

# FOOD FOR PEOPLE

## PUBLIC/PRIVATE COLLABORATION RESULTS IN DRAMATIC INCREASE TO FOOD RESCUED IN VERMONT



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AGENCY OF NATURAL RESOURCES

## TODAY'S TOPICS:

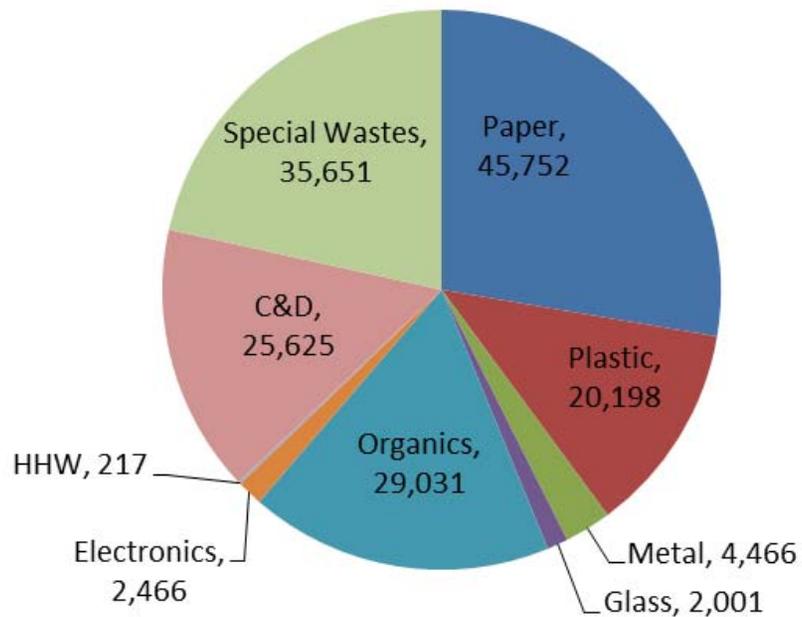
- Moving forward by looking back
- Summary of Universal Recycling & Composting Law (UR law, or Act 148)
- Nuances of UR law
- Timing Can Be Everything – Evolution of a partnership
- Projects underway or wrapping up



**MOVING FORWARD BY LOOKING BACK**

**WHERE IS ALL THE FOOD GOING?**

## WHAT WE KNOW:



### COMMERCIAL SECTOR:

Second highest amount of materials sent to the landfill are:

- Organics – 18% or ~29,000 tons
  - Food scraps were 11.2%, or...  
~18,600 tons = 3,7200,000 lbs

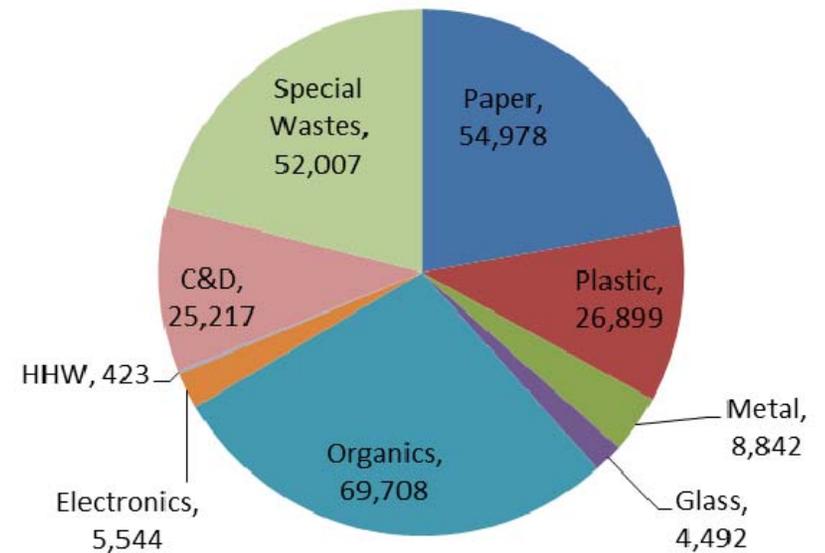
Vermont Waste Composition Study:  
<http://dec.vermont.gov/sites/dec/files/wmp/SolidWaste/Documents/finalreportvermontwastecomposition13may2013.pdf>

## WHAT WE KNOW:

### HOUSEHOLDS:

Highest amount of materials sent to the landfill are:

- Organics – 28% or ~70,000 tons
  - Food scraps were 16.7%, or ~41,500 tons = 83,000,000 lbs

