



# West Coast Climate & Materials Management Forum

30 November 2017

**Measuring Amounts and Causes of Wasted Food**

# West Coast Climate and Materials Management Forum

The West Coast Climate and Materials Management Forum is a collaboration of state, local, and tribal government

- ▣ Develop ways to institutionalize sustainable materials management practices.
- ▣ Develop tools to help jurisdictions reduce the GHGs associated with materials



# Check out the Forum's Resources

- [Original Report Connecting Materials/Climate](#)
- [Research Summaries](#)
- [Turn-key Materials Management Presentation](#)
- [Climate Action Toolkit](#)
- [Food: Too Good to Waste Toolkit](#)
- [Climate Friendly Purchasing Toolkit](#)
- [Reducing GHGs Through Composting and Recycling](#)

[www.westcoastclimateforum.com](http://www.westcoastclimateforum.com)



**West Coast Climate**  
& Materials Management Forum

# West Coast Climate Forum

## Webinar Series Disclaimer

This webinar is being provided as part of the West Coast Climate and Materials Management Forum Webinar Series. The Forum is a collaboration of state, local, and tribal governments. We invite guest speakers to share their views on climate change topics to get participants thinking and talking about new strategies for achieving our environmental goals. Mention of trade names or commercial products does not constitute endorsement or recommendation for use.

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**West Coast Climate**  
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This webinar will focus on measuring the amounts and causes of wasted food in households and businesses. While there are bold goals to halve wasted food by 2030 in the US, there is little understanding of the types, amounts, edibility, and root causes of wasted food in cities and states. This webinar will feature emerging research and insights from pioneering efforts led by the Natural Resource Defense Council (NRDC), and the Oregon Department of Environmental Quality (DEQ) in collaboration with Portland State University. This research is intended to help governments, NGOs, businesses and funders better understand opportunities to reduce avoidable wasted food through improved measurement and more effective prevention, rescue, and recovery strategies.

30 November 2017



**West Coast Climate  
& Materials Management Forum**

## Today's Speakers



**Ashley Zanolli is a Sr. policy and program advisor in Oregon DEQ's Materials Management Program. Ashley is considered a national expert on wasted food prevention and measurement. She is currently on assignment from the US EPA to the Oregon DEQ Materials Management Program as a senior policy and program advisor.**



**Dr. Christa McDermott is the Director of Community Environmental Services, Portland State University. Christa is a social psychologist whose work focuses on environmental behavior change at institutional and individual levels with year of experience working in the federal government and on local zero waste initiatives.**



## Today's Speakers



**Darby Hoover is a Senior Resource Specialist in NRDC's food and agriculture program. Darby specializes in issues related to wasted food prevention, composting, anaerobic digestion, zero waste, recycling, and sustainable packaging. Darby's previous work includes helping to manage NRDC's sustainability initiatives with sports and entertainment organizations, including Major League Baseball, the National Basketball Association, the National Hockey League, the Academy Awards, and the GRAMMY Awards**





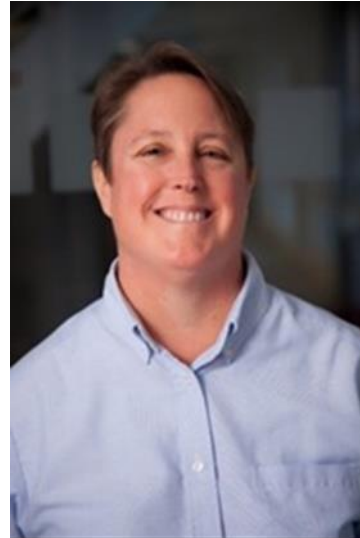
# Today's Speakers



**Ashley Zanolli, Sr. policy and program advisor in Oregon DEQ's Materials Management Program**



**Dr. Christa McDermott is the Director of Community Environmental Services, Portland State University**



**Darby Hoover is a Senior Resource Specialist in NRDC's food and agriculture program**







**More to come in the Webinar series in 2018:**

February 2018: Advancing Sustainable Consumption: New Tools for Local Government

April 2018: Consumption and GHGs: New Models and Insights

June: 2018: Measuring Success in Reducing Wasted Food Presented by Oregon DEQ and Portland State University



# THANK YOU!

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Please fill out the survey you receive after the webinar.

For more information, visit [www.westcoastclimateforum.com](http://www.westcoastclimateforum.com)



**West Coast Climate**  
& Materials Management Forum

# Preventing the Wasting of Food



**Measuring Amounts and Causes of Wasted Food Webinar**  
**Ashley Zanolli**  
**November 30, 2017**

# Where we're going today

- **Why Wasted Food?**
- **DEQ Prevention Strategy**
- **Foundational Research**
  - ✓ Measurement on causes and amounts of wasted food
  - ✓ Case studies



# Why Wasted Food?

MORE THAN JUST FOOD

## THE U.S. WASTES TONS OF RESOURCES WHEN WE WASTE FOOD

**1,250** CALORIES PER PERSON PER DAY  
THAT IS HALF OF THE RECOMMENDED DAILY INTAKE FOR ADULTS

**19%**  
OF ALL  
U.S.  
CROPLANDS  
THAT IS MORE  
LAND THAN ALL  
OF NEW MEXICO

**21%** OF U.S. LANDFILL  
CONTENT



THE NO. 1 CONTRIBUTOR BY WEIGHT

**18%**  
OF ALL  
FARMING  
FERTILIZER  
WHICH CONTAINS  
3.9 BILLION POUNDS  
OF NUTRIENTS

**2.6%** OF ALL U.S. GREENHOUSE  
GAS EMISSIONS ANUALLY



37 MILLION PASSENGER VEHICLES' WORTH

**21%** OF THE U.S. AGRICULTURAL  
WATER USAGE



MORE THAN: TEXAS + CALIFORNIA + OHIO

**\$218,000,000,000**

WHICH IS EQUAL TO 1.3% OF THE U.S. GROSS DOMESTIC PRODUCT (GDP)



# “Wasted Food” or “Food Waste”?



# Growing Recognition of the Problem



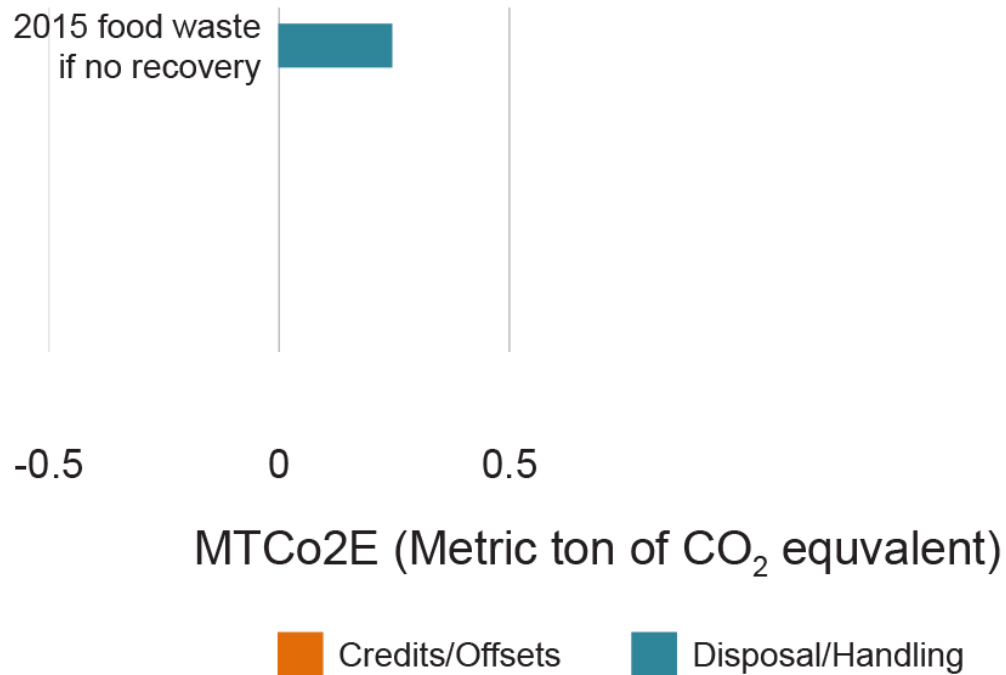
**DRAWDOWN**  
THE MOST COMPREHENSIVE  
PLAN EVER PROPOSED TO  
REVERSE GLOBAL WARMING  
EDITED BY PAUL HAWKEN





