disposal facilities, including certain infrastructure; requiring the Department to |
| 8 | report its interim and final findings and recommendations to the Governor and the |
| 9 | General Assembly on or before certain dates; and generally relating to yard waste |
| 10 | and food residuals diversion and infrastructure. |
| 11 | SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, |
| 12 | That: |
| 13 | (a) The Department of the Environment shall: |
| 14 | (1) study the diversion of yard waste and food residuals from refuse |
| 15 | disposal facilities in the State, including any State laws or regulations governing the |
| 16 | diversion of yard waste or food residuals; |
| 17 | (2) study the laws and regulations of other states governing the diversion |
| 18 | of yard waste or food residuals; |
| 19 | (3) review the status of infrastructure for the diversion of yard waste and |
| 20 | food residuals in the State and other states, including the availability of infrastructure in |
| 21 | relation to: |
| 22 | (i) large generators of food waste, identified by type and geographic |
| 23 | distribution; and |

- 3 (4) explore ways to promote composting of yard waste and food residuals
4 and other methods of organic waste reduction and diversion, including ways to encourage
5 a decentralized and diverse infrastructure;

What you can do... ideas to support home composting

- Partner with nonprofits to provide training and demo sites
- Support local business
- Encourage DIY bins
- Do not unnecessarily restrict community exchange of materials
- The potential to expand home composting is largely untapped but massive
- Be creative and innovative!



Seattle 2-bin DIY system

What can you do... ideas to support distributed composting

- ✖ Support diversified infrastructure
- ✖ Technical assistance and tools for locally based systems
- ✖ Support locally based systems
- ✖ Support reasonable policies & regs
- ✖ Procurement of finished compost
- ✖ Renewed focus on SCHOOLS
- ✖ Equipment for community scaled systems
- ✖ Support training and well operated sites



Photos: NYC Compost Project

Brenda Platt
Institute for Local Self-Reliance
bplatt@ilsr.org
@PlattBrenda
www.ilsr.org



“What Is Community Composting” video:
<https://ilsr.org/video-community-composting/>

Need help designing your own home composting program or offering training?

Our **Neighborhood Soil Rebuilders Composter Training Program** can be adapted to your community!

Contact us at composting4community@gmail.com