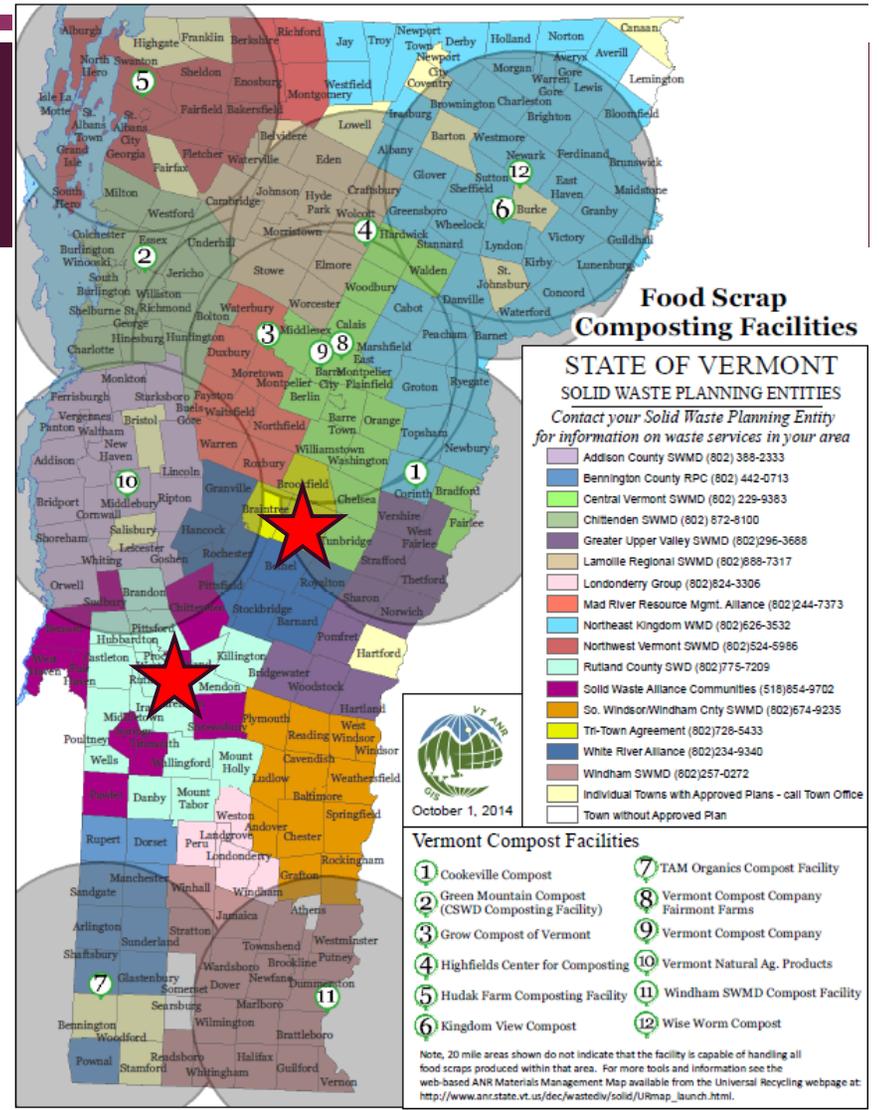


# CERTIFIED FACILITIES & A.D. PILOTS

## Two AD Pilots in Gap Areas

★ Rutland

★ Randolph



# PLUS / DELTA

## OPPORTUNITIES

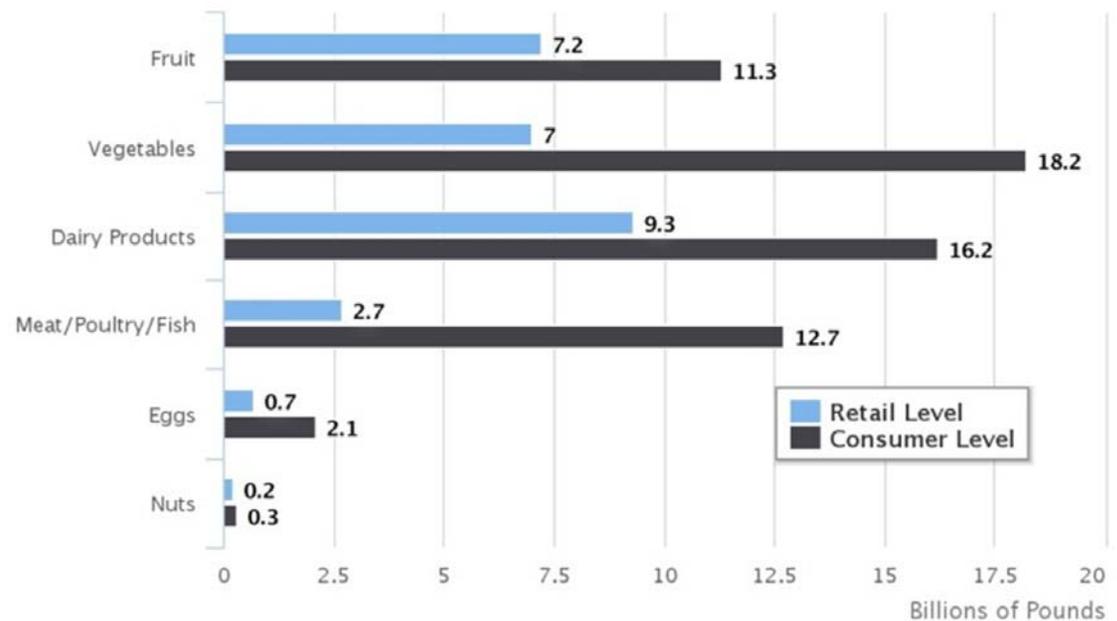
- Many untapped resources
- Increasing awareness
- Partnerships, Connections, Leverage
  - Food Rescue
  - Food Access
  - compost/AD coexistence