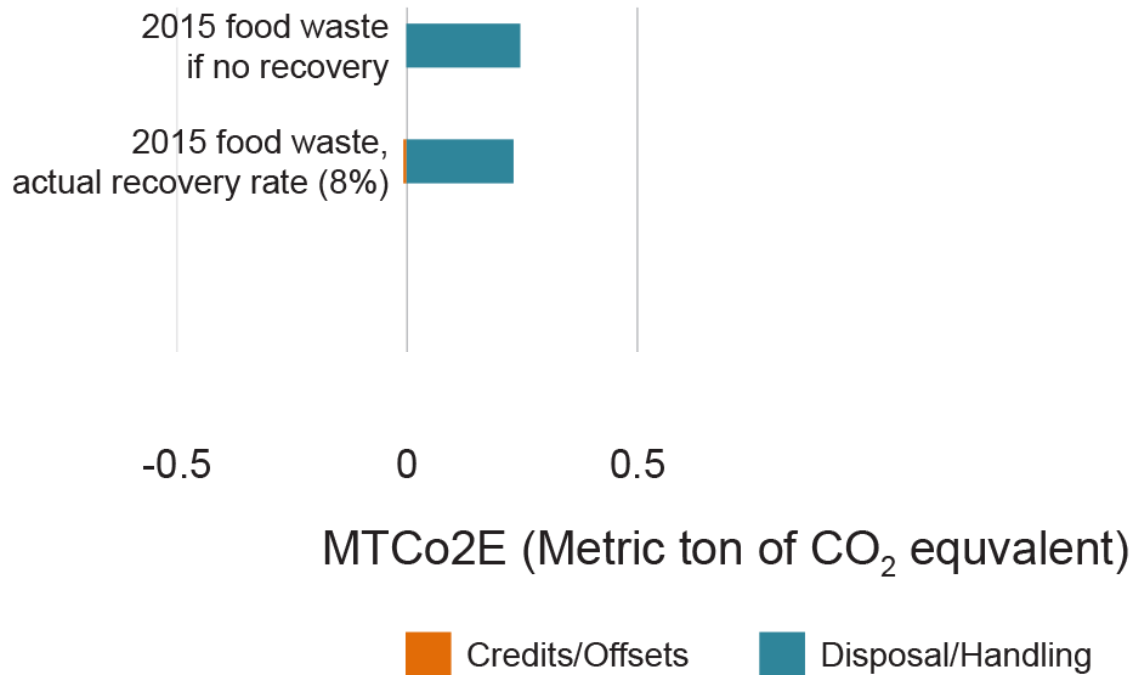
# Relative GHG Impacts: Oregon case study

