



Lucky 13!

Josh Kelly April 11, 2019
Materials Management Section
Chief



So....what's new?

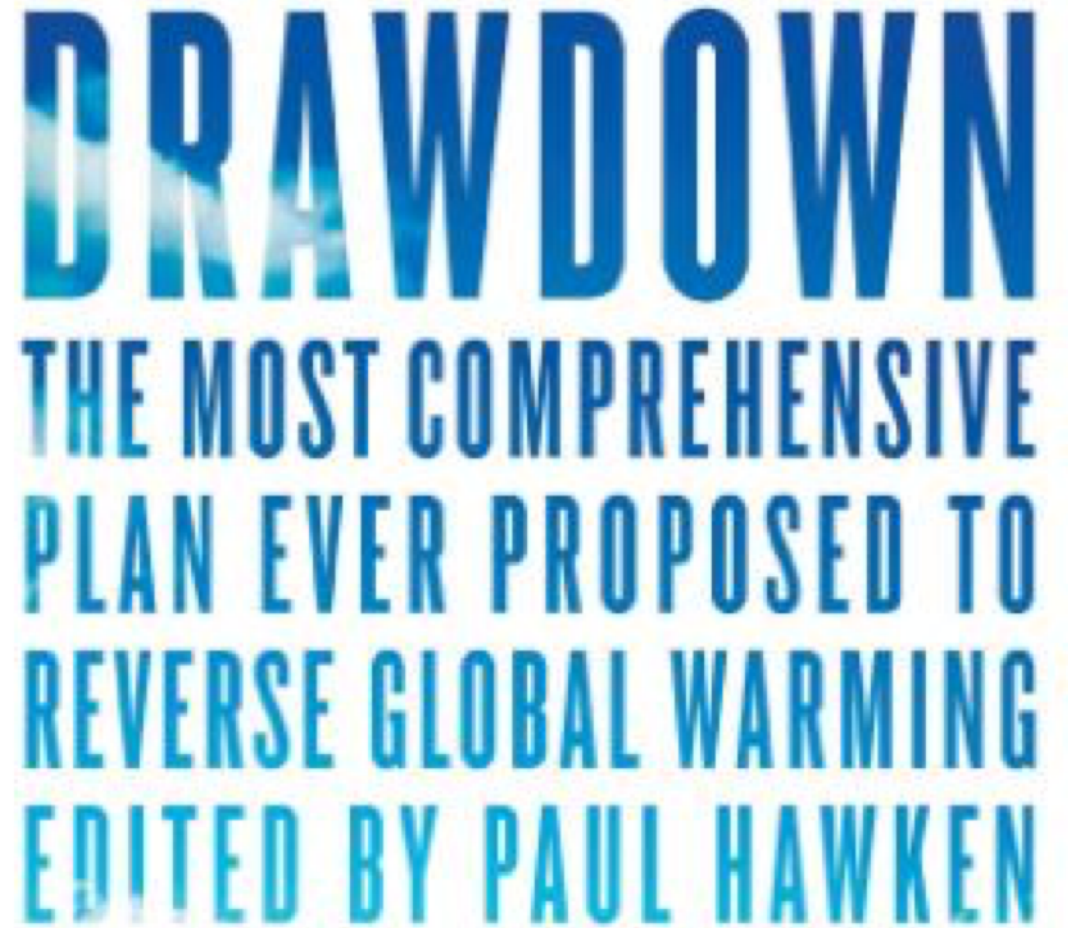
You're famous

Of Drawdown's 100 solutions:

#3. Reduced Food Waste

#30. Methane Digesters

#60. Compost

The image shows the front cover of the book 'DRAWDOWN'. The title 'DRAWDOWN' is at the top in large, bold, blue capital letters. Below it, the subtitle 'THE MOST COMPREHENSIVE PLAN EVER PROPOSED TO REVERSE GLOBAL WARMING' is written in smaller, blue capital letters. At the bottom, it says 'EDITED BY PAUL HAWKEN' in the same blue capital letters. The background of the cover is white with a faint, light blue pattern that looks like a stylized globe or a network of lines. The book is framed by two vertical grey bars on the left and right sides.