## CHALLENGES

- Loans vs. Grant Funding
- Logistics
- Rural State/Economies of Scale

Where is food wasted in the U.S.?

Source: USDA/ERS



## ESTIMATED ORGANICS DIVERSION BY 2022 SHOWING CUMULATIVE % CHANGE FROM 2014 TO 2022

Organics	2014 Tons	2022 Tons	% Change Over 2014
<b>ICI Organics</b>			
Food Residuals Disposed	18,592	6,095	<b>67%</b>
Reduced		1,608	
Food Rescue		1,592	
New Diversion		10,889	
Yard Waste Disposed	4,818	2,409	<b>50%</b>
On-site Disposal		964	
Diverted		1,445	
Compostable Paper Disposed	6,345	3,173	<b>50%</b>
Diverted		3,173	
<b>Total ICI Disposed</b>	<b>29,755</b>	<b>11,677</b>	<b>61%</b>
<b>Residential Organics</b>			
Food Residuals Disposed	41,486	18,007	<b>57%</b>
On-Site Composting		5,471	
Diverted		18,007	
Yard Waste Disposed	7,913	2,216	<b>72%</b>
On-Site Disposal		2,374	
Diverted		3,323	
Compostable Paper Disposed	15,506	7,753	<b>50%</b>
Diverted		7,753	
<b>Total Residential Disposed</b>	<b>64,905</b>	<b>27,976</b>	<b>57%</b>
<b>Total Disposed, ICI &amp; Residential</b>	<b>94,660</b>	<b>39,653</b>	<b>58%</b>

### VERMONT'S SYSTEMS ANALYSIS REPORT

- Historic food rescue data difficult to establish
- Estimated food rescued from institutional & commercial (ICI) sector only
- Estimated cumulative increase in food rescue through UR law implementation was conservative (<10% of discarded food)
- Presumed greatest change in management will be from “new diversion,” or downstream processing

[http://dec.vermont.gov/sites/dec/files/wmp/SolidWaste/Documents/FinalReport\\_Act148\\_DSM\\_10\\_21\\_2013.pdf](http://dec.vermont.gov/sites/dec/files/wmp/SolidWaste/Documents/FinalReport_Act148_DSM_10_21_2013.pdf)



**SUMMARY OF UR LAW**

Convenient, Consistent, & Collaborative

## UNIVERSAL RECYCLING LAW PHASED-IN MANDATES & LANDFILL BANS

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

## PHASE-IN LANDFILL BAN ON FOOD RESIDUALS

Phases for larger food scrap generators, *if there is a facility within 20 miles*

- 2014: >104 tons/year **2 tons/wk**
- 2015: >52 tons/year **1 ton/wk**
- 2016: >26 tons/year **1/2 ton/wk**
- 2017: >18 tons/year **1/3 ton/wk**



**2020: ALL\* food scraps banned from landfill**

**\*Applies to all generators including households**

# ESTIMATED FUNDING NEEDED FOR UR LAW

Fall 2015 RFI  
confirmed:

- Looking only at downstream management options...

