

# Bans and Beyond

Designing and Implementing Organic Waste Bans and Mandatory  
Organic Recycling Laws

---

# Toolkit Process

- ~20 interviews conducted
- March 2018: Convening
  - ~15 private and public sector stakeholders provided feedback
- Final Toolkit: Publication expected spring 2019



# Toolkit Table of Contents

- Introduction
- Costs and Benefits of Organic Waste Bans and Waste Diversion Laws
- Designing Policies
- Barriers, Challenges & Solutions
- Beyond the Ban -- additional policies and programs
- Conclusion

# Organic Waste Bans & Recycling Laws: Legal Landscape





# Designing Policy: To Ban or Not to Ban

**Table 6. Summary Results by Segment, 2016**

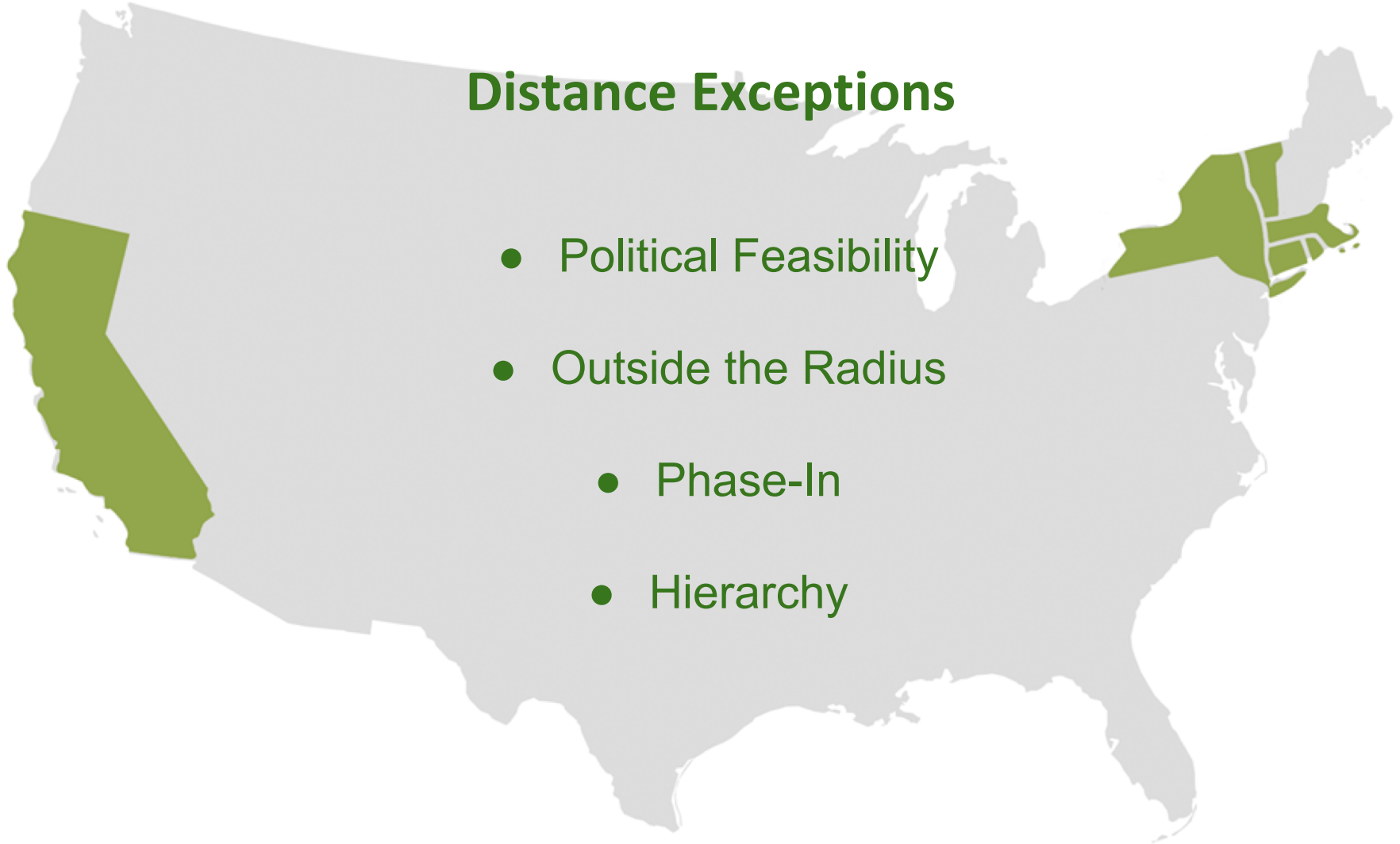
	Haulers	Processors	Rescue Organizations	Total Impact
<b>Employment</b>	500	290	130	910
<b>Labor Income (\$ millions)</b>	\$25.6	\$15.8	\$ 5.4	\$46.8
<b>Value Added (\$ millions)</b>	\$42.9	\$25.8	\$8.1	\$76.8
<b>Industry Activity (\$ millions)</b>	\$101.5	\$58.0	\$15.1	\$174.6
<b>State &amp; Local Taxes (\$ millions)</b>	\$3.1	\$1.8	\$0.5	\$5.4

Note: Numbers may not sum due to rounding.

Source: IMPLAN Analysis, compiled by ICF.

## Distance Exceptions

- Political Feasibility
- Outside the Radius
  - Phase-In
  - Hierarchy



# Thresholds

## Supermarkets and Grocery Stores

[Click here](#) for a printable, fill-in version of this Commercial Food Waste Disposal Ban threshold estimation guide for supermarkets and grocery stores.

	Average Measurement		Material
Full Time Employees	3,000	lbs/employee/yr	Food waste
Disposed Waste	63	% of disposed waste by weight	Food waste

If you have **35 full-time employees**, then:

$3,000 \text{ lbs/employee/year} * 35 \text{ full-time employees} = 105,000 \text{ lbs food waste generated/year}$

$105,000 \text{ lbs/year} \div 52 \text{ weeks/year} = 2,019 \text{ lbs/week} = 1 \text{ ton of food waste per week}$

If you fill **1 trash dumpster at 4 cubic yards 2 times per week**, then:

$450 \text{ lbs} * (1 \text{ trash dumpster} * 4 \text{ yd}^3 * 2 \text{ pickups/week}) = 3,600 \text{ lbs of total disposed waste/week}$

$3,600 \text{ lbs} * 63\% \text{ of total waste} = 2,268 \text{ lbs/week} = 1.1 \text{ tons of food waste in one week}$