DRAWDOWN
THE MOST COMPREHENSIVE
PLAN EVER PROPOSED TO
REVERSE GLOBAL WARMING
EDITED BY PAUL HAWKEN

Benefits of Keeping Food Waste out of the Landfill



1



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!



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.

NY Jan. 2022 – 2-ton w/in 25 miles.

EPA Food Waste Management & Infra. Projects

3 awards totaling \$110,000 to expand anaerobic digestion (AD)

VT DEC selected for \$43,551 of EPA funds for AD tanks/pipes & wastewater testing at 5 food-businesses, **capturing value** and **reducing pollution**.

- Complements DEC's Sustainability Cohorts program with brewers, dairies, and specialty food manufacturers.
- Continues EPA and Vermont's organics recovery partnership

DEC Organics Infrastructure Grants

Green Mountain Compost

Greater Upper Valley Organics Transfer Station

Windham Composting Facility

Lamoille Soil Compost Facility

Town of Ryegate Compost Facility

Total grant funds: \$747,089

Projects represent ~36,075 tons of food scrap processing capacity





Household Food Waste Perceptions and Behaviors: A Vermont Case Study

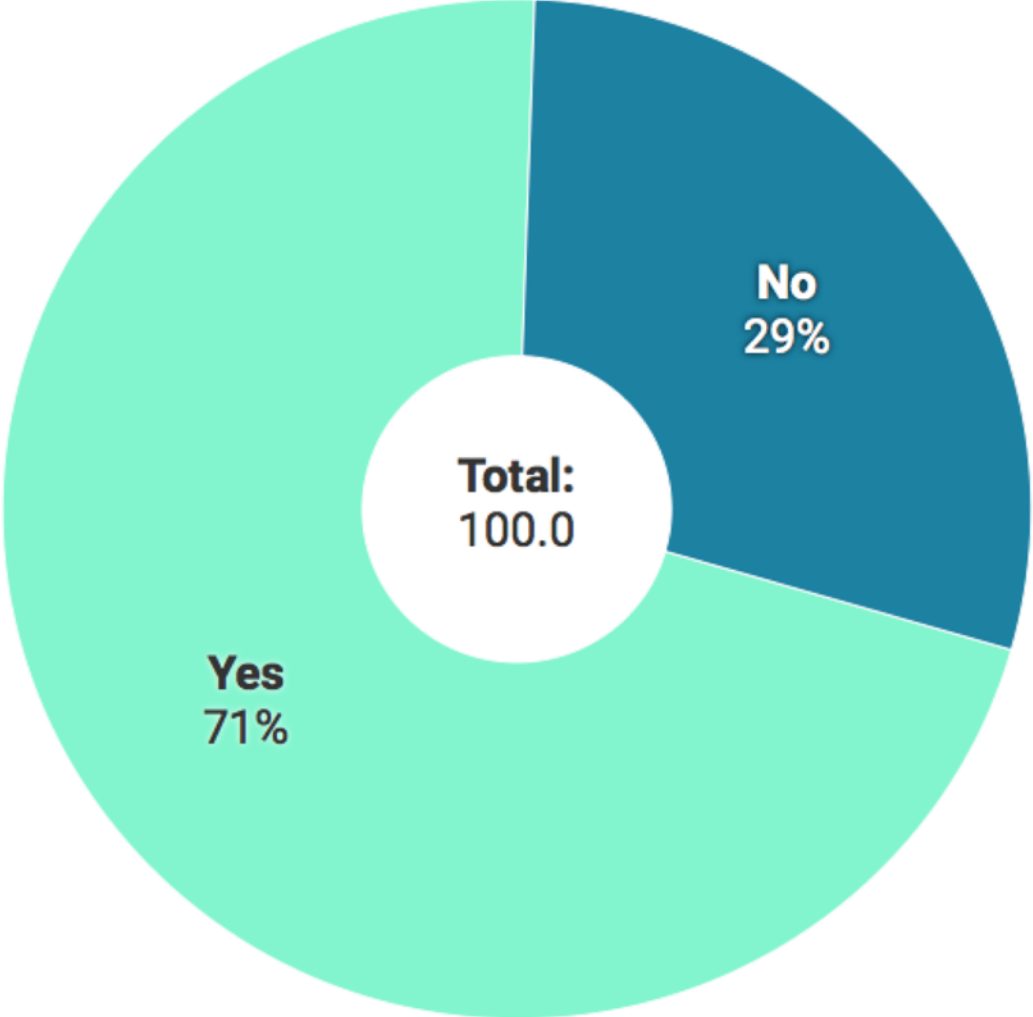
Conducted Feb. 2018 by the Vermonter Poll
and Center for Rural Studies at UVM