~\$26.2m needed

## SUMMARY OF RESPONSES:

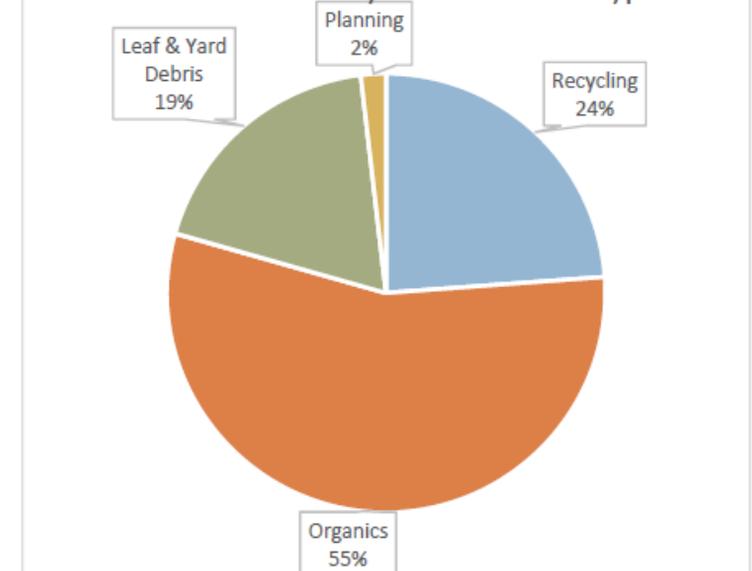
Request for Information on Universal Recycling Infrastructure Cost Needs

### TOTAL COSTS FOR:

<b>Recycling</b>	<b>\$ 11,251,920</b>
Carts	\$ 2,190,620
Trucks	\$ 2,509,800
Transfer Stations & MRFs	\$ 3,424,000
Other	\$ 3,127,500
<b>Organics</b>	<b>\$ 26,231,298</b>
Carts	\$ 2,660,218
Trucks	\$ 2,040,000
Transfer Stations	\$ 1,387,530
Processing Facilities	\$ 13,134,000
Other	\$ 7,009,550
<b>Leaf &amp; Yard Debris</b>	<b>\$ 8,870,000</b>
Trucks	\$ 705,000
Transfer Stations	\$ 1,178,500
Processing	\$ 4,215,000
Other	\$ 2,771,500
<b>Planning</b>	<b>\$ 871,080</b>