## 2015 Food Waste Analysis



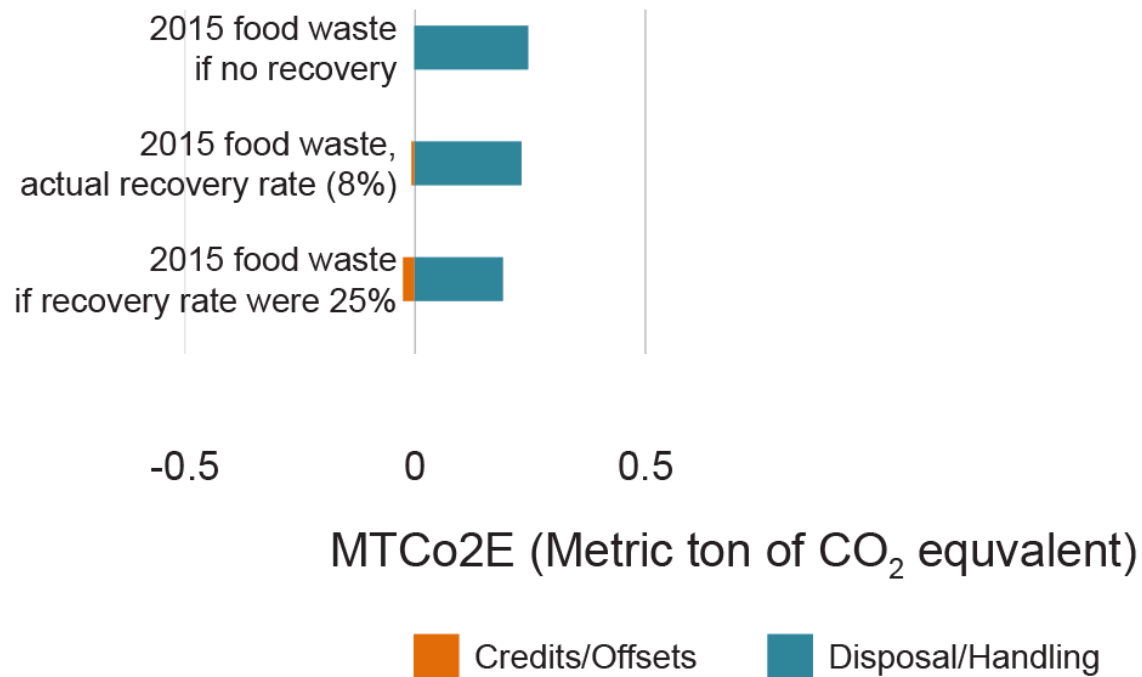
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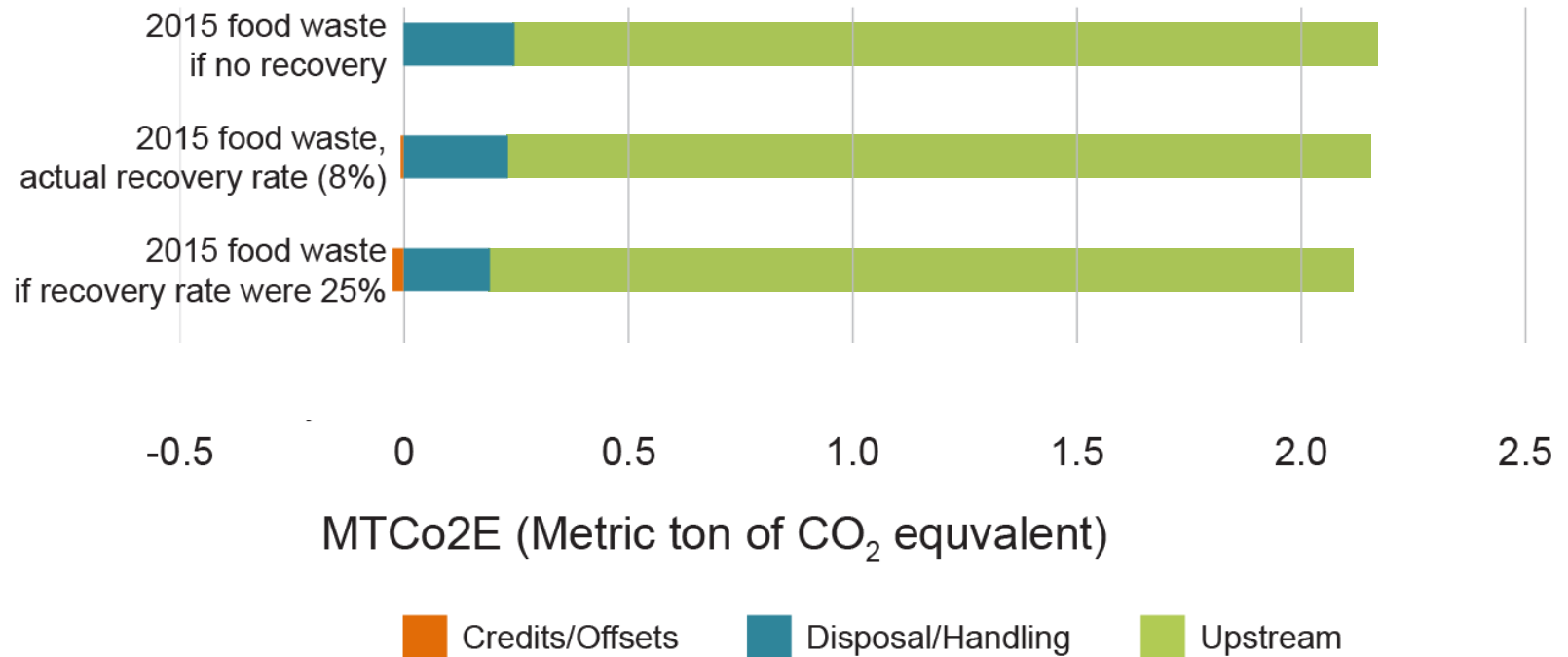
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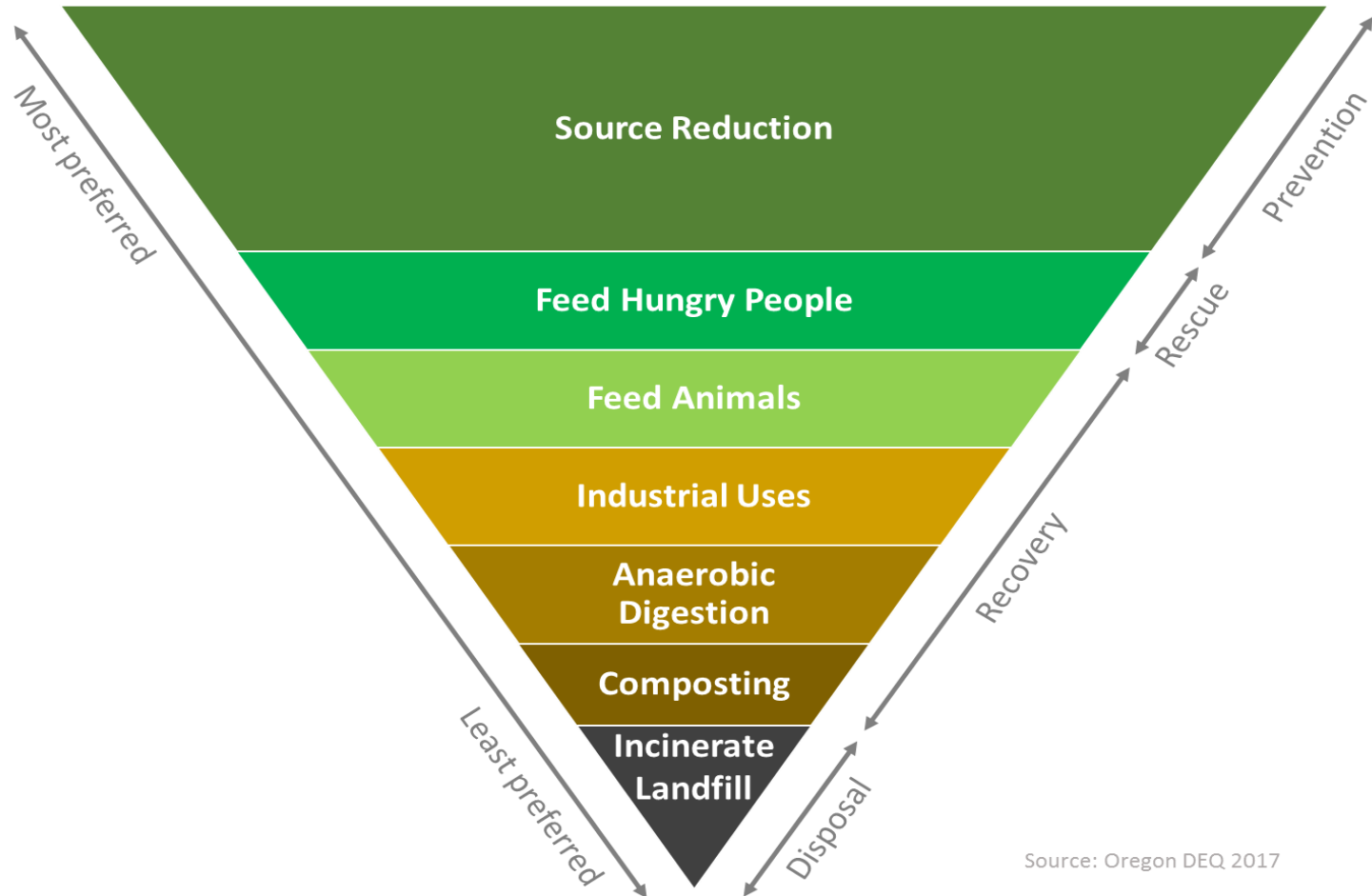
# The importance of generation goals: Oregon case study

## 2015 Food Waste Analysis



# Oregon's Hierarchy

## Wasted Food Hierarchy



Source: Oregon DEQ 2017

# Mindset Matters



# DEQ's Objective – Change the Conversation





# Oregon's Strategic Plan – Goals

- Develop the state of knowledge and building blocks to help reduce wasted food
- Increase business and consumer actions to prevent wasted food
- Reduce GHG emissions, water use, energy use and wasted resources by reducing the generation of wasted uneaten food by
  - ✓ 15 percent by 2025
  - ✓ 40 percent by 2050.