# Barriers & Challenges: Political Feasibility

**6 trade associations ask DSNY to withdraw new commercial organics rule**

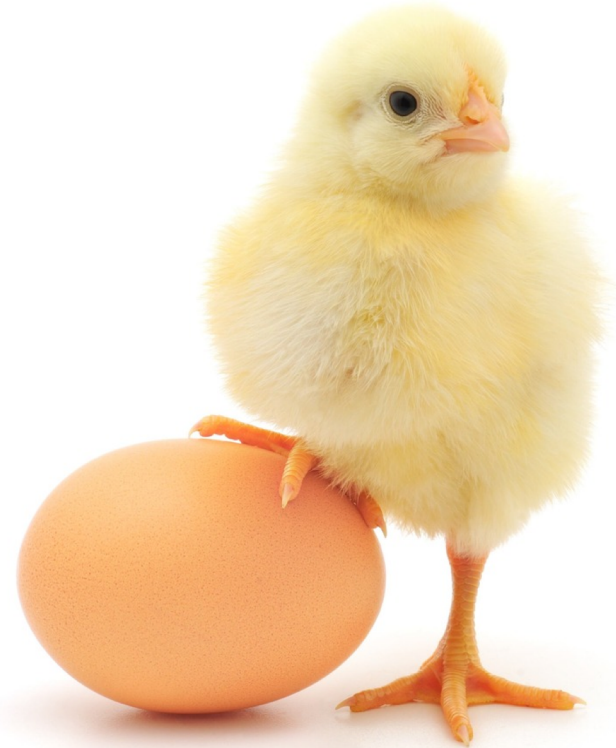
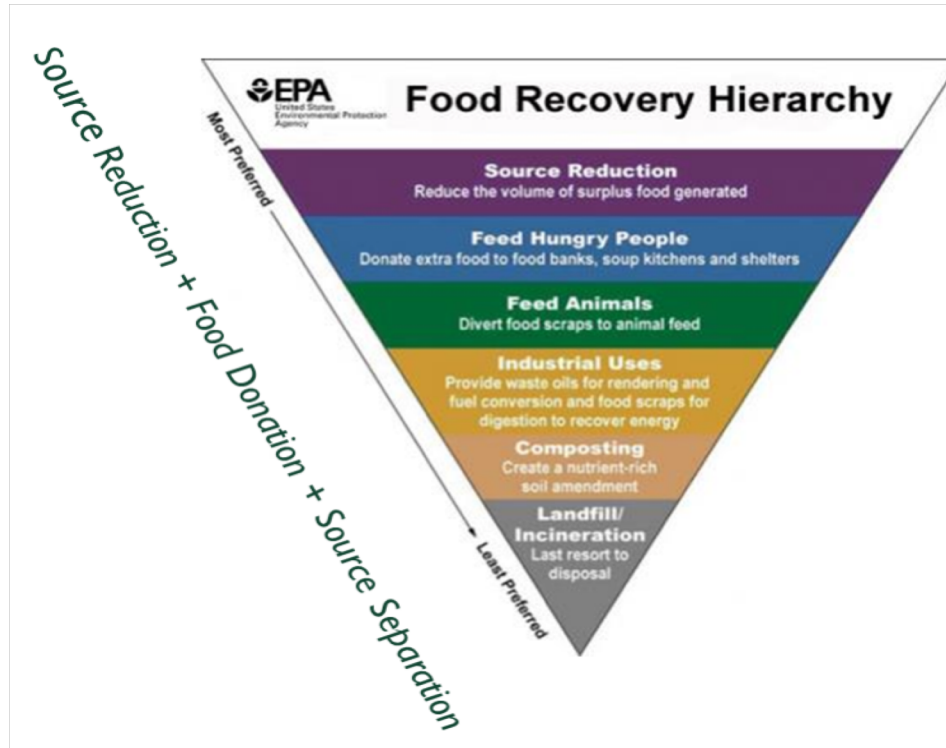
**Vermont gives commercial haulers extra year to comply with organics law**

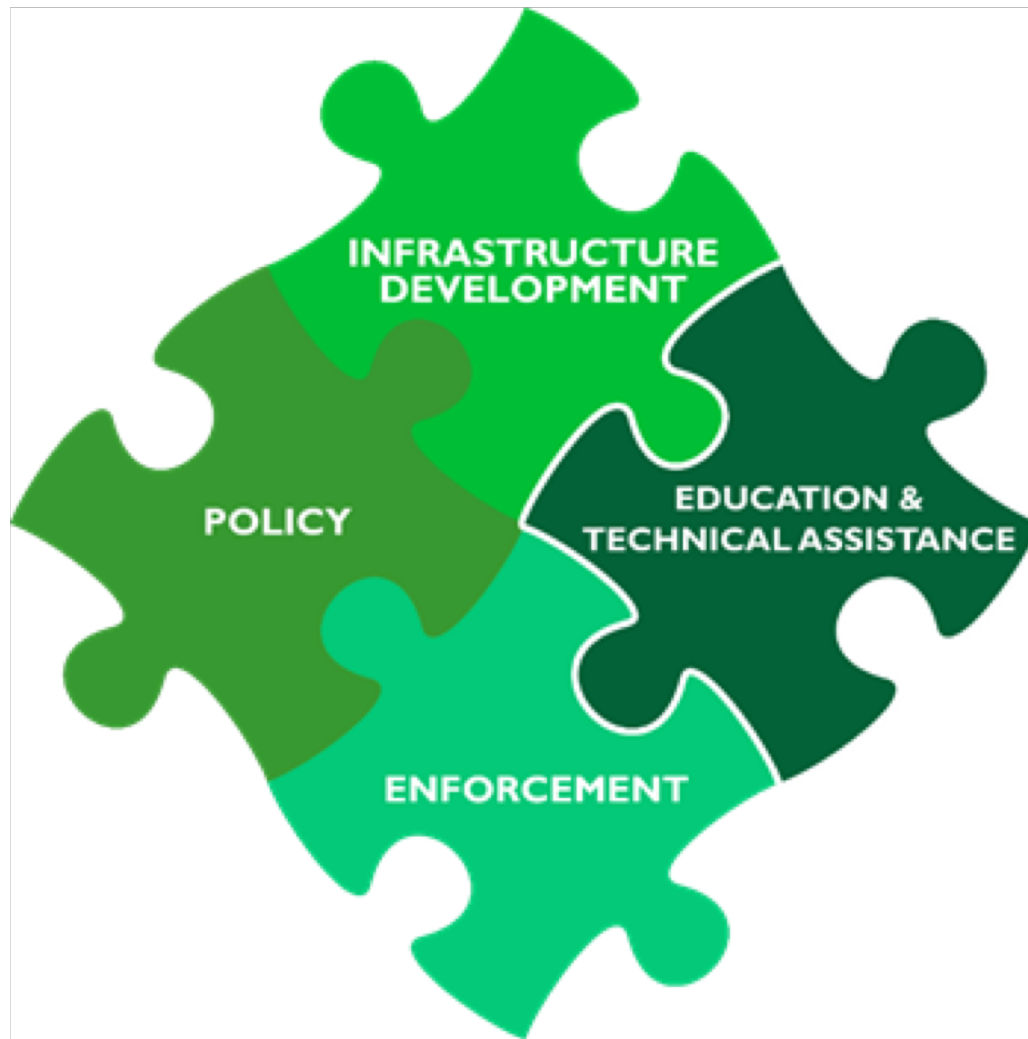
News > Local-Regional

## Vermont Extends Compost Deadline

**Can Vermont Reach The 2020 Composting Deadline? Lawmakers And Haulers Weigh Options**

# Infrastructure











[wastedfood.cetonline.org](http://wastedfood.cetonline.org)



# Permitting

Summary of 6NYCRR Part 361-3: Composting, Anaerobic Digestion (AD), and Other Organics Processing Facilities

Process	Materials Processed	Level of Regulatory Oversight	Regulatory Citation
Composting:	On site (except sludges and animal carcasses)	Exempt	361-3.2(a)(1) & 360.14(1)(ii) & (iii)
	Home Composting	Exempt	361-3.2(a)(1)
	≤1,000 lbs or ≤1 cubic yard, whichever is greater, of SSO per week	Exempt	361-3.2(a)(2)
	≤ 3,000 cubic yards of yard trimmings per year	Exempt	361-3.2(a)(3)
	Animal carcasses on a farm (≤10 if non-CAFO)	Exempt	361-3.2(a)(4)
	Animal mortalities generated on state or municipally owned properties	Exempt	361-3.2(a)(5)
	Animal manure and bedding or crop residues	Exempt	361-3.2(a)(6)
	Located on a CAFO (no sanitary waste)	Exempt	361-3.2(a)(7)
	>3,000 - ≤10,000 cubic yards of yard trimmings per year	Registration	361-3.2(b)(1)
	≤5,000 cubic yards or ≤2,500 wet tons, whichever is less, of SSO per year	Registration	361-3.2(b)(2)
	Roadkill animals or routine animal mortalities	Registration	361-3.2(b)(3)
	AD Digestate (if allowed under 361-3.3)	Registration	361-3.2(b)(4)
	>10,000 cubic yards of yard trimmings per year	Permit	361-3.2(d) & (e)
	>5,000 cubic yards or >2,500 wet tons, whichever is less, of SSOW per year	Permit	361-3.2(d) & (e)
	Biosolids	Permit	361-3.2(d) & (e)
	On site	Exempt	361-3.3(a)(1)
	Animal manure and bedding	Exempt	361-3.3(a)(2)
	≤1,000 lbs or ≤1 cubic yard, whichever is greater, of SSO per week	Exempt	361-3.3(a)(3)