**Total Estimated Costs \$ 47,224,298**

Estimated Costs by Infrastructure Type





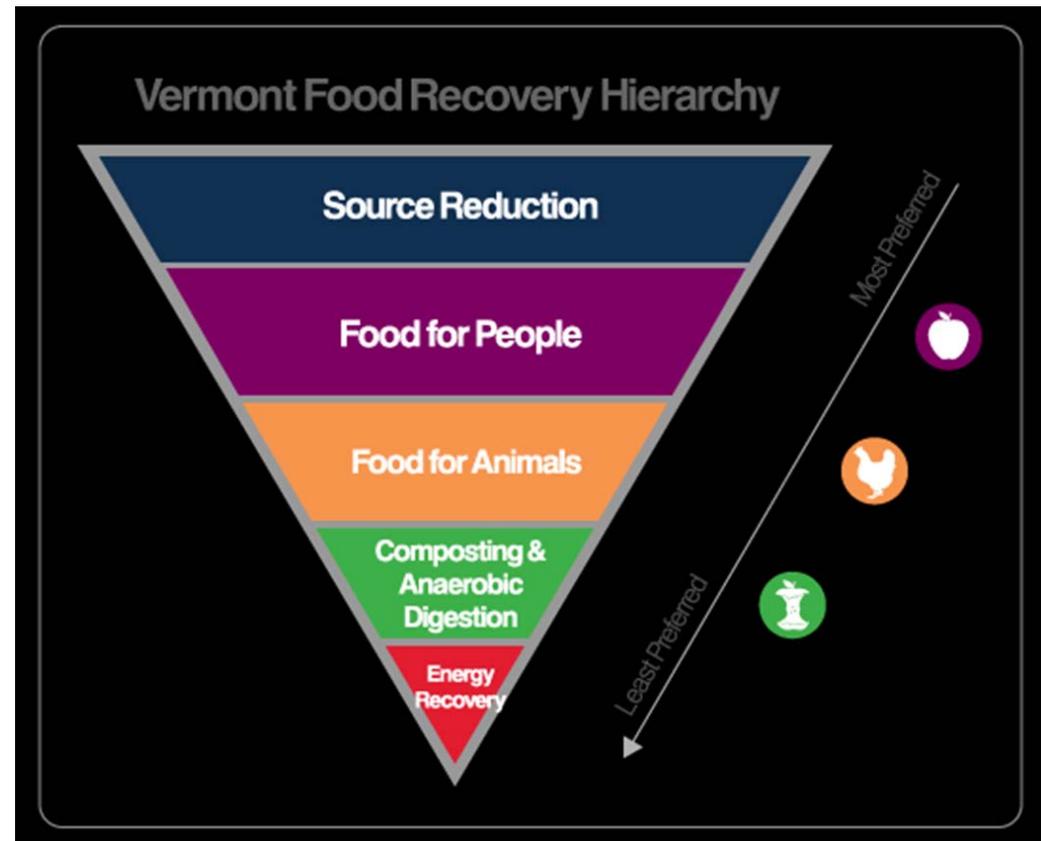
NUANCES OF UR LAW

Food Recovery Hierarchy & Landfill Ban

## UR LAW – FOOD RESIDUALS & VERMONT'S FOOD RECOVERY HIERARCHY

- **"Food residual"** means source separated and uncontaminated material that is derived from processing or discarding of food and that is **recyclable, in a manner consistent with section 6605k** of this title. **Food residual may include preconsumer and postconsumer food scraps.** "Food residual" does not mean meat and meat-related products when the food residuals are composted by a resident on site.
  
- **§ 6605k. Food residuals; management hierarchy**
  - (a) It is the policy of the State that food residuals collected under the requirements of this chapter **shall be managed according to the following order of priority uses:**
    - (1) reduction of the amount generated at the source;
    - (2) diversion for food consumption by humans;
    - (3) diversion for agricultural use, including consumption by animals;
    - (4) composting, land application, and digestion; and
    - (5) energy recovery.

# VERMONT'S FOOD RECOVERY HIERARCHY



# FOOD SAFETY & HANDLING

## Health & Safety Controls

- Time & Temperature
- Prepared Food Date Labeling
- Recommended controls:
  - Allergen labeling
  - Donation tracking

<http://dec.vermont.gov/waste-management/solid/materials-mgmt/food-donation>



## Guidance for Food Donation: Businesses and Institutions

Vermont's Universal Recycling and Composting Initiative bans throwing away food and food scraps in landfills by 2020. This law adopted the Food Recovery Hierarchy that sets priorities for managing food and food scraps.

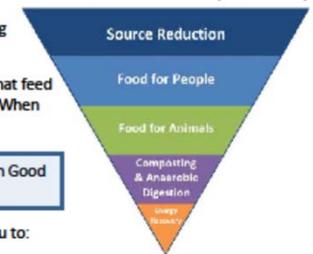
Extra food can be donated to food rescue agencies or organizations that feed the hungry only if it was handled properly and not previously served. When creating a program to donate food, follow these guidelines.

You are protected from liability by federal law under the Bill Emerson Good Samaritan Food Donation Act when donating properly handled food.

Donating surplus food to local food rescue organizations will allow you to:

- Lower trash disposal and diversion costs
- Follow the Universal Recycling law by not throwing food away
- Support your community by helping the one in four Vermonters who is in need
- Take possible federal tax deductions (ask your accountant about the details)

### Vermont Food Recovery Hierarchy



### DONATING FOOD SAFELY & SAFE FOOD HANDLING GUIDE

#### TIME & TEMPERATURE CONTROLS

Potentially hazardous foods require temperature control for safety (see guide below). Examples include prepared foods, meat, poultry, dairy, fish, seafood, tofu, eggs, cut produce, and garlic in oil mixtures. Foods kept in the temperature danger zone, which is between 41°F and 135°F, can spoil, cause bacteria to grow, and may cause people to become sick.

Food Type	Storage Requirements	Foods That Cannot be Donated
Prepared Foods	Stored at 41°F or below Frozen at 0°F or below	<ul style="list-style-type: none"> <li>• Foods kept in the danger zone more than 2 hours</li> <li>• Previously reheated foods</li> <li>• Previously served foods</li> </ul>
Chilled Perishable, Prepackaged Foods (e.g., dairy, juice)	Stored at 41°F or below	<ul style="list-style-type: none"> <li>• Foods kept in the danger zone more than 2 hours</li> <li>• Damaged or bulging packaging</li> <li>• Foods stored in non-food grade packaging</li> </ul>
Meat, Poultry, Fish (Unfrozen)	Stored at 41°F or below	<ul style="list-style-type: none"> <li>• Foods kept in the danger zone more than 2 hours</li> <li>• Foods stored in non-food grade packaging</li> </ul>
Meat, Poultry, Fish (Frozen)	Frozen at 0°F or below	<ul style="list-style-type: none"> <li>• Foods kept in the danger zone more than 2 hours</li> <li>• Severe freezer burn</li> <li>• Defrosted foods</li> </ul>
Fresh Produce (Whole)	Stored in a cool, dry, and clean area	<ul style="list-style-type: none"> <li>• Significant decay</li> </ul>
Fresh Produce (Cut)	Stored at 41°F or below	<ul style="list-style-type: none"> <li>• Foods kept in the danger zone more than 2 hours</li> <li>• Color change or decay</li> </ul>
Baked Goods	Stored in a cool, dry, and clean area	<ul style="list-style-type: none"> <li>• Foods stored in non-food grade packaging</li> <li>• Moldy or stale products</li> </ul>
Canned/Boxed Foods	Stored in a cool, dry, and clean area	<ul style="list-style-type: none"> <li>• Damaged or bulging packaging</li> <li>• Home-canned products</li> </ul>