ROAR

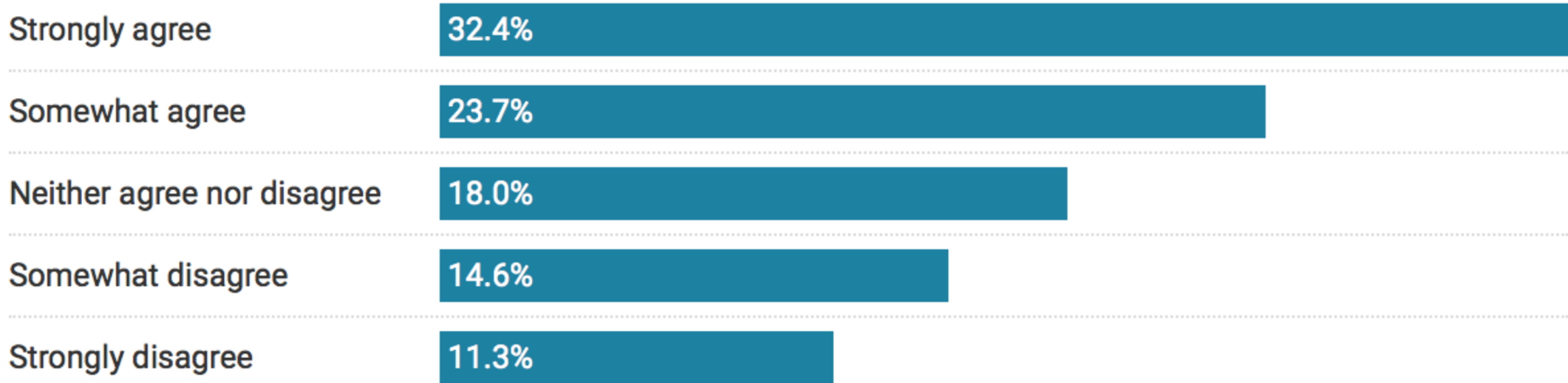
Dr. Meredith Niles
Assistant Professor
University of Vermont

Have you heard about Vermont's food waste law before today?



* $p < 0.01$

Food waste should be banned from disposal in the landfill



- **56%** of respondents agree that food waste should be banned from the landfill

* $p < 0.05$

Current Food Waste Strategies

58% of VTers compost/feed animals in similar 2018 study by Castleton Polling Institute.

Manage your own food waste with backyard composting, or by feeding to pets or livestock



Throw your food waste into the garbage



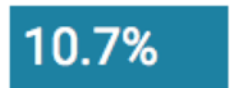
Dispose of food waste in your garbage disposal



Drive to a drop off station with your food waste

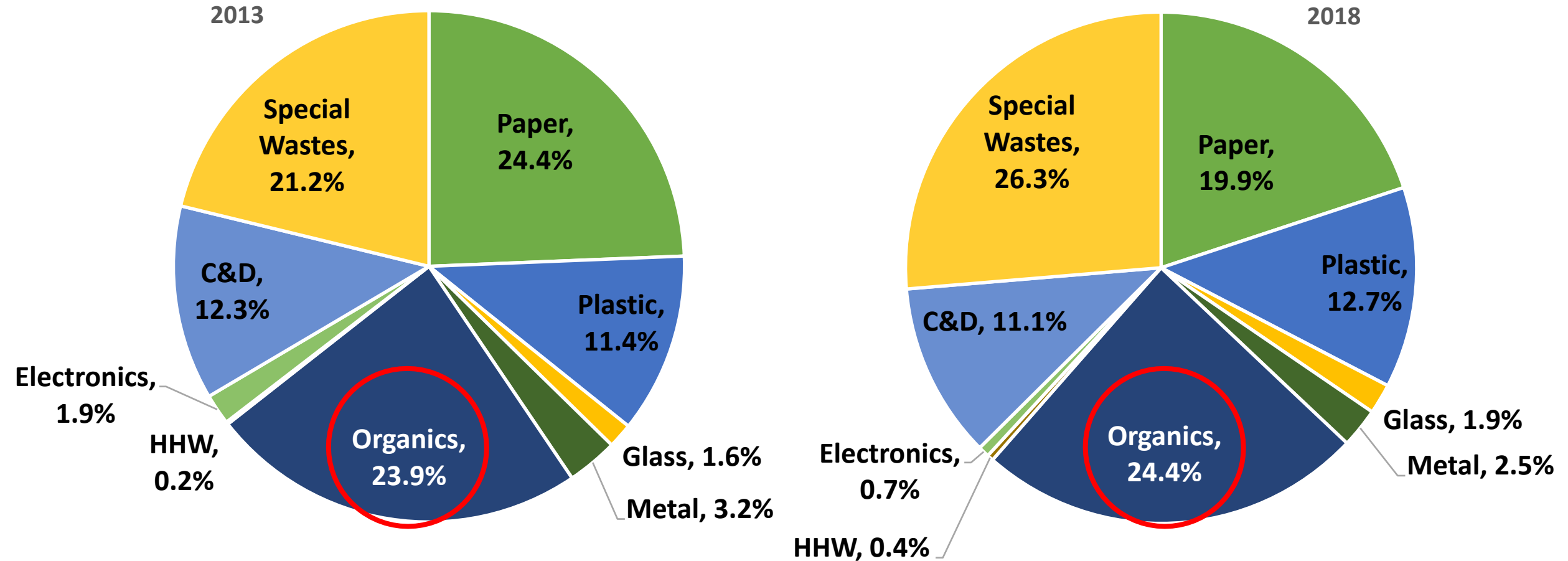


Subscribe to a curbside pickup program for food waste, similar to recycling



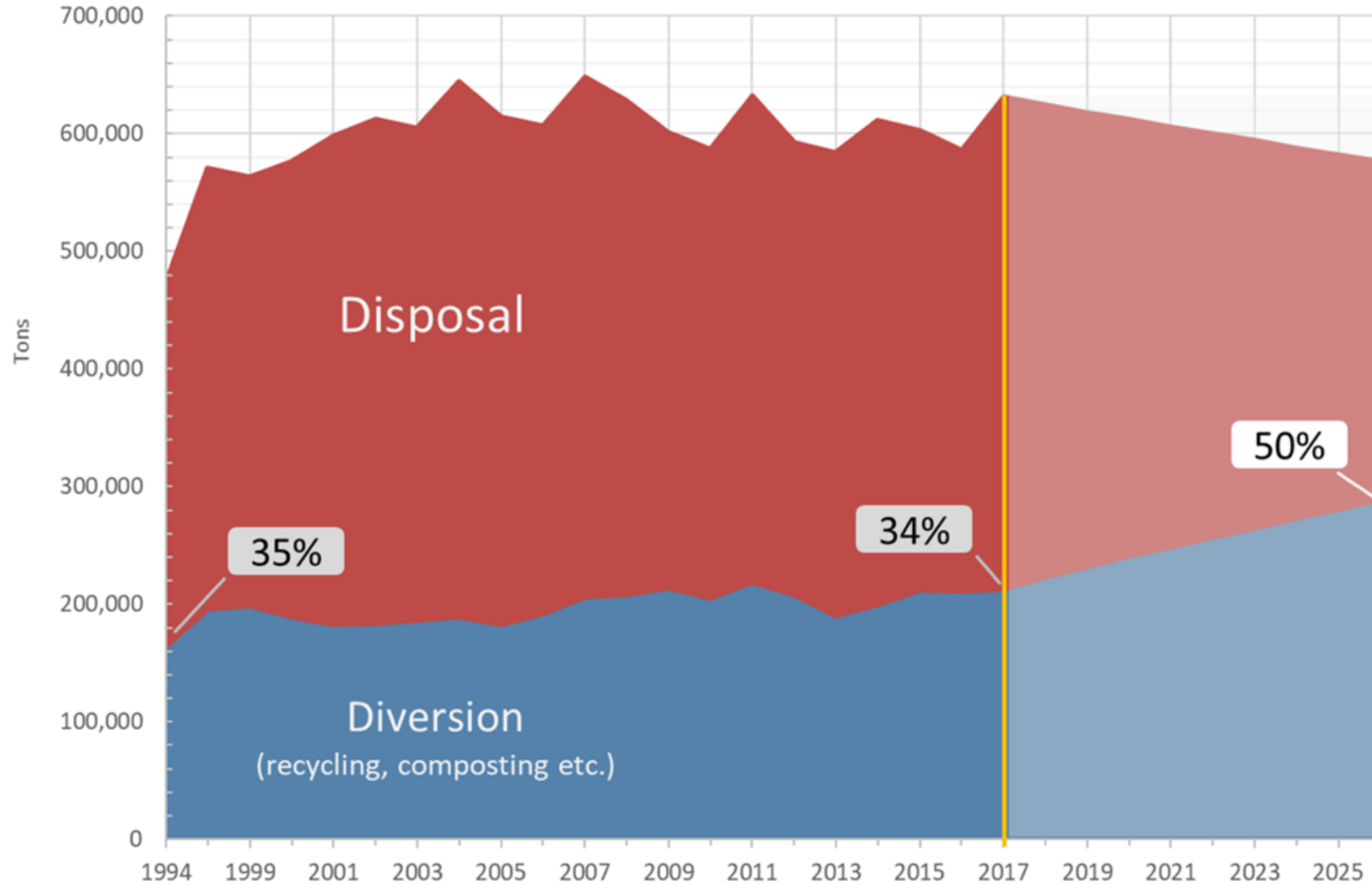
Waste Composition Studies

Disposed MSW 2013 vs. 2018



2018 Study found that 38% of food waste was packaged
 ANR estimates on average VT disposes of 77,000 tons of food/food scraps annually

Vermont State Diversion Goal



Current Status



**100s of
businesses
compost**



**Food
Donation
has nearly
tripled**



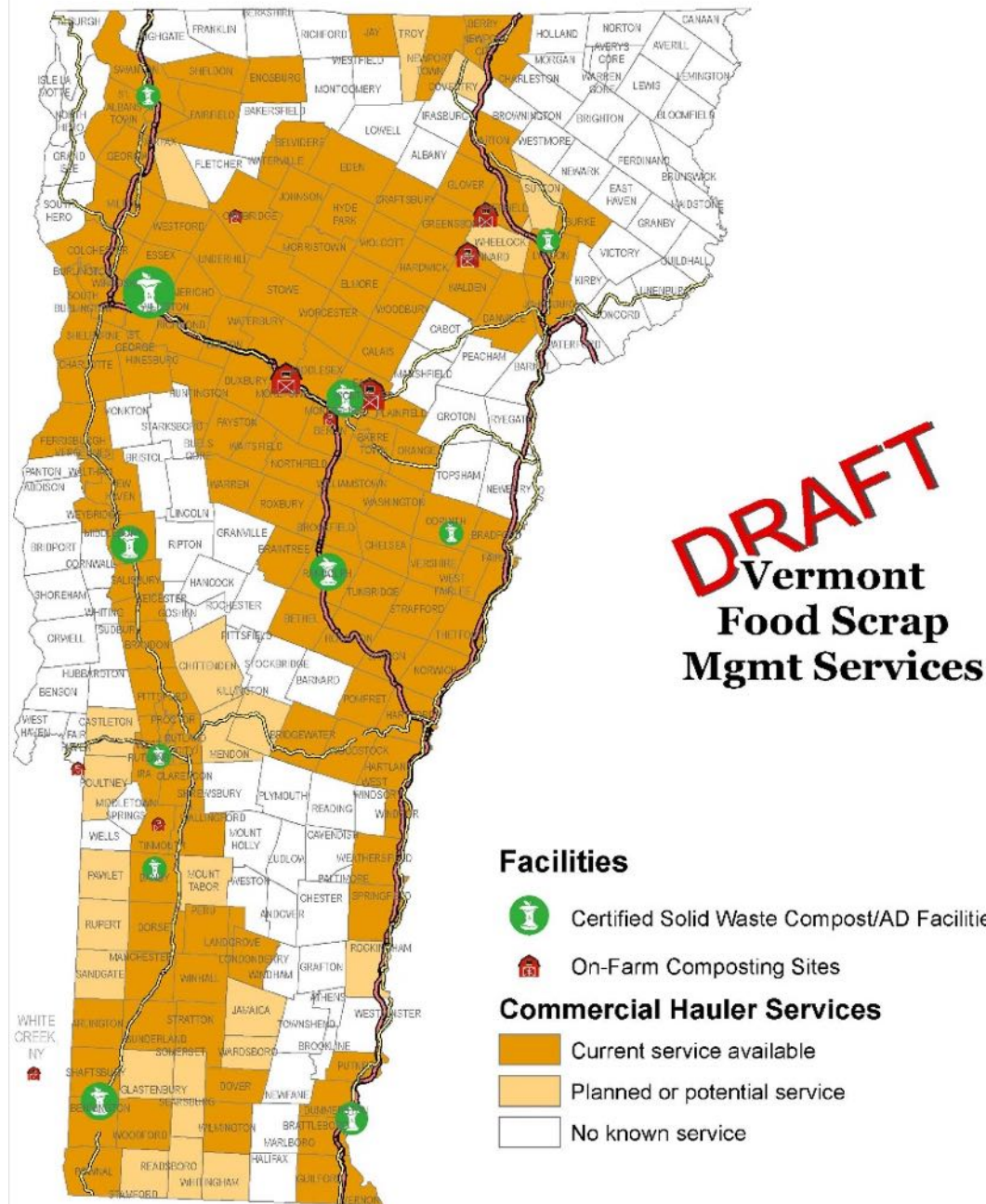
**Number of Food Scrap haulers has
nearly doubled since the law passed**

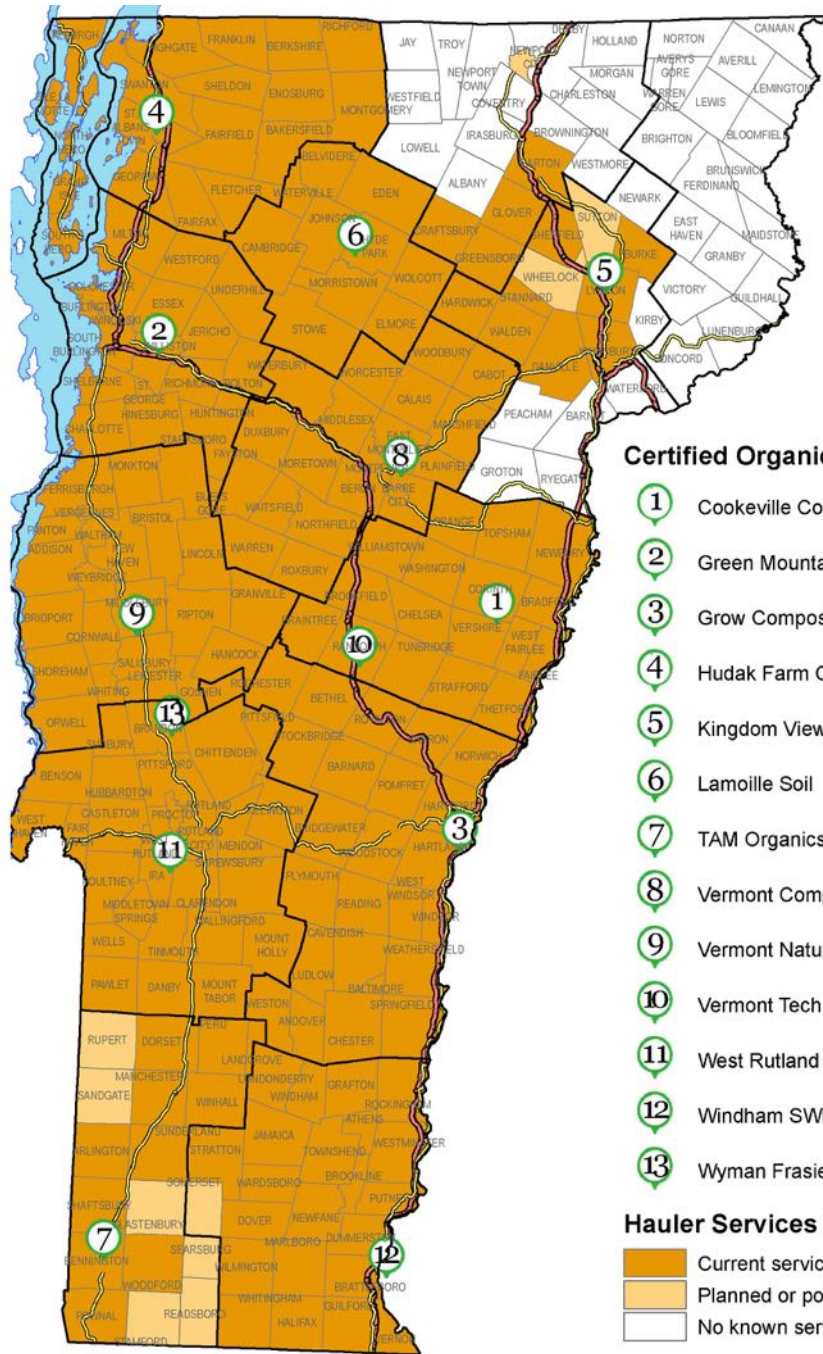
**40% of residential food waste is
composted or fed to animals**

**In 2017 Vermonters
composted more than
ever before (9% increase)**

2018 VORS

~62% of towns have commercial services or planned services





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

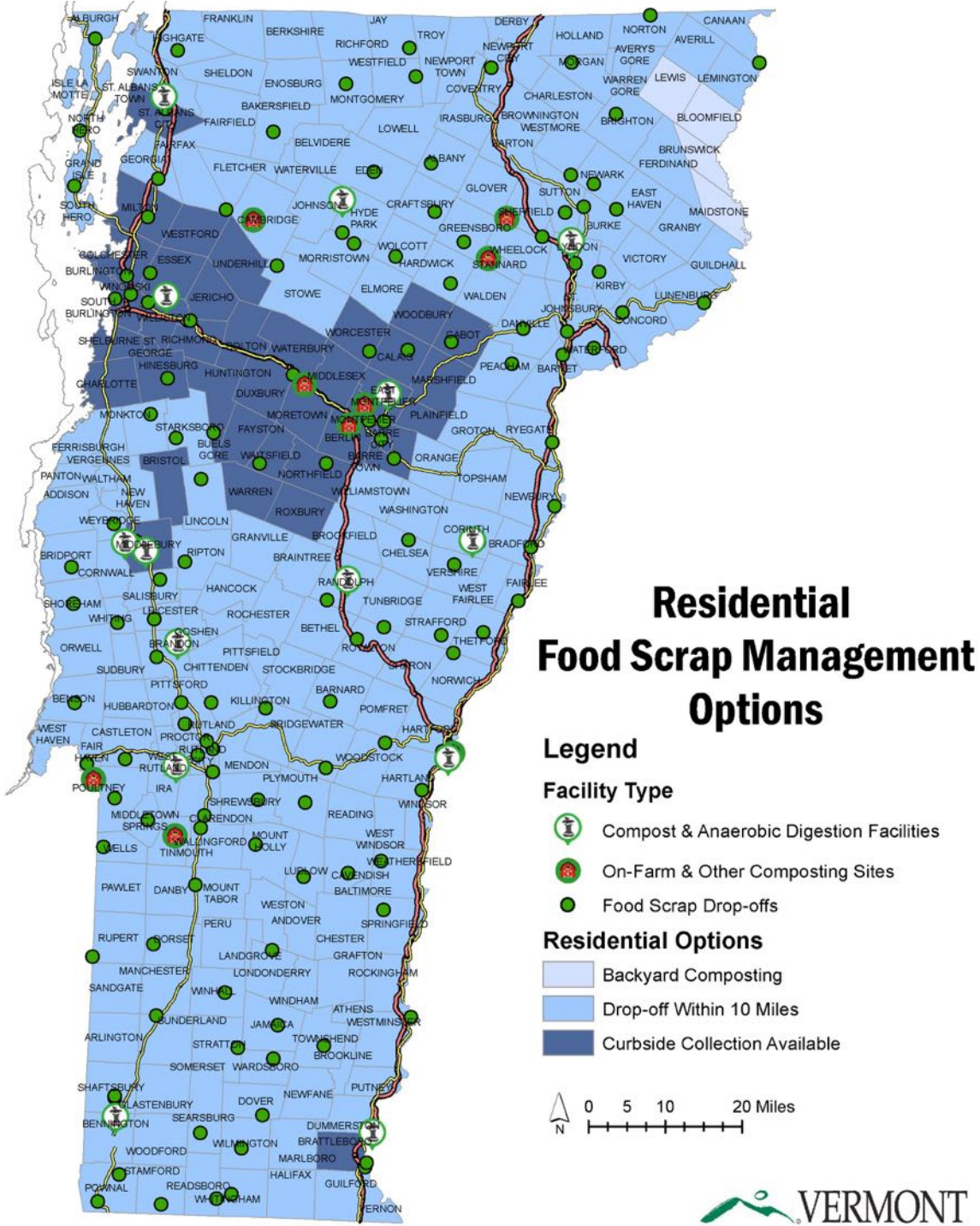
- Current service available
- Planned or potential service
- No known service

2019 VORS

~80% of towns have commercial services

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

Vermont has over 100 Food Scrap Drop-off Locations within 10 miles of almost every town.



Legislature?

ANR's Biennial SW Report Recommendations

Hauler Food Scrap Collection Requirement:

- Recommended adjusting the law to only require haulers to offer food scrap collection to commercial customers and multi-residential (4 or more units) customers, unless another hauler is providing this service.

Food Scrap Processing Capacity:

- 2017 – ~15,000 tons/year were processed (ANR/DEC phone survey)
- 2020 – ~46,000 tons/year of processing need (Waste Comp. Data)
- ANR estimated that expansion at existing sites can meet this need

Timing & pending legislation S.159

MATERIAL	FACILITIES	HAULERS	BANNED
Recyclables	2014	2015	2015
Leaf & Yard	seasonal 2015	<i>repealed</i>	2016
Food Scraps	2017	TBD 2020	2014-2020
Clean Wood			2016
All dates are July 1 st .			

S.159 also proposes:

- to allow Bag Drops to charge for recycling and
- to allow disposal waivers for mandatory recyclables when cost exceeds disposal.

What's DEC up to?

Business Outreach



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

Composting Ads – April/May 2019



<https://www.youtube.com/watch?v=2SF9z-h9bXU&list=PLb5jIRj04Vi9DrzVeix9mUhs8ERQMmYz2&index=5>



A FAMILY OF FOUR SPENDS \$1500 A YEAR ON FOOD THEY DON'T EAT

COOK IT, STORE IT, SHARE IT.
JUST DON'T WASTE IT.

SAVETHEFOOD.COM



What we're also up to...

Compost with Confidence Handout

Emerald Ash Borer carbon sourcing for composters

Promote compost use for construction projects

Compost Technical Assistance Hours

Compost Operator Training Fall 2019

2019 Vermont Materials Management Plan

Thank you!



Because of you, Vermont's recycling, food recovery, and composting initiative is working