# Pay-As-You-Throw

- PAYT
  - Charge for collection by volume or weight
  - Several models: bags, tags, carts, etc.
- Incentivizes consumers to waste less and reduce, recycle, and compost more



Table 3-4: PAYT Rate Structures (Monthly Rates) by Cart Size (Gallons(G))

	Micro (12G)	Mini (20- 24G)	Small (30- 48G)	Standard (60-70G)	Large (90+G)	Price Differential, Smallest and Largest Cart	Percent of Customers with Large Carts
<b>Minneapolis</b>			\$25.47		\$28.47	\$3.00	91%
<b>Austin</b>		\$17.90	\$19.15	\$24.30	\$42.85	\$24.95	15%
<b>Portland</b>	\$21.70	\$24.60	\$29.25	\$35.10	\$41.60	\$19.90	4%
<b>Seattle</b>	\$22.85	\$28.00	\$36.45	\$72.90	\$109.35	\$86.50	NA

# Conclusion

Coryanne Mansell

[wastedfood.cetonline.org](http://wastedfood.cetonline.org)

[coryanne.mansell@cetonline.org](mailto:coryanne.mansell@cetonline.org)

413.586.7350 x238

Katie Sandson, JD

[www.chlpi.org/flpc](http://www.chlpi.org/flpc)

[ksandson@law.harvard.edu](mailto:ksandson@law.harvard.edu)



# Organic Waste Ban: An Analysis of Existing Policies, Challenges and Opportunities

## Universal Recycling Ordinance Austin, Texas

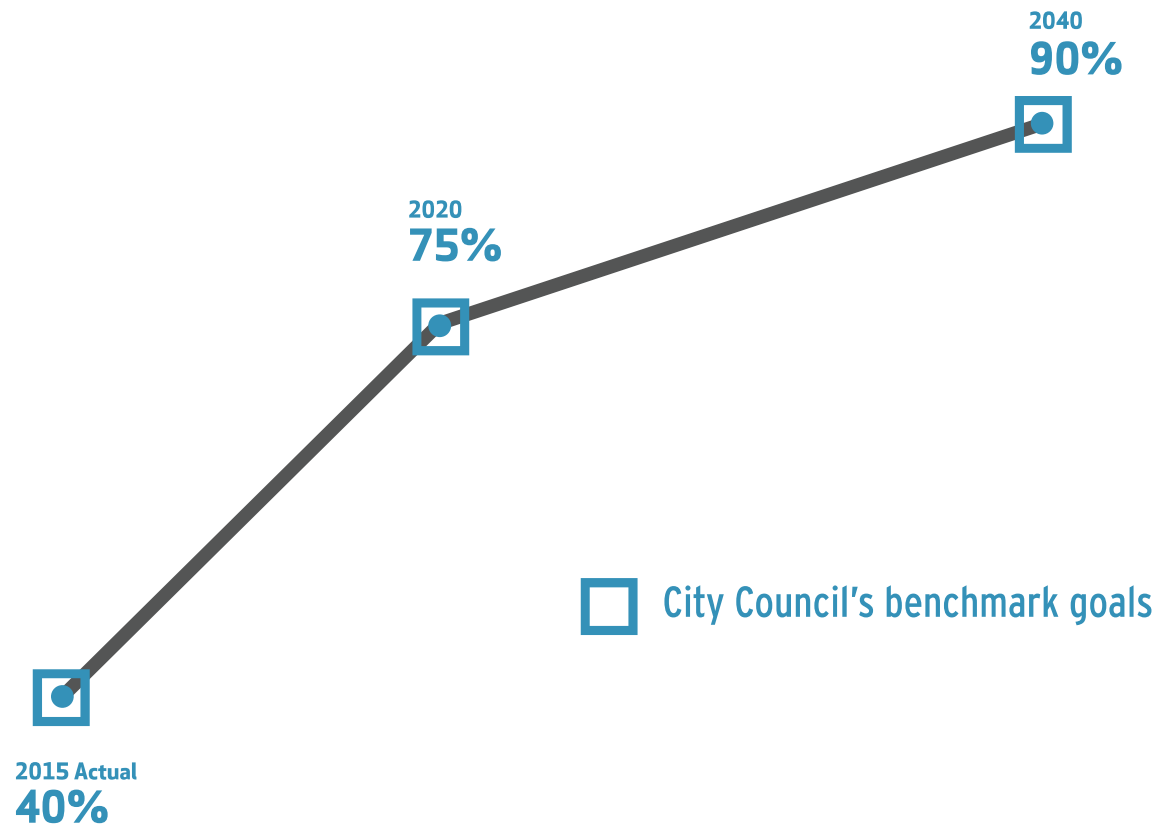


Gena McKinley, Strategic Initiatives Division Manager  
City of Austin | Austin Resource Recovery | Strategic Initiatives





# Austin's Zero Waste Goal

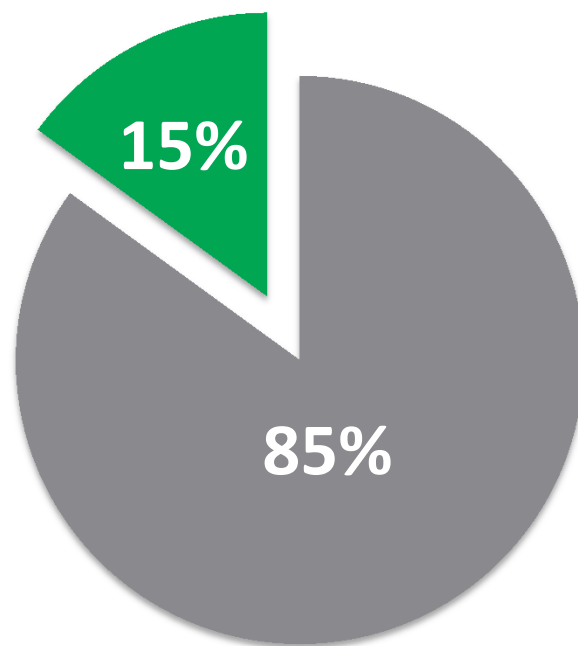




# Citywide Generation: Influence vs. Control

Most of the discards in Austin  
are outside of ARR's control

**Mostly Residential**  
Managed by City of Austin



**Commercial & Multifamily**  
Managed by Private Haulers

# Universal Recycling Ordinance Implementation Timeline



## Multifamily Residential Properties

Multifamily properties including:

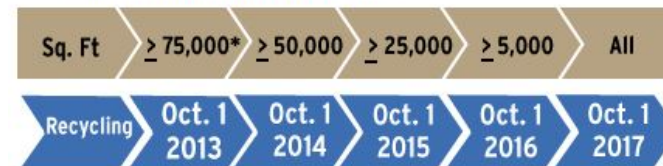
- Apartments
- Condominiums
- Mobile home parks
- Private funded dorms
- Assisted living facilities



## Commercial Non-Residential Properties

Non-residential commercial properties, including:

- Retail
- Medical facilities
- Hotels and Motels
- Religious buildings
- Commercial office buildings
- Private educational facilities
- Industrial and Manufacturing Facilities



Food service enterprises include:

- Grocers
- Farmers' Markets
- Food and Beverage Industry (restaurants, bars, catering)





# Universal Recycling Ordinance Requirements

## Recycling Requirements

### *Commercial and Multifamily Properties*

#### Access

Ensure employees and tenants have recycling capacity and convenient access to methods of recycling or reuse.

#### Signage

Post informational, bilingual, signage on or near diversion stations or containers.

#### Education

Provide annual, bilingual, education on diversion to employees and tenants. Education could be provided at team meetings or by e-mail.

#### Reporting

The person responsible for organics diversion will need to fill out an online diversion plan, beginning October 1<sup>st</sup> at: [austintexas.gov/diversionplan](http://austintexas.gov/diversionplan). This plan is a report of how a business meets the ordinance requirements. Having access to service receipts is beneficial when filling out this online form.

#### Materials

Ensure recycling services accept paper, plastic (#1, #2), aluminum, glass, and cardboard.