# Oregon's Strategic Plan

## Oregon DEQ Strategic Plan for Preventing the Wasting of Food



**Materials Management**

700 NE Multnomah  
Portland, OR 97232  
Phone: 503-229-5096  
800-452-4011  
Fax: 503-229-6702  
Contact: Elaine Blatt  
[www.oregon.gov/DEQ](http://www.oregon.gov/DEQ)



State of Oregon  
Department of  
Environmental  
Quality

<http://www.oregon.gov/deq/mm/Pages/foodwastestrategy.aspx>

# Preventing the Wasting of Food

## Strategic Plan for 2017 – 2021

### Near term projects

- **Measurement study**
  - **Research on impacts of food rescue approaches**
  - **Messaging research**
  - **Commercial campaigns**
  - Consumer campaigns and outreach
  - Date labeling – initial research and tracking
- Regional coalition
  - Commercial best practices



# Preventing the Wasting of Food

## Strategic Plan for 2017 – 2021

### Longer term projects

- Further work on date labeling, based on research and other developments
- Best practices for school kitchens
- Additional research
  - ✓ Comparative analysis of prevention actions
  - ✓ Analysis of prevention, donation, and recovery as interventions
  - ✓ Economics of food waste reduction
  - ✓ Impacts of packaging



# Oregon Wasted Food Measurement Study



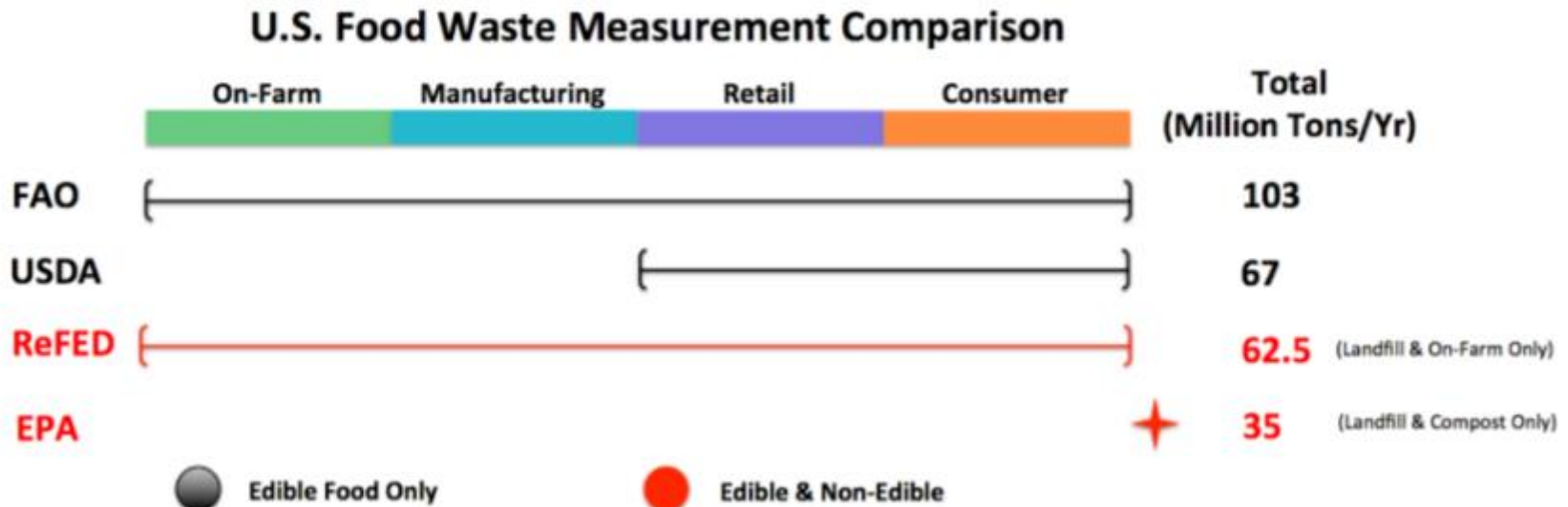
# What does “Reduce” mean?

## Measurement data can help:

- Design of policy or interventions
- Provide baseline
- Assess progress

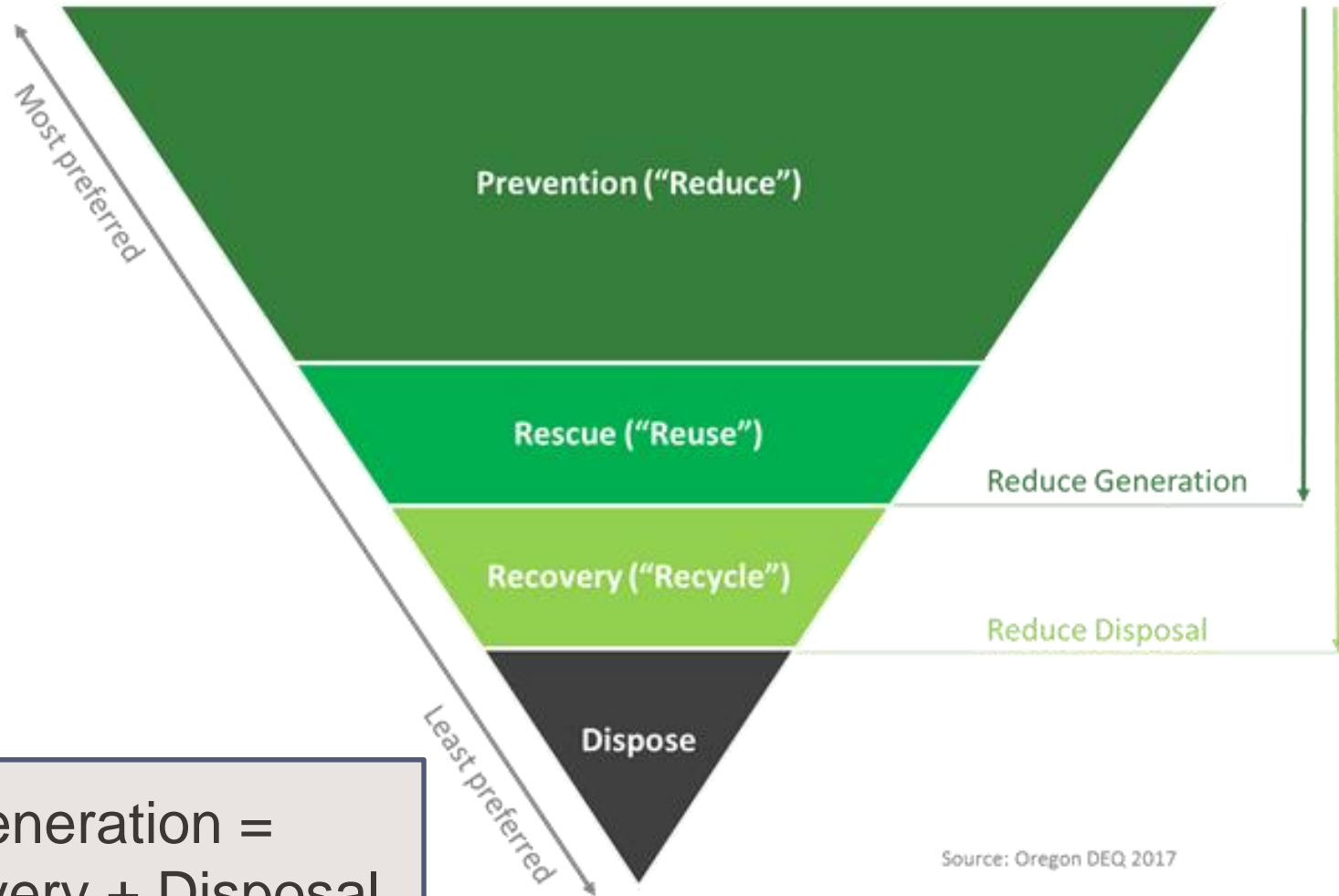
## More “robust” data needed to accomplish these goals as we move up the hierarchy:

- Loss reason
- Type of food
- Disposal Destination



# Public Policy Goals and Targets

Wasted Food Hierarchy



Generation =  
Recovery + Disposal

Source: Oregon DEQ 2017



# DEQ and PSU Wasted Food Research

## Research Goals:

1. Establish baseline metrics for wasted food in residential households and a limited number of commercial/institutional (ICI) sectors. Metrics include:
  - a) Quantities and types of edible food wasted;
  - b) Self-reported perceptions of reasons, barriers, and alternative behaviors;
  - c) Knowledge and attitudes in relation to behaviors and structural and/or psychological motivators to reduce wasted food.
2. Test methods for reliably collecting data on wasted food, *both quantity and reasons for waste*
3. Develop basic methods for other cities, states, and countries to establish their own baselines, making context specific modifications, and assess progress in preventing waste.
4. Assess cost effectiveness and environmental impact of up to 7 waste prevention interventions in a limited number of food service environment.