Information in this table is from Comprehensive Guidelines for Food Recovery Programs (p. 44 – 43), developed at the Conference for Food Protection, revised March 2007



September 2015



December 2015

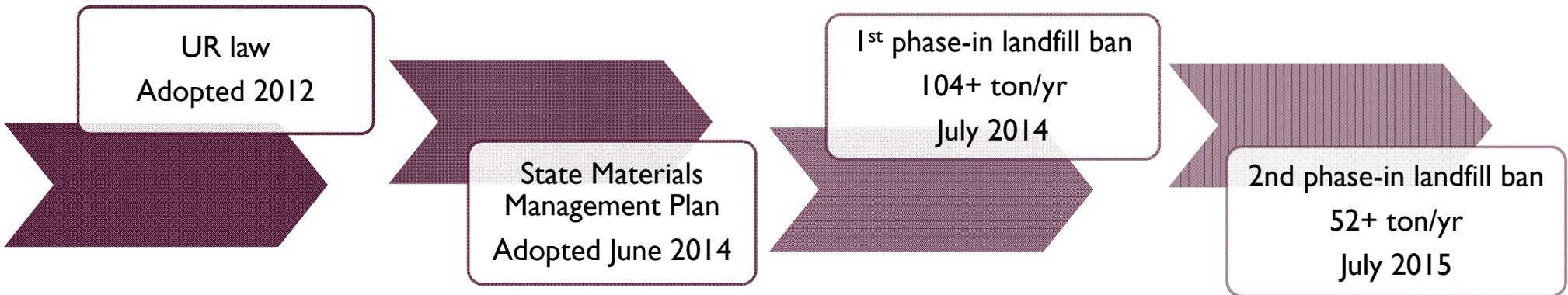


April 2016

**TIMING CAN BE EVERYTHING**

Phase-In Dates & Recoverable Food

# VERMONT 'S TIMELINE TO DATE



## STATE MATERIALS MANAGEMENT PLAN (MMP)

Included as performance standards in MMP:

- ANR will promote source reduction, such as EPA's **Food Too Good to Waste** pilot program, as well as food “rescue” and donation programs.
- **ANR will work with the Vermont Food Bank and other organizations** as able to increase awareness and education about food rescue options. At minimum ANR will do this through its website...
- **Implement an ongoing public education and outreach** campaign to inform the residents, businesses, and institutions (hospitals, nursing homes, colleges, correctional facilities, and other large waste generators) **of the better ways to manage organic materials**. Include information about:
  - locally available services and resources for diversion such as food rescue sites/organizations



# FEDERAL TIMELINE

USDA & USEPA  
Food Waste Challenge  
Launched 2013

USDA & USEPA  
50% by 2030  
Announced Sept. 2015

Food Recovery Act  
Introduced Dec. 2015

Extended Federal Tax  
Benefits for Donation  
Announced Dec 2015

Food Date Labeling  
Act  
Introduced May 2016

## EXTENDED FEDERAL TAX BENEFITS – AS OF DECEMBER 2015

### KEY FEATURES UNDER THE NEW LAW

1

PERMANENT  
EXTENSION  
FOR FOOD  
DONATIONS

2

INCREASE IN  
DONATION  
CAP TO 15%  
OF DONOR'S  
NET INCOME

3

NEW OPTIONAL  
FORMULA FOR  
TAXPAYERS USING  
CASH BASED  
ACCOUNTING TO  
CALCULATE THE  
DEDUCTION

4

PROVIDES A  
FORMULA FOR  
DETERMINING  
THE FAIR  
MARKET VALUE

# CHANGING THE PARADIGM

## Knowing Your Audience

- Food Waste → **WASTED** food
- Discarded Food → **potentially recoverable**
- Generator → **Potential Donor**
- Recipient site → **Network Partner**



## CAPTURING MORE FOOD FOR PEOPLE



**Bill Emerson Good Samaritan Food Donation Act (1996)** provides liability protection for food donors.

**Food rescued is UP!**

**Dec 2015: ↑30%**

**May 2016: ↑?%**

*(10/1/15 to 5/23/16)*



### **Extended Tax Benefits for Donation (2015)**

Extends tax benefits to all companies & permanent for all businesses. Higher Deduction Cap –15% of donor net income, with options to carry forward up to five years.