## Organics Diversion Requirements

### *All Food Permit Holders*

#### Access

Ensure employees have convenient access to methods of keeping food scraps out of landfill.

#### Signage

Post informational, bilingual, signage on or near diversion stations or containers.

#### Education

Provide annual, bilingual, education on diversion to employees. Education could be provided at team meetings or by e-mail.

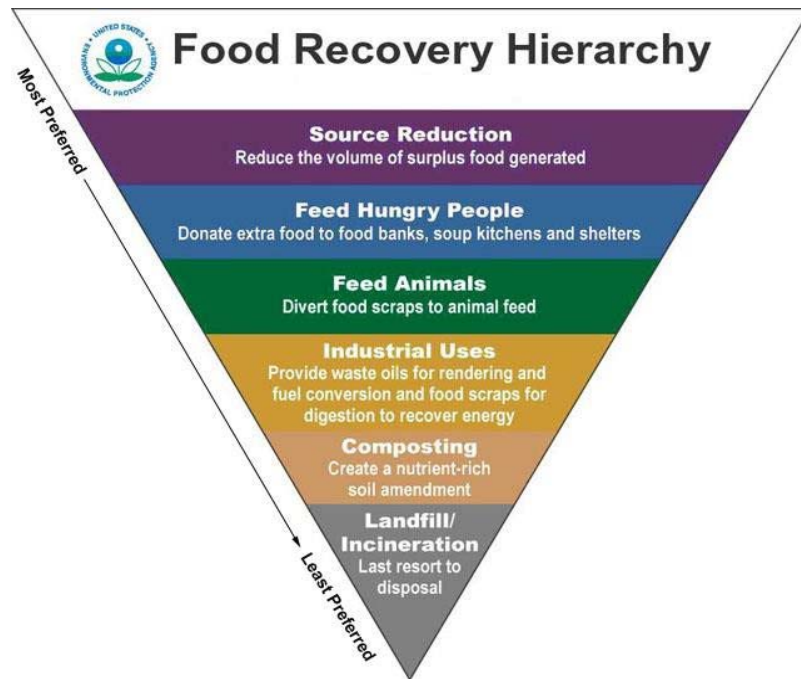
#### Reporting

The person responsible for organics diversion will need to fill out an online diversion plan, beginning October 1<sup>st</sup> at: [austintexas.gov/odp](http://austintexas.gov/odp). This plan is a report of how a business meets the ordinance requirements. Having access to service receipts is beneficial when filling out this online form.



# Universal Recycling Ordinance

## Methods of Organics Diversion



### Methods of Organics Diversions

*The URO requires convenient access for employees to divert discarded organics material from the landfill. Businesses will decide what methods to use. Some methods to divert organics material include:*

#### Feeding Hungry People

Donate extra food to food banks, soup kitchens, or shelters.

#### Feeding Animals

Donate food scraps to feed animals at regional community ranches.

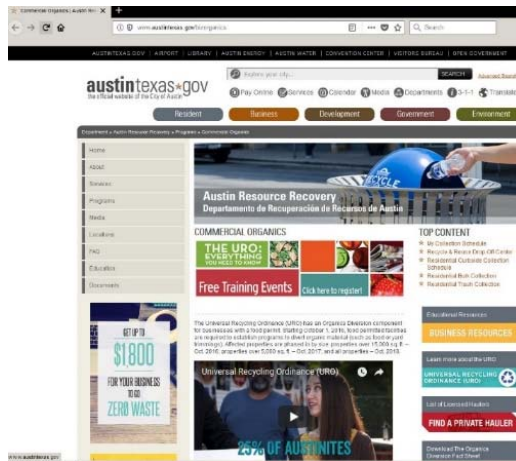
#### Composting

Compost on-site or contract with a private service provider to collect organics.

#### Alternative Means

Develop innovative solutions, customized to your business, which diverts organic material from landfills.

# Universal Recycling Ordinance Community Education and Outreach



Web page: [austintexas.gov/bizorganics](http://austintexas.gov/bizorganics)

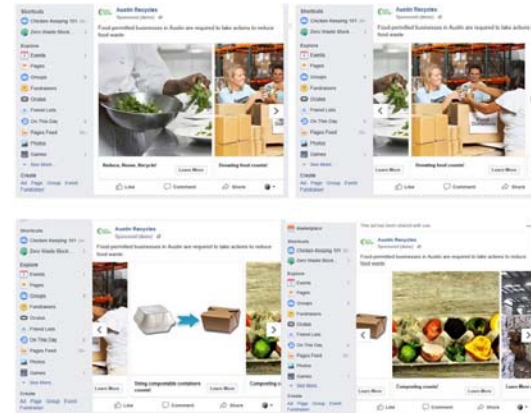


Flyers and Handouts



Universal Recycling Ordinance (URO)

Social Media Video



Facebook Advertising



# Universal Recycling Ordinance Community Education and Outreach



Print Publications

## Submit Your Organics Diversion Plan

Beginning Oct. 1, 2018, all food-permitted businesses are required to submit their Organics Diversion Plan (ODP) - an annual report on a business's practices that divert organic materials from the landfill - every year as part of the City's Universal Recycling Ordinance (URO).

Haven't submitted yours yet? Click below to get started!



## Not Sure Where to Start?

[view full ODP instructions](#)

E-mail



Austin Energy Utility Bill Insert



Radio Advertising





# Universal Recycling Ordinance Public Training and Education



Hello,

Beginning Oct. 1, 2018 all permitted food businesses in the City of Austin will be affected by Austin's Universal Recycling Ordinance which requires that businesses provide employees with on-site access to diversion of organic materials like food scraps, expired foods, and soiled paper, from local landfills.

More information is available at [www.austintexas.gov/bizorganics](http://www.austintexas.gov/bizorganics).

The Austin Resource Recovery and Austin Public Health are partnering to host free trainings to help owners and managers of food-permitted businesses learn about local policies, compliance requirements, and best practices. Come and receive free educational resources.

**WHAT:** Health & Waste Requirements for Food-Permitted Businesses

**WHERE:** Manchaca Road Library, 5500 Manchaca Rd.

**WHEN:** Monday, September 17th

**TIME:** 10:30-11:30 AM

[RSVP Here](#)

OR

**WHAT:** Health & Waste Requirements for Food-Permitted Businesses

**WHERE:** Old Quarry Library Branch, 7051 Village Center Dr.

**WHEN:** Monday, September 24th

**TIME:** 2:00-3:00 PM

[RSVP Here](#)

For more information about the event, please contact [info@0waste.org](mailto:info@0waste.org).



## Recent Trainings

Monday, January 14, 2019

2:30 p.m. – 3:30 p.m.

Ruiz Library Branch

1600 Grove Blvd.

Austin, TX 78741

Tuesday, January 22, 2019

10:30 a.m. – 11:30 a.m.

Yarborough Library Branch

2200 Hancock Dr.

Austin, TX 78756

Monday, January 28, 2019

2:30 p.m. – 3:30 p.m.

Spicewood Springs Library Branch

8637 Spicewood Springs Rd.

Austin, TX 78759



Follow Austin Resource Recovery on Facebook or Twitter for regular training updates, or at [austintexas.gov/uro](http://austintexas.gov/uro).