# Timeline

## Task 1 - Qualitative Interviews

- June 2017 Published Report

## Task 2 – Statewide Residential Survey (urban and rural)

- Finalized in August 2017 (unpublished)

## Task 3 – Household Wasted Food Study (urban and rural)

- Finalized Design in August, recruiting now April 2018 Final Report

## Task 4 – ICI Case Studies (fifteen total)

- Finalize Design in July. May 2018 Final Report

## Task 5 – Overall Analysis and Report

- August 2018 Final Report and Protocols for States, Counties, Cities, and Businesses



# Timeline

Task 1 Report available at: <http://www.oregon.gov/deq/mm/food/Pages/Wasted-Food-Study.aspx>

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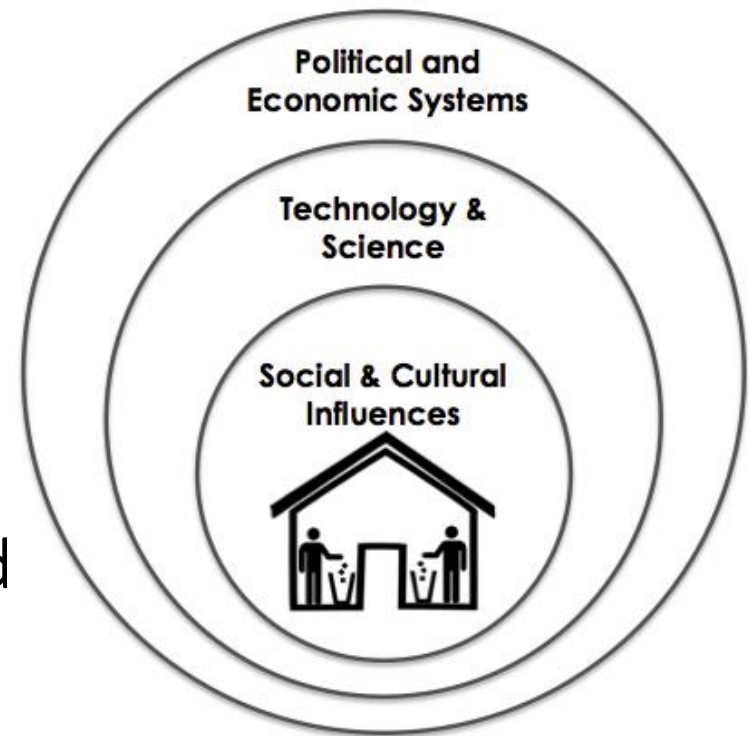
- August 2018 Final Report and Protocols for States, Counties, Cities, and Businesses



# DEQ and PSU Qualitative Interviews

**Research Objectives are to better understand social, economic and cultural factors that lead to the wasting of food, or hinder prevention of waste, specifically:**

- ✓ Within the household;
- ✓ Outside of the household, influencing behavior within; and
- ✓ Social processes and points of intervention



# Summary of Findings

- **Delayed Disposal:** Freezing and saving leftovers often resulted in food being saved, but not necessarily eaten. Storing leftovers seems to be connected to guilt alleviation through delayed disposal.
- **Good Intentions can go awry with healthy eating and meal planning:**
  - ✓ As people are trying to eat healthier they often buy a lot of produce and healthy things that get wasted fall short of reaching their health goals.
  - ✓ Dedicated meal planners waste things unexpectedly when they say make a trip to the farmers market and find delicious produce, but that produce wasn't in their meal plan
- **Location of Provisioning**
  - ✓ “Get to go” to the Farmers Market
  - ✓ “Have to go” to the Grocery Store

# Summary of Findings

- **Commonly discarded items:**
  - Items “lost in refrigerator” or “forgotten in the back of the fridge”.
  - Partially-consumed beverages left out too long (such as milk, coffee, and soda).
  - Foods purchased in sizes that are larger than desired.
  - Foods purchased for specific meals or recipes.
  - Foods purchased to eat healthier (connected to aspirational relationships).
  - Leftovers (connected to waste aversion and delayed disposal).
  - Items that are wasted at the end of food phases or fads.
  - Food served to children.

# Summary of Findings



Conahan for Oregon Business The Wastrel

## Role of Composting

- ✓ Composting alleviates guilt associated with trashing food, which may result in an increased generation of wasted food.
- ✓ Composting seen as separate from trash, so amount discarded may be “hidden”, resulting in inability to identify opportunities to prevent wasted food.



# Messaging Research

## Knowledge gap

- Limited market research regarding wasting food
- Limited understanding of how to best message prevention and food recycling together

## Research Objectives

- Identify the value-based messages and language most likely to motivate Oregon residents to reduce wasting of food.
- Develop a messaging hierarchy that can be used to inform the development of campaigns and other outreach material.

# Timeline

Task 2 Report available at: <http://www.oregon.gov/deq/mm/food/Pages/Wasted-Food-Study.aspx>

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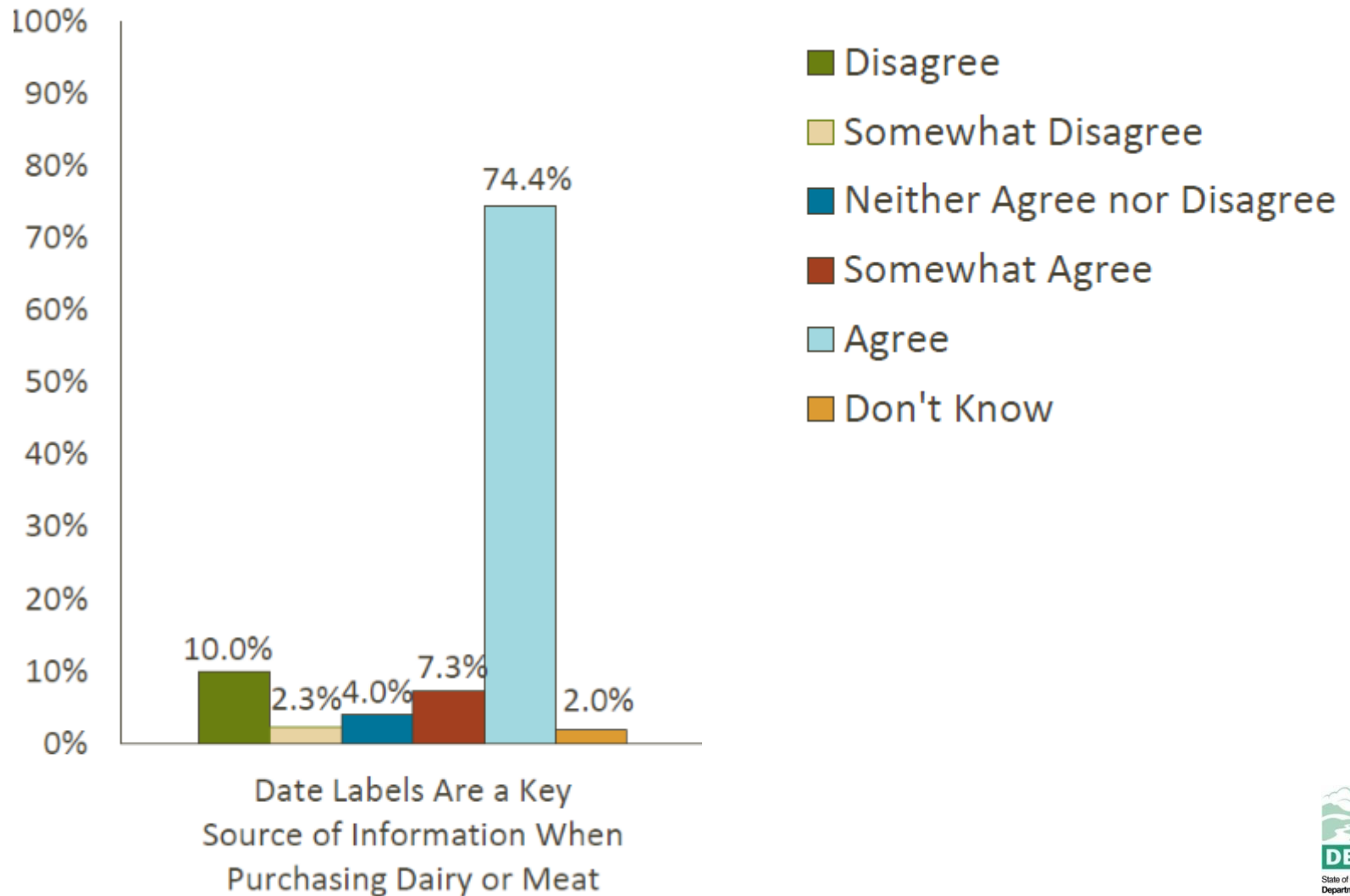
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# Survey Findings – Date Labeling



# Survey Findings - Date Labeling

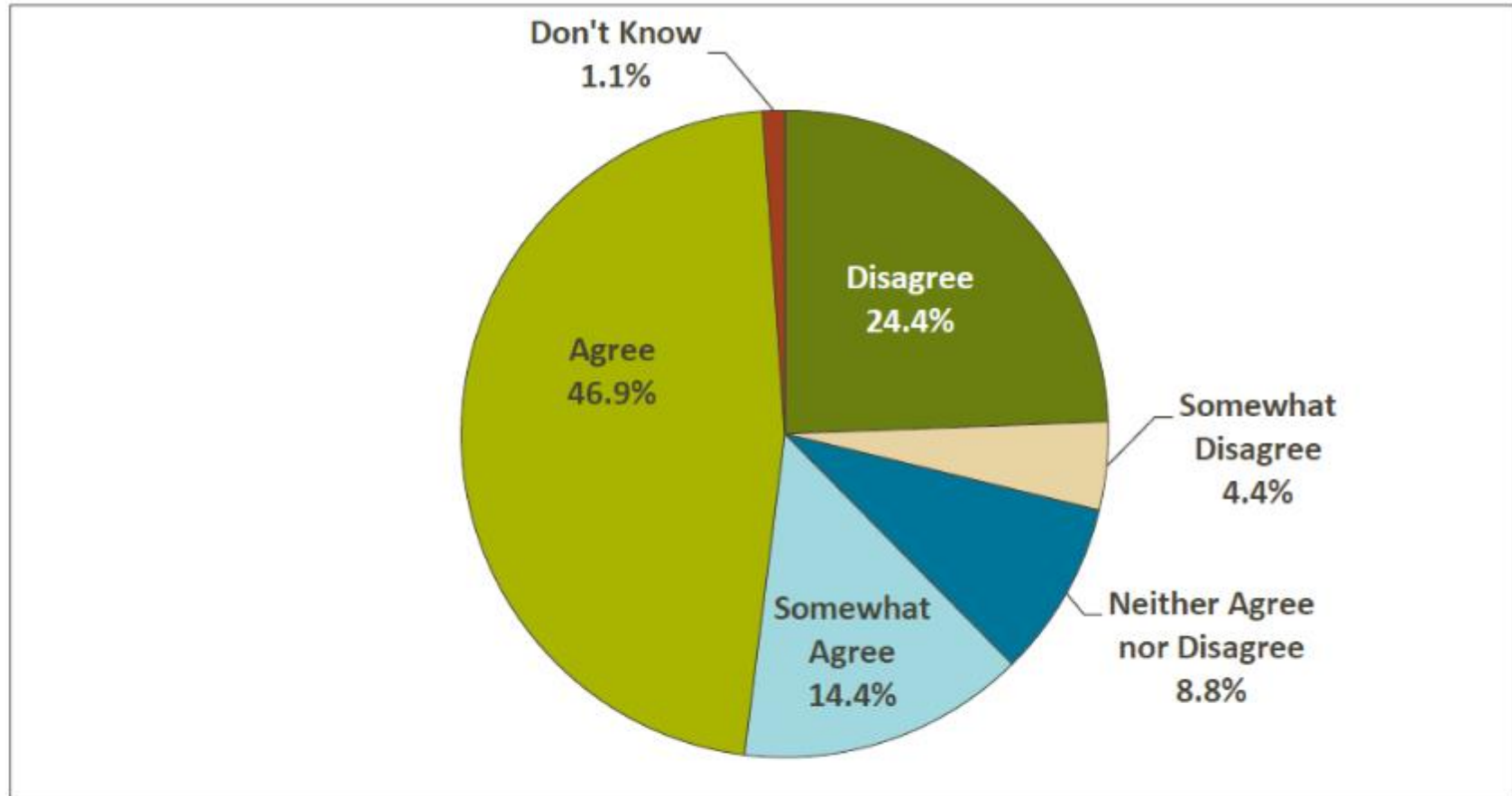
**Table 11: Approach to Foods That Have Passed the “Use by,” “Sell by,” or “Best by” Date has Passed**

<i>[sorted in descending order by Fresh Meat or Fish]</i>	Fresh Meat or Fish	Eggs or Dairy	Fresh Fruits and Vegetables	Canned Foods	Condi-ments
Not Applicable, everything is eaten or frozen before the package date	<b>46.2%</b>	<b>33.6%</b>	<b>28.6%</b>	<b>29.7%</b>	<b>26.7%</b>
Smell or look at it to determine if it's still good	<b>35.5%</b>	<b>41.5%</b>	<b>50.4%</b>	<b>17.0%</b>	<b>25.2%</b>
Throw it away	<b>11.8%</b>	<b>15.4%</b>	<b>11.0%</b>	15.0%	<b>21.7%</b>
Don't pay attention to dates	2.2%	5.9%	4.6%	<b>26.6%</b>	20.7%

Survey Question: Food is often marked with a “use by,” “sell by,” or “best by” date. What do you generally do with the following foods after the date has passed?

N = 486

# Survey Findings – Desire to Eat Healthier

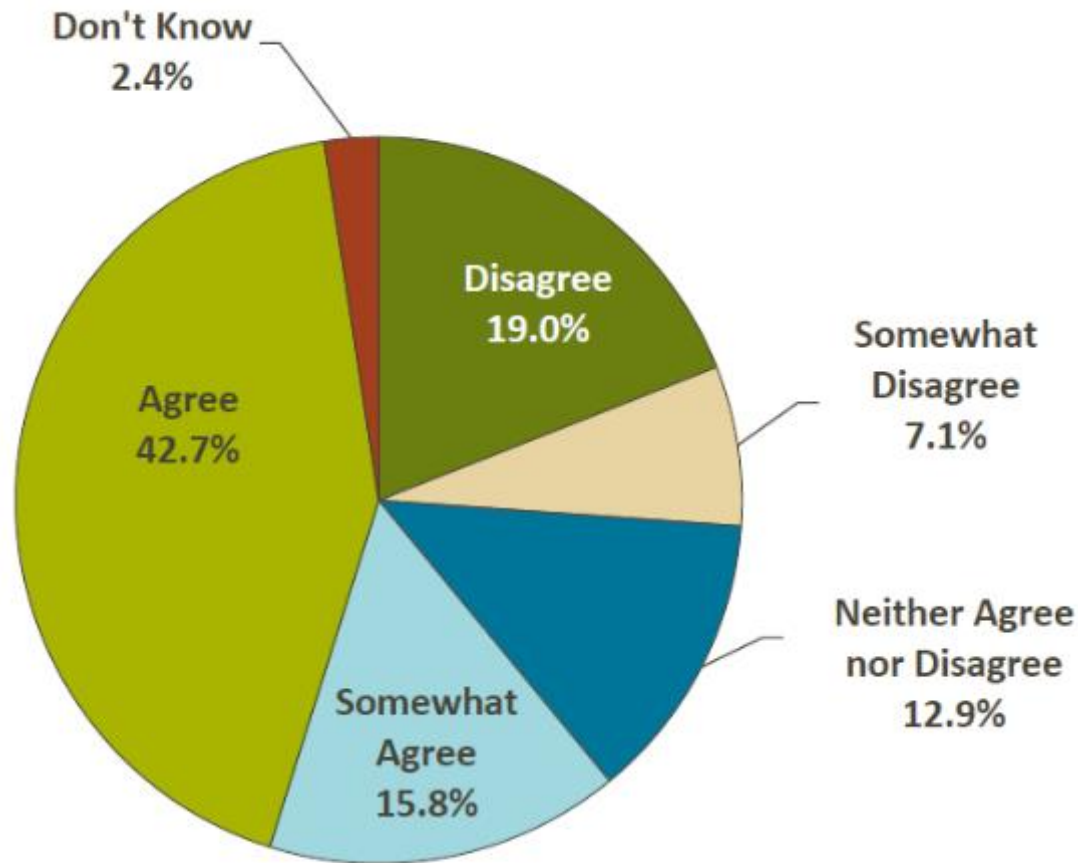


How strongly do you agree or disagree with the following statements?

Q15E: I wish I ate more healthily, for example eating more servings of fresh fruit and vegetables.

N = 486

# Survey Findings: Less Guilt Through Delayed Disposal

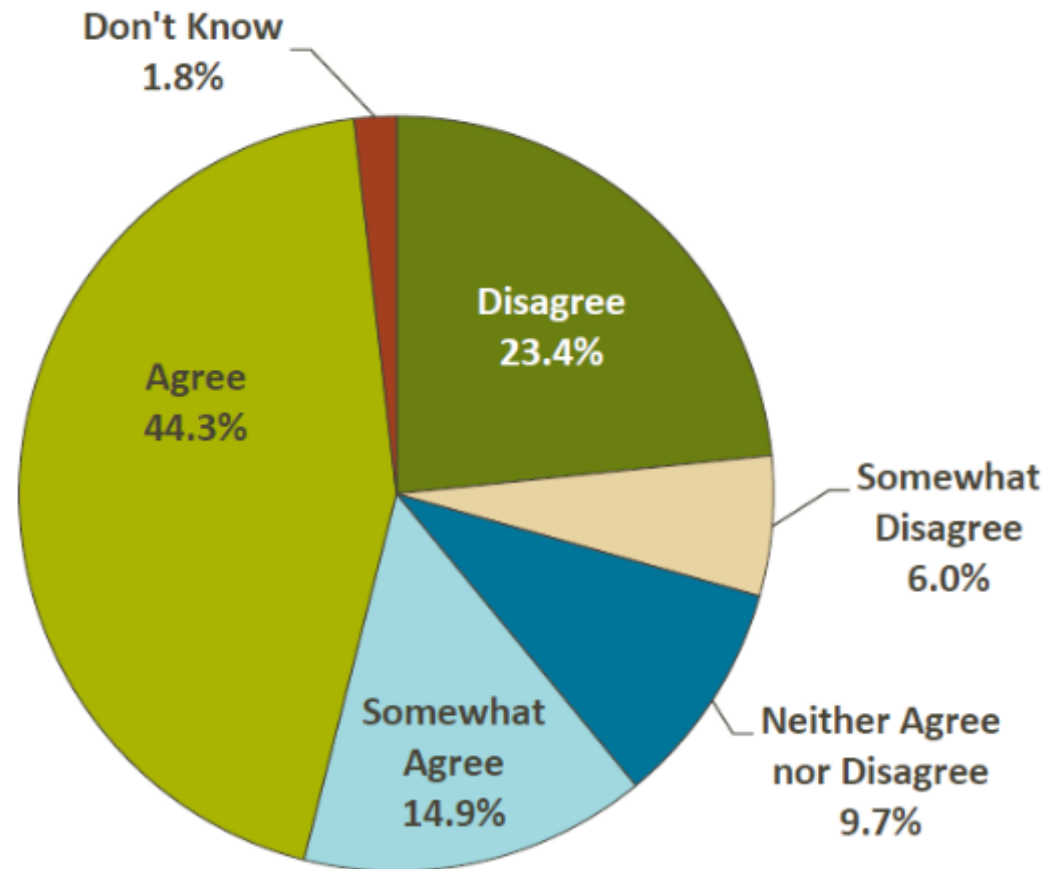


How strongly do you agree or disagree with the following statements?

Q15A: I feel less guilty about throwing out food that has been in the refrigerator for a long time.

N = 486

# Survey Findings: Desire to Reduce Amount of Food Tossed



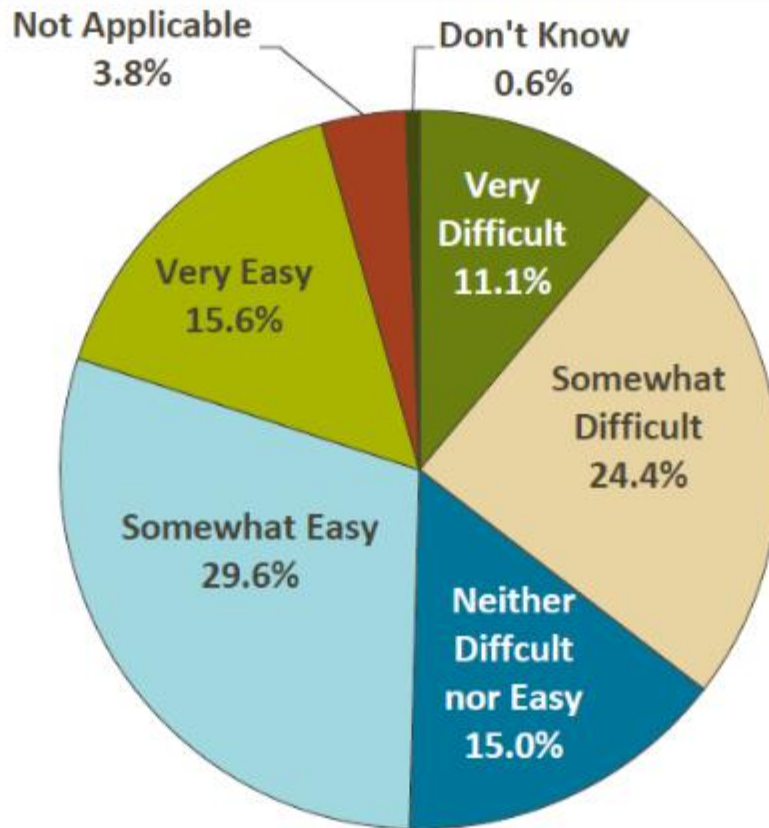
How strongly do you agree or disagree with the following statements?

Q15B: I believe my household should reduce the amount of food we throw away.

N = 486



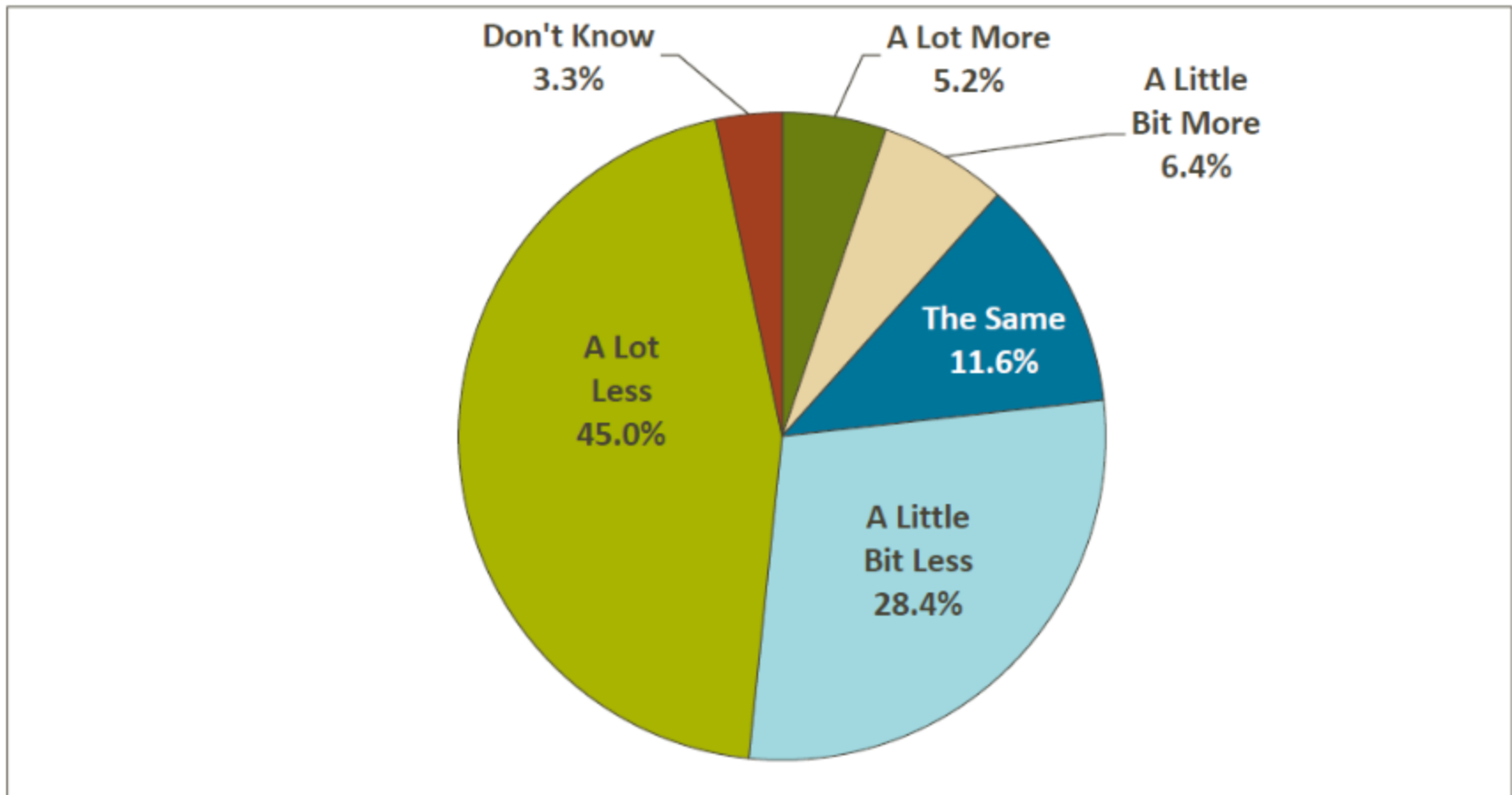
# Survey Findings: Ease of Reducing Food That Goes to Waste



Q14: How easy or difficult do you think it would be for you, personally, to reduce the amount of food that goes to waste in your households?

N = 486

# Survey Findings: Most people think they waste less than average



Q13: Thinking about an average American, do you think the amount of food you throw out or compost is a lot more, a little bit more, the same, a little bit less, or a lot less?

N = 486

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# Household Wasted Food Study

## Research Goals

**Goal 1:** Develop reliable baseline metrics for avoidable wasted food for residential households in the state.

**Goal 2:** Provide state, cities, and counties with methods for establishing household wasted food baseline metrics and assessing shifts in behaviors and levels of awareness.

**Goal 3:** Understand how household characteristics are associated with amounts and types of avoidable wasted food, as well as the reasons food is being wasted.

**Goal 4:** Gain understanding about the role of composting in the generation of wasted food.

**Goal 5:** Explore the relationship between residential wasting of food and 1) behaviors that may contribute to or help avoid wasted food 2) motivations for disposing edible food.

## UK Example using similar methods



Source: UK WRAP (2012)

# Household Wasted Food Study

## Research Approach

- Pre-Survey (similar to statewide survey)
- Pre-Diary waste sort
- Kitchen Diary with Urban and Rural Households (n=225)
- Post-Survey

		Week 1	Week 2	Week 3	Week 4	Week 5
Recruitment						
Initial survey						
Waste sorts						
Diaries						
Follow-up survey						

1) Inedible	Items not intended for human consumption (it is acceptable for a small amount of edible material associated with the inedible material to be included).
2) Meat and fish	Uncooked or cooked meat (with mostly edible components) unmixed with other types of food. Examples include beef, pork, and fish.
3) Dairy	Solid dairy products unmixed with other food types or in original form. Examples include milk, cheese, and butter.
4) Eggs	Extra category for DEQ comparison
5) Vegetables and fruits	Solid uncooked or cooked vegetables and fruits (with mostly edible components) unmixed with other