## RETAIL FOOD DONATION ON THE RISE

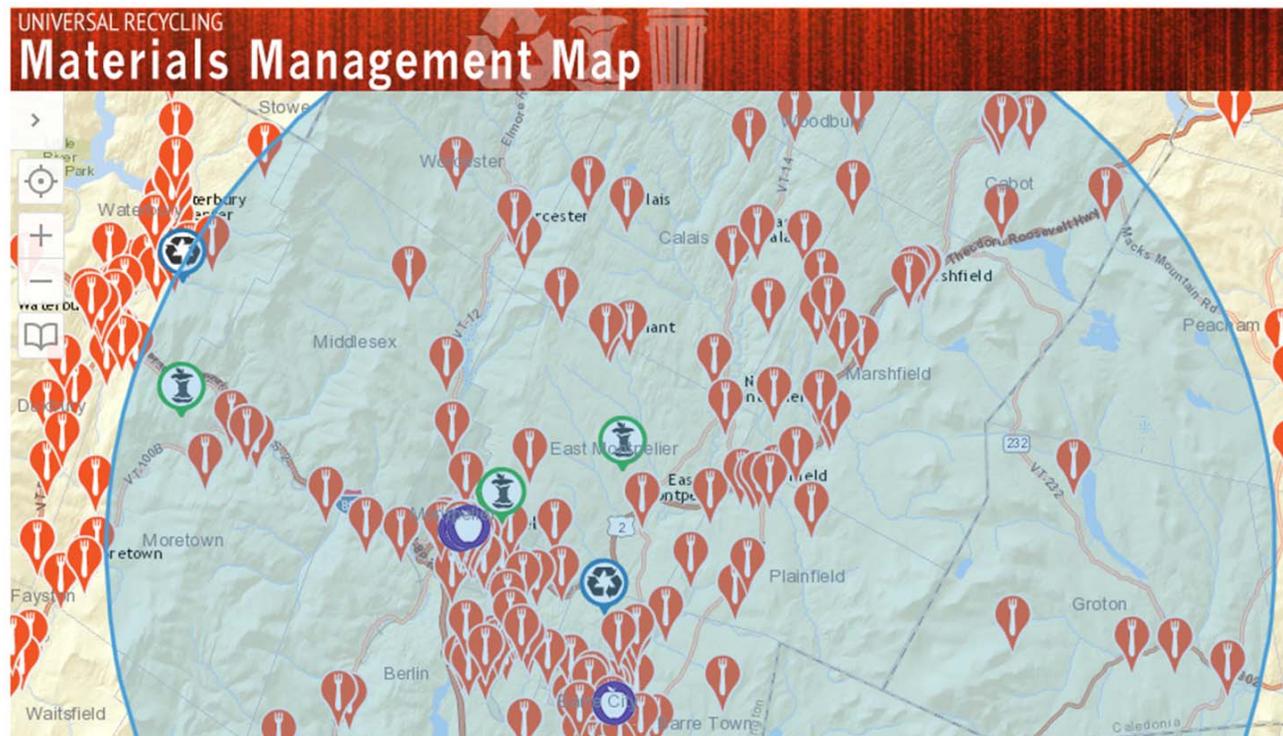
### Retail Partner Program – started mid 2014

- YTD breakdown
    - 10/1/14 – 4/19/15 = 318,107 lbs
    - 10/1/15 – 4/19/16 = 1,068,060 lbs
  - UR Law Implementation (July to July)
    - 7/1/14 – 7/1/15 = 828,984 lbs
    - 7/1/15 – 4/19/16 = 1,605,570 lbs
- ↑ 236%
- ↑ 94% & counting



# FOOD WASTE PREVENTION & FOOD RESCUE RELATED PROJECTS

- Materials Management Map w/ food shelf locations (2014)
- Farm to School – Planning & Implementation Grants (2015)
- Share Table & Business/Institution Donation Guidance (2016)