Schedule a training by contacting:  
[commercialrecycling@austintexas.gov](mailto:commercialrecycling@austintexas.gov)

URO Training video is available at:  
[austintexas.gov/uro](http://austintexas.gov/uro)







# Universal Recycling Ordinance Resources

## INFORMATION

More information about the Universal Recycling Ordinance is available at:  
[austintexas.gov/uro](http://austintexas.gov/uro) and [austintexas.gov/bizorganics](http://austintexas.gov/bizorganics)

## SIGNAGE

Free recycling and organics diversion signage is available at:  
[austintexas.gov/signmaker](http://austintexas.gov/signmaker)

## EDUCATION

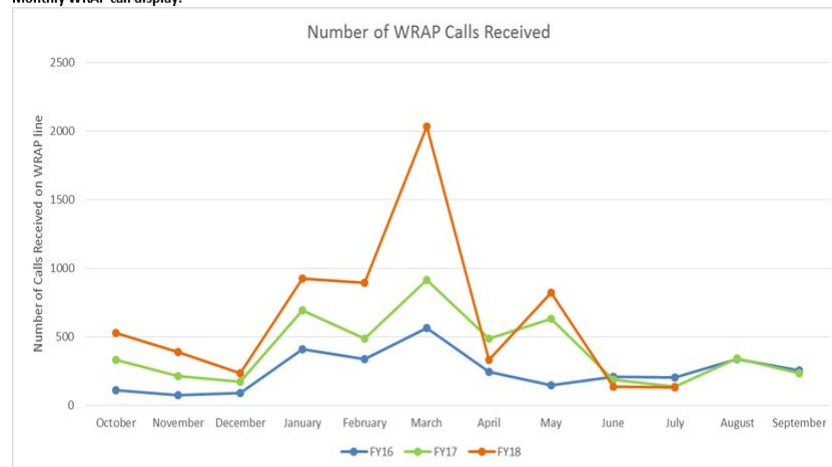
Free recycling and organics diversion education is available at:  
[austintexas.gov/uroresources](http://austintexas.gov/uroresources)

Free information, guidance, and resources are available as part of Austin Resource Recovery's Business Outreach services. Email [commercialrecycling@austintexas.gov](mailto:commercialrecycling@austintexas.gov) for more information or assistance in filling out a diversion plan.

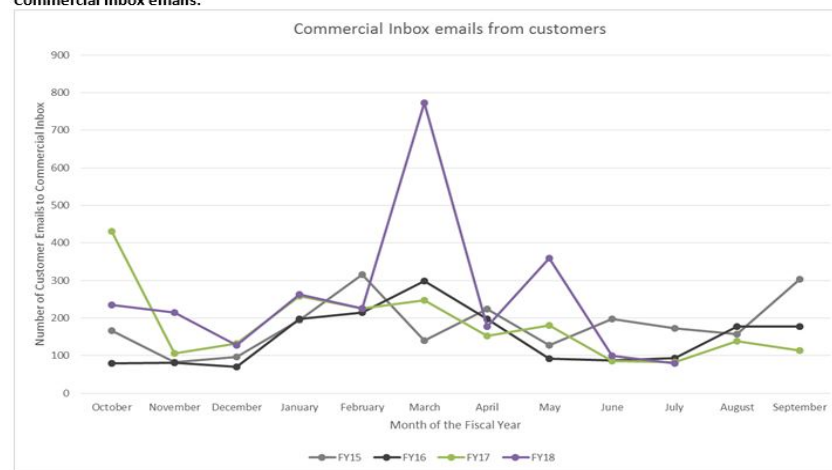


# Universal Recycling Ordinance Education and Assistance

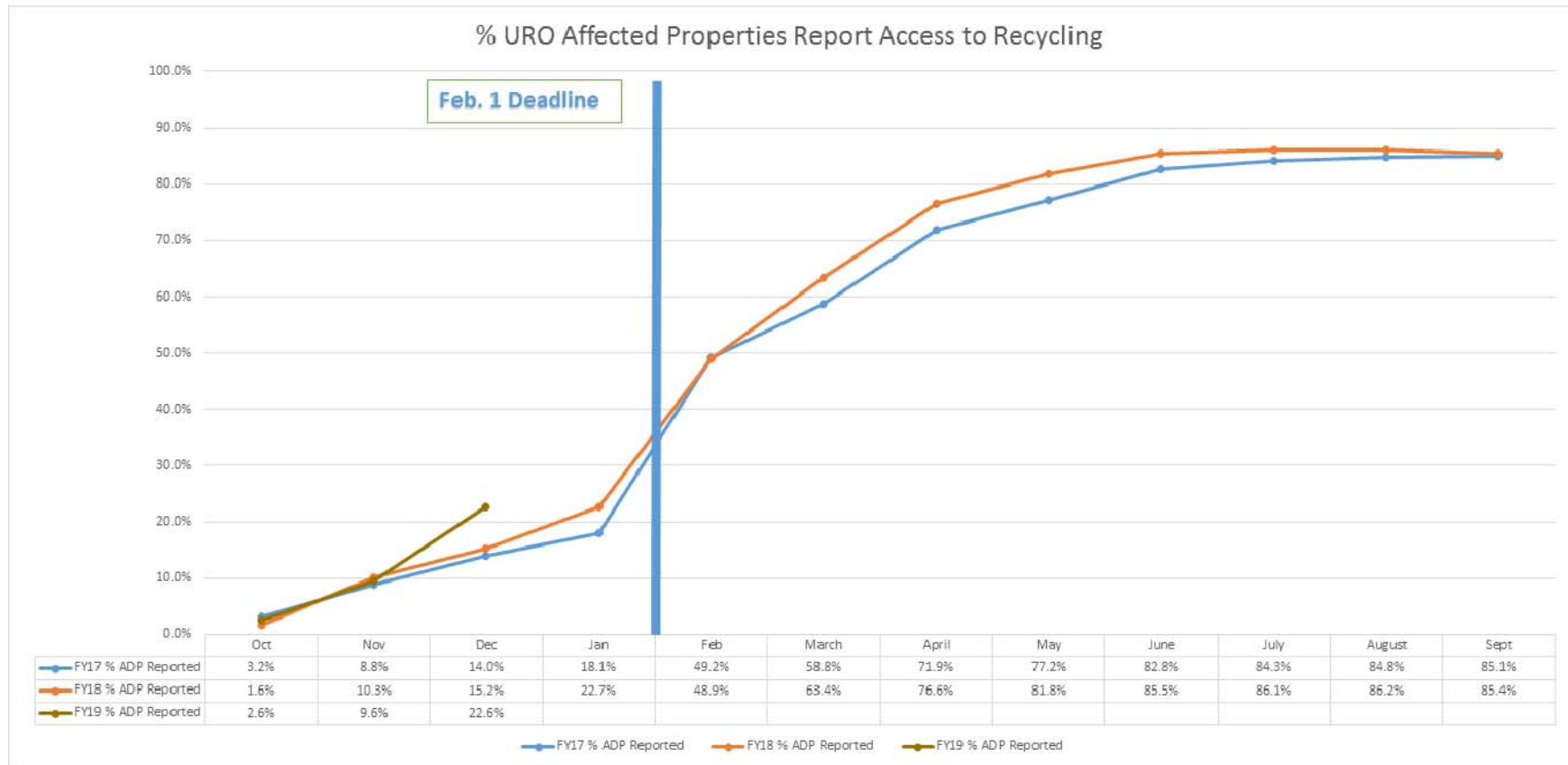
Monthly WRAP call display:



Commercial Inbox emails:



# Universal Recycling Ordinance Recycling Annual Diversion Plans

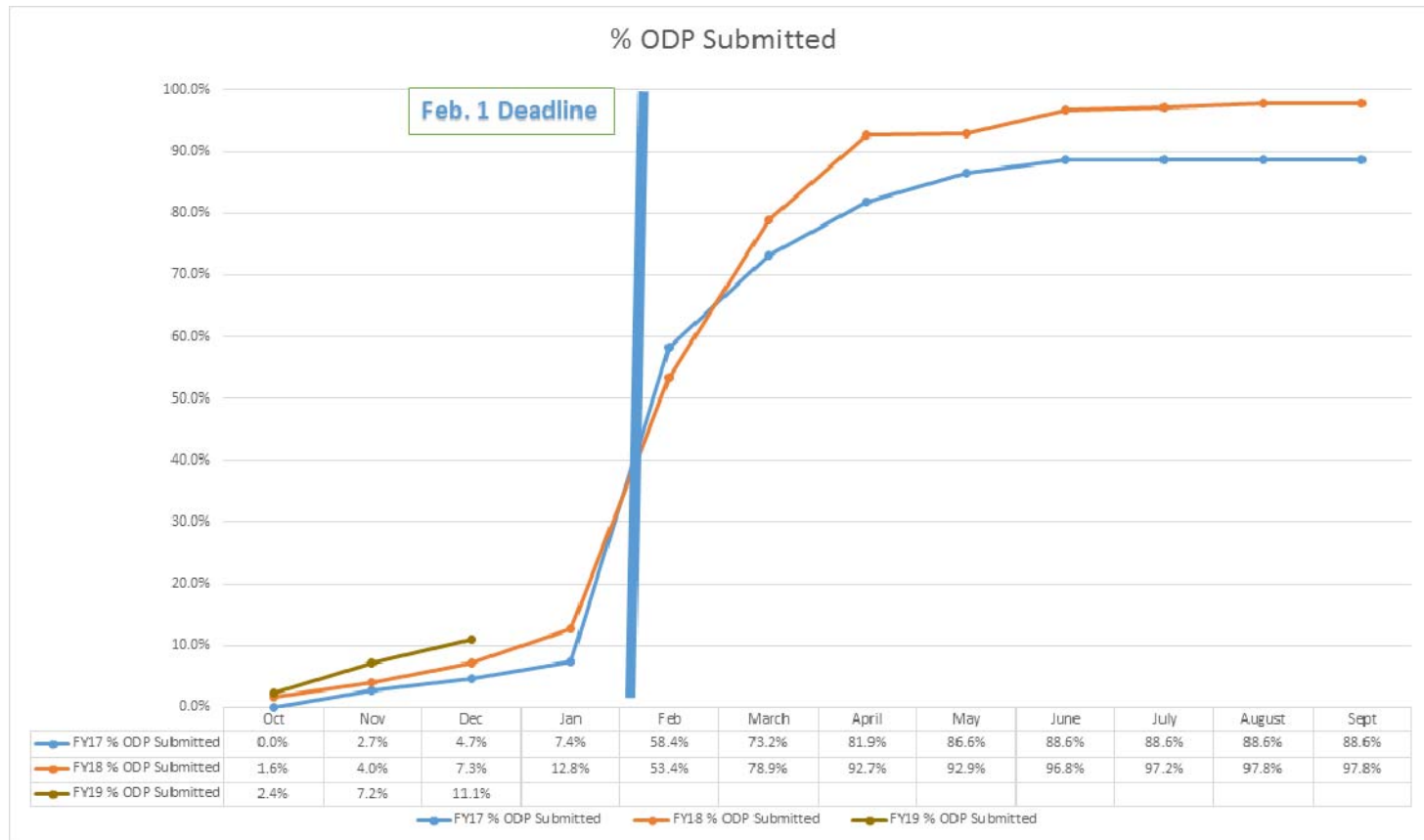


FY18: Austin Resource Recovery monitored approximately 9,000 properties and 500 food permit holders.

FY19: Austin Resource Recovery will monitor approximately 9,000 properties and 6,000 food permit holders.



# Universal Recycling Ordinance Organics Annual Diversion Plans



FY18: Austin Resource Recovery monitored approximately 9,000 properties and 500 food permit holders.

FY19: Austin Resource Recovery will monitor approximately 9,000 properties and 6,000 food permit holders.







# Zero Waste Business Profiles

**BATCH CRAFT BEER AND KOLACHES**  
3220 Manor Rd. | [batchatx.com](http://batchatx.com)

"It all felt so effortless.  
Honestly it was really easy and  
I don't know why everyone  
doesn't do it."

— Josh Lit, Owner Batch





# Zero Waste Business Profiles

## BENTO PICNIC

2600 E. Cesar Chavez | [bentopicnic.com](http://bentopicnic.com)

"Zero waste for me means not generating waste in the first place."

— Leanne Valenti, Owner  
Bento Picnic







# Universal Recycling

Vermont's Recycling and Composting Initiative

Composting Collaborative Webinar, February 13, 2020  
Josh Kelly, Materials Management Section Chief



# Four Points Before We Begin

1. Preventing food waste can & is happening even without a ban.
2. Some food is already being rescued for people in your region
3. Some food processing byproducts are already being recovered for animal feed and via the rendering industry
4. Concerns about food waste are growing, meaning consumers are more aware of sustainability practices such as waste prevention, donation, and organics recycling (composting, animal feed, anaerobic digestion)

# States with Organics Bans

**CA** Apr. 2016 – 8-cu.yd. Jan. 2017 – 4-cu.yd. Revisited in 2021

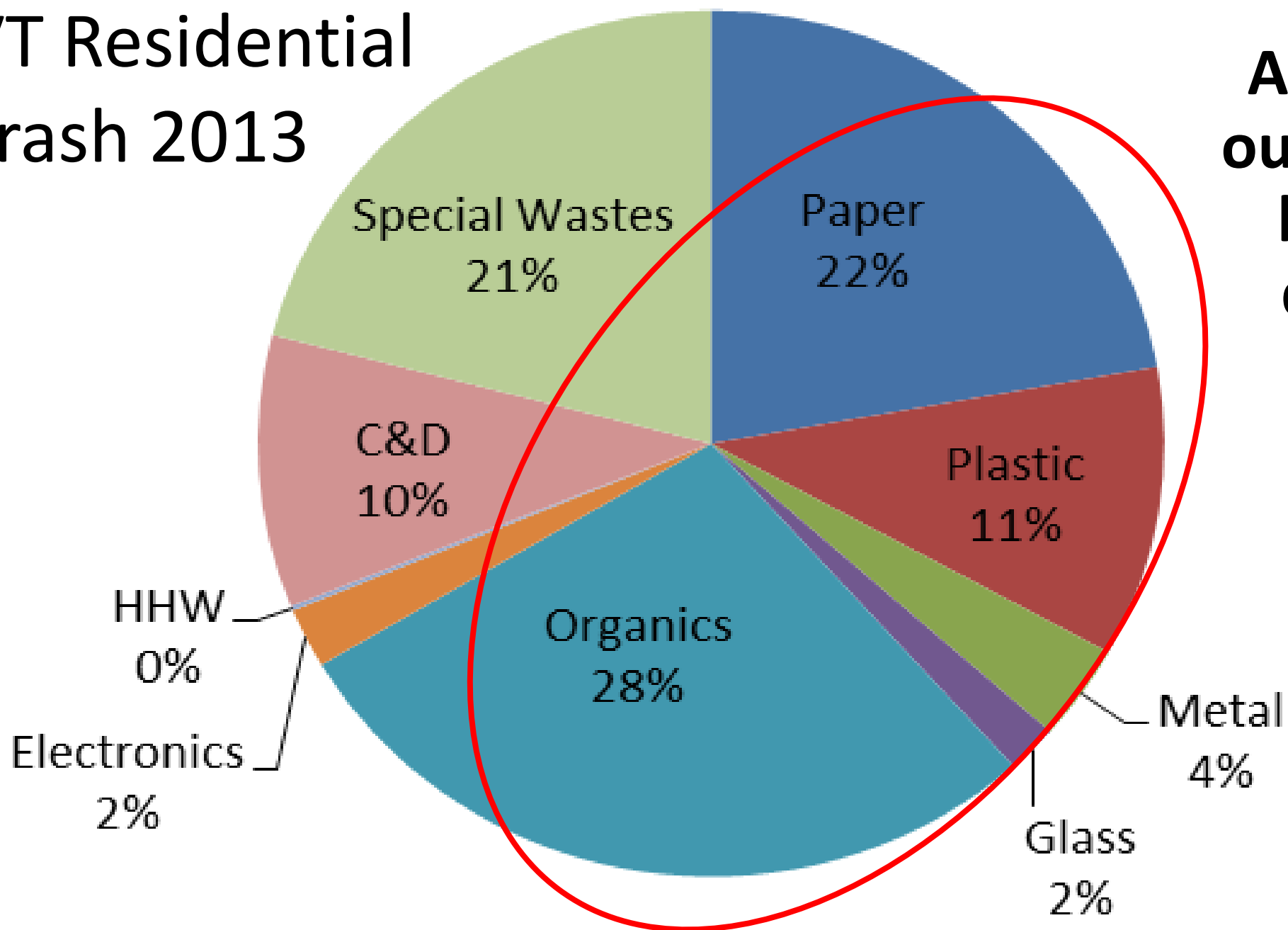
**CT** Jan. 2014 – 2-ton w/in 20 miles. 2020 1-ton w/in 20 miles.

**MA** Oct. 2014 – 1-ton regardless of distance.

**RI** Jan. 2016 – 2-ton w/in 15 miles.

**VT** July 2014 – 2-ton w/in 20 miles. Phases to full ban in 2020.

# VT Residential Trash 2013



**Almost half of  
our waste could  
be recycled,  
donated, or  
composted**













10 year old carrots

# Benefits of Keeping Food Waste out of the Landfill



1

VERMONT  
AGENCY OF NATURAL RESOURCES

## Feeds People

Rescued food donations  
**more than doubled**  
from 2014 to 2016 at the  
Vermont Foodbank.



2

**Reduces**  
Greenhouse Gas  
**Emissions**



3

Supports  
**Green Jobs**



4

Compost  
**Restores Soil**



5

**Reduces**  
need for  
**Landfills**

VT landfills ~60,000  
tons of food scraps  
each year.



Composting the  
scraps



instead of trashing  
them would...

reduce greenhouse  
gas emissions



as much as not  
driving ~84 million  
miles.

That's like  
driving  
around Earth  
3,373 times!



January 2018

# 2012 – BIG year for Vermont

Universal Recycling (Act 148) passes unanimously

Hey, you can  
compost  
that!



That's  
recyclable!



# Comprehensive Solid Waste Policy

## 1. Disposal Bans = **Motivation**

- recyclables
- leaf, yard, and clean wood
- food scraps

## 2. Parallel Collection = **Convenience**

## 3. Pay As You Throw = **Incentive**

## 4. Recycling in Public Spaces = **Lead by Example**

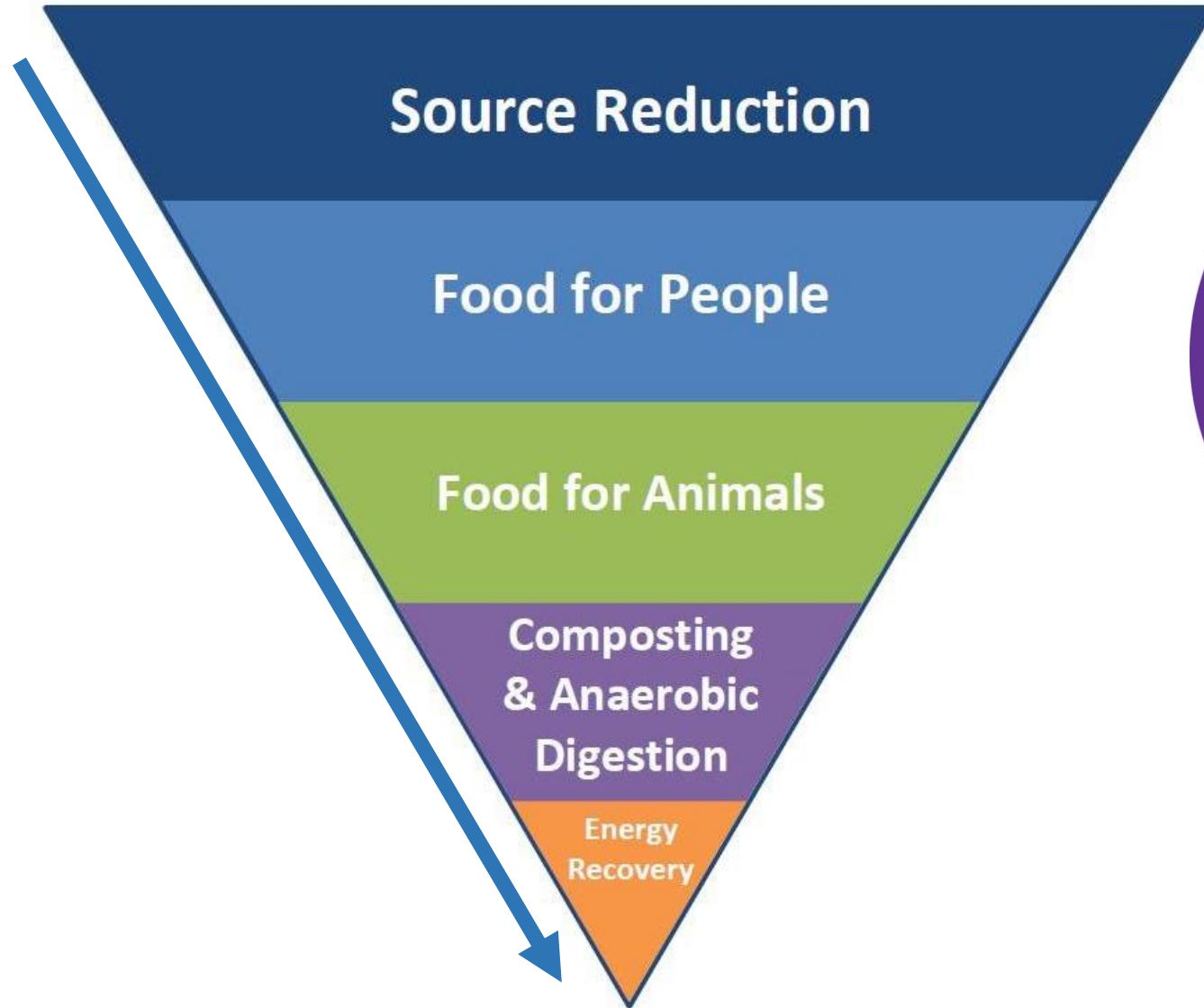


# A Phased In Approach



MATERIAL	FACILITIES must collect	HAULERS must collect	LANDFILL BAN
Recyclables	2014	2015	2015
Leaf/Yard Waste	2015		2016
Clean Wood	2016		2016
Food Scraps	2017	2020	2014-2020

# Universal Recycling Food Hierarchy





# Food Scraps Disposal Ban Phases

Food scrap generators within 20 miles of a facility must separate if above these thresholds

- 2014 > 104 tons/year **2 tons/week**
- 2015 > 52 tons/year **1 ton/week**
- 2016 > 26 tons/year **1/2 ton/week**
- 2017 > 18 tons/year **1/3 ton/week**
- **2020 all food scraps banned regardless of distance**



# Flexibility

## Hauler & Facility Exemptions

Residents that home compost can throw out meat and bones.

Businesses/Institutions that compost can request de minimis designation to dispose of some material.



Photo courtesy of CVSWMD

# And....It's Working

**Food rescue has nearly tripled according to our foodbank**

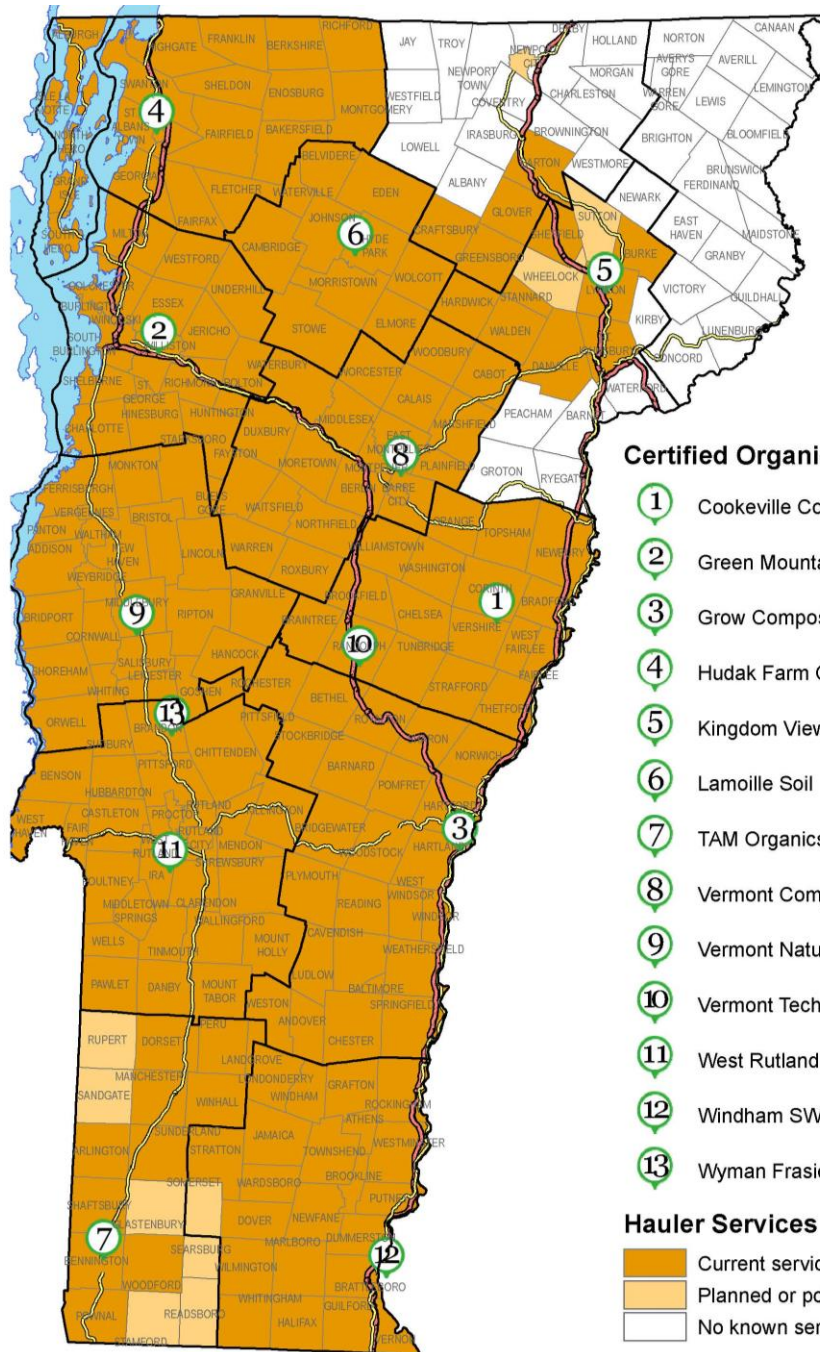
**Vermonters composted more this past year than ever before (9% increase over previous year)**

**Over 100 transfer stations have food scrap drop-off**

**The number of Food Scrap haulers has nearly doubled since 2012**

**~60% of Vermonters surveyed compost or feed animals some of their food waste** (according to two surveys UVM & Castleton Polling Institute)





## Commercial Food Scrap Collection Services

### Certified Organics Facilities

- ① Cookeville Compost
- ② Green Mountain Compost
- ③ Grow Compost
- ④ Hudak Farm Composting Facility
- ⑤ Kingdom View Compost
- ⑥ Lamoille Soil
- ⑦ TAM Organics Compost Facility
- ⑧ Vermont Compost Company
- ⑨ Vermont Natural Ag. Products
- ⑩ Vermont Tech Community Anaerobic Digester
- ⑪ West Rutland Organics Facility (Not Operational)
- ⑫ Windham SWMD Compost Facility
- ⑬ Wyman Frasier Compost of Vermont

### Hauler Services for Commercial Customers

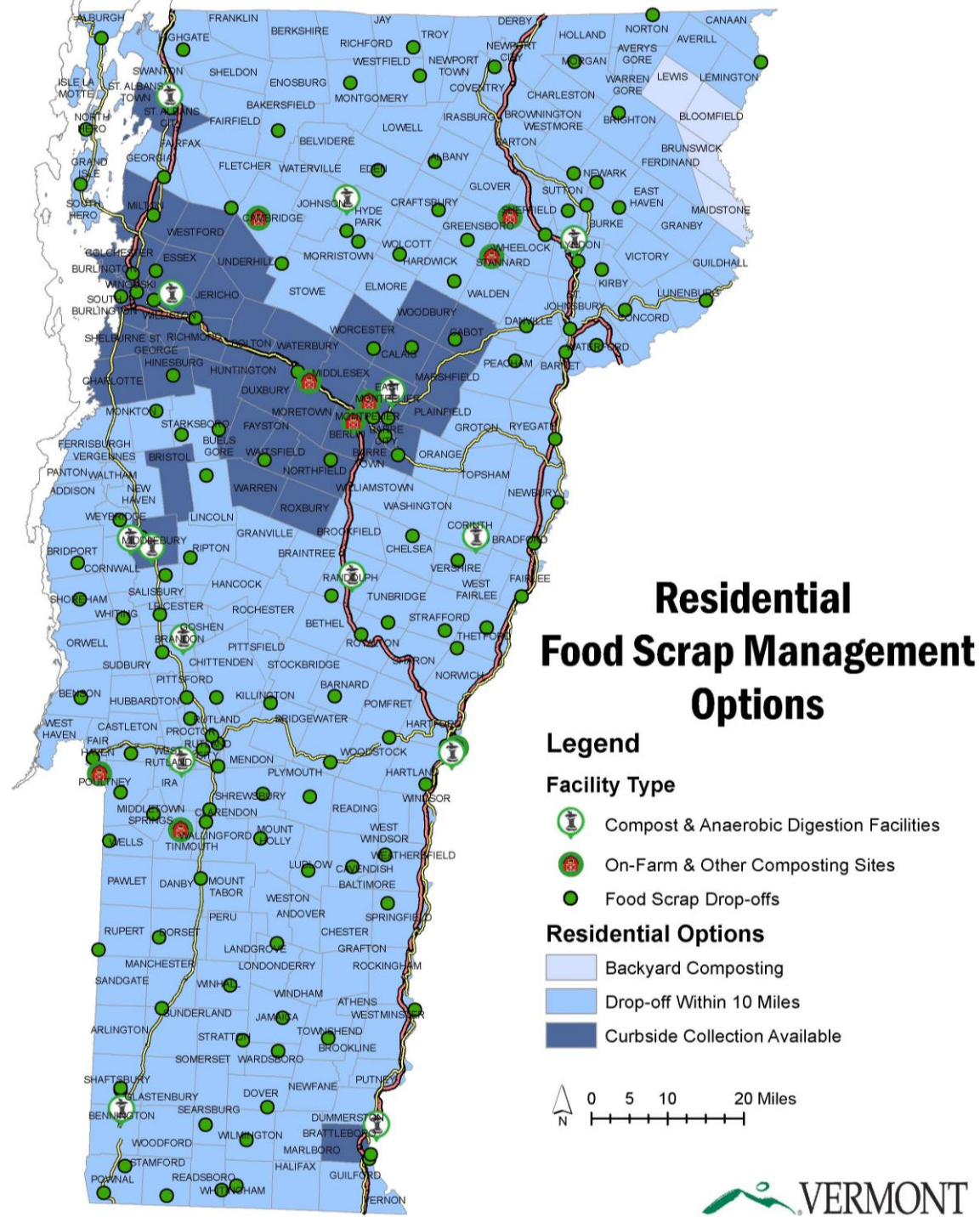
- Current service available
- Planned or potential service
- No known service

13 Certified Facilities  
(10 compost, 2 AD)

~85% of towns are  
w/in 20 miles of a  
facility

~80% of towns have  
commercial services

# Over 100 Food Scrap Drop-off Locations

























# Business Outreach



Photo credit: Central Vermont Solid Waste Management District (CVSWMD)

# Challenges

- Markets for finished compost
- Hauling food scraps, especially rural routes
- Depackaging – VT study showed ~37% of food in trash was packaged
- Space for 3 dumpsters – Recycling, Compost, Trash

# Opportunities

- Saving money by reducing food waste
- Food Donation greatly expanded
- Animal Feed
- Composting
- Anaerobic Digestion
- Reduce landfill dependence, GHG reductions, putting waste to work, etc...

# FREE Symbols – at [VTrecycles.com](http://VTrecycles.com)



[josh.kelly@vermont.gov](mailto:josh.kelly@vermont.gov)

802.522.5897

**Follow us on Facebook and Twitter -- @VTrecycles**