



COMPOSTABLES



People • Service • Environment

Totex

Williamstown: Working Towards Zero Waste

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Composting feasibility study in Williamstown, M.A.

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

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

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



21% is food scraps alone

15% paper/paperboard

8% yard trimmings

8% wood waste

Residential Food Waste



Transfer Station

~2,200 households with 650 tons of estimated food waste per year*

*Based on USDA averages



Combination of incinerators and landfills across the Northeast

Private Hauling



Restaurant Food Waste

30 small-scale businesses collectively producing more than **70** tons of organic waste per year.

Restaurants utilize private haulers

Currently composting: Wild Oats, the Clark Cafe, Orchards Hotel Dining



Mass. Composting Legislation

- Mass DEP Commercial Food Material Disposal Ban
- 2014: Ban on disposal of ≥ 1 ton per week
 - Large institutions and grocery stores
- Oct. 2021: Ban on disposal of $\geq \frac{1}{2}$ ton per week
 - Restaurants serving $\geq 1,000$ meals a week, nursing homes housing ≥ 80 beds



MassDEP

Commonwealth of Massachusetts
Department of Environmental Protection

Methodology

- Case Studies
 - Cambridge, MA
 - Vermont
 - Hamilton, MA
 - Toronto, Canada
- Interviews
 - Waste management experts
 - Compost program leaders
- Field visits



CITY OF CAMBRIDGE – DEPARTMENT OF PUBLIC WORKS

**CURBSIDE ORGANICS COLLECTION FROM RESIDENTS
PHASE 2 REPORT**



Expanding Composting Options

Pilot Program - Pros and Challenges

Pros

- Gauges town popularity
- Works out kinks with smaller population
- Lessons for the future
- Reduced price through grant

Challenges

- Increased price for users when program ends
- Can only support a small % of town
- Not mandatory, would require a lot of outreach and promoting

Williams Composting Expansion

- Williams College Strategic Planning Goals
 - Community outreach and sustainability
- Expand already existing infrastructure + monitoring
- Scope
 - Town residents drop off scraps voluntarily
 - Restaurants in Williams owned buildings have scraps picked up by Williams collector
- Possibility for composting to be written into Williams-owned buildings' leases



Williams Composting - Pros and Challenges

Pros

- Fulfill Strategic Planning Goals
- Student engagement to educate town members on composting 101
- Free for users

Challenges

- Slight increase in price from Casella and cost of monitoring
- Would not include restaurants that do not reside in Williams-owned buildings
- Not mandatory, would require a lot of outreach and promoting

Voluntary Curbside Pickup

- Casella curbside pickups
 - Subscription model
 - **\$15-\$25** monthly add on for bi-weekly pickup
- Available to residents & restaurants who have contracts with Casella
- New cost could be offset if regular trash pickup is decreased over time



Voluntary Curbside Pickup - Pros and Chal.

Pros

- Easy and convenient
- Eventually decrease trash pickup

Challenges

- Increased price
- Would not include people who have memberships at transfer station or other private haulers
- Not mandatory, would require a lot of outreach and promoting

Mandatory Composting Options

Curbside and Transfer Station

- Mandatory Curbside or
 - Casella expansion
 - **\$15-25** monthly increase
 - More trucks on the road?
- Mandatory Transfer Station Drop Off
 - Williamstown contract re-negotiation
 - Increased membership cost



Mandatory Curbside / Transfer Station - Pros and Challenges

Pros

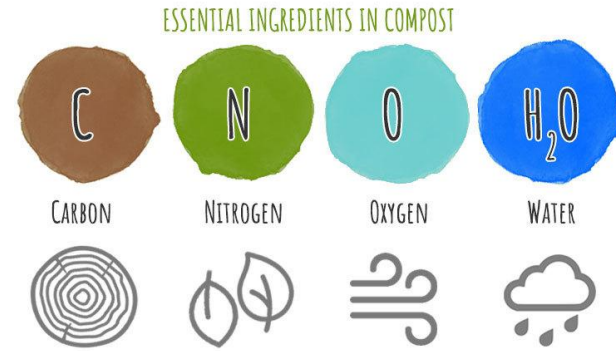
- Enforced composting
- Maximum food waste reduction
- Would provide options for people using private hauling and transfer station

Challenges

- Possible pushback from town
- Forced price increase that some people cannot afford
- No financial support from the state
- Most potential for contamination

Home Composting

- NBSWMD subsidy program to get people supplies
 - 2 gallon kitchen collector & 80 gallon outdoor composter
- Require educational events and outreach
- Close monitoring for bear & rodent infestations
- Cheaper alternative with steep learning curve
- Alternatives available for indoor composting



Home Composting - Pros and Challenges

Pros

- Cheaper than paying for private service
- Free compost

Challenges

- Bears
- Rodent infestations
- Would require a lot of outreach, promoting, and education
- Hard for restaurants to implement
- Cannot compost everything (i.e. meat)

Going Forward

Our Recommendation

- Pilot Program starting as soon as 2022
- Better gauge community public support
- Voluntary initiatives before mandatory bylaw
- Mobilizing both town members and Williams community

Areas of Further Research

- Secure grant(s)
- Brainstorm plans for schools / nursing homes
- Extend knowledge to other Northern Berkshire towns



Credit by Slide

1: Justin Sullivan/Getty

3: Institute for Local Self Resilience <https://ilsr.org/compost-impacts-infographic/>

4: <https://www.earthshare.org/compost/>, Google Earth, [casella.com](https://www.casella.com), https://www.ers.usda.gov/webdocs/publications/43833/43680_eib121.pdf

5: <https://www.waste360.com/food-waste/restaurants-prioritize-food-waste-prevention>

6: [mass.gov](https://www.mass.gov)

7: https://www.cambridgema.gov/-/media/Files/publicworksdepartment/recyclingandrubbish/PDFs_Keep/2015cambridgecurbsideorganicsphase2report.pdf,
<https://dec.vermont.gov/sites/dec/files/wmp/SolidWaste/Documents/Universal-Recycling/2019.Universal.Recycling.Status.Report.pdf>

9: <https://www.axisgis.com/WilliamstownMA/>

11: <https://sustainability.williams.edu/waste/composting>

13 & 16: [casella.com](https://www.casella.com)

18: [helpmecompost.com](https://www.helpmecompost.com), http://www.nbswmd.com/compost_bins

22: [wlschools.org](https://www.wlschools.org), [williamstowncommons.org](https://www.williamstowncommons.org)

Questions?