## LOOKING AHEAD

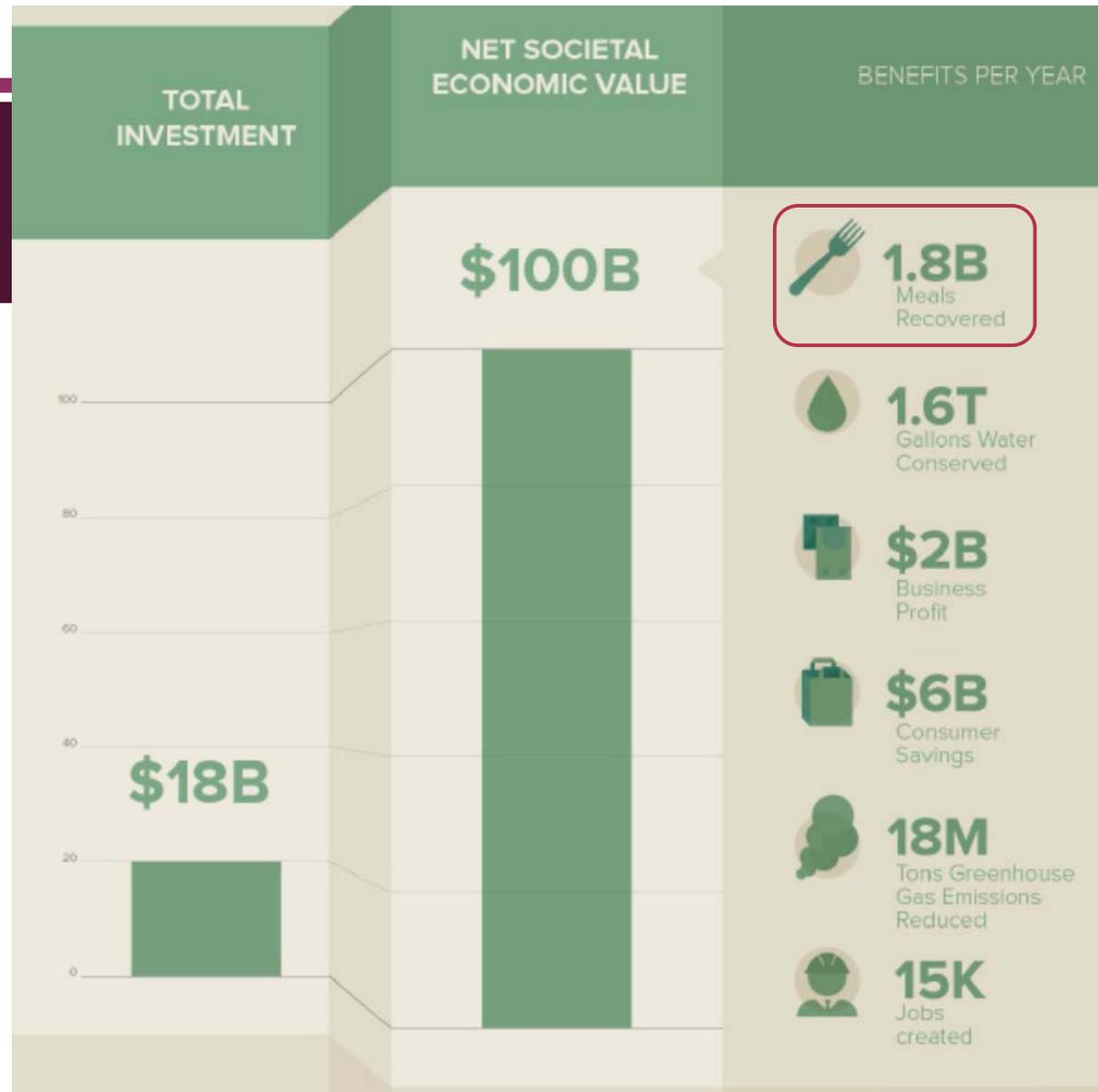
- Social Norming & Collective Action
  - CSWD's website (<http://cswd.net/reduce-and-reuse/reducing-food-waste/>)
  - Local chef host's *Just Eat It* film screening & Food Salon
- ECO AmeriCorps Members
- Increased Collaboration with sister Agencies
  - Agency of Education – Summer Institute (Aug 2016)
  - Agency of Agriculture – Farm to School Conference (Nov. 2016)



# ROADMAP

## ReFED Roadmap Report

- \$18b investment
- 27 solutions
  - Prevention & Recovery highest value/ton invested
- ~20% reduction over 10 yrs



## CONTACT INFORMATION

**VTANR website: [www.vtrecycles.com](http://www.vtrecycles.com)**



**[www.facebook.com/VTrecycles](http://www.facebook.com/VTrecycles)**



**[@VTrecycles](https://twitter.com/VTrecycles)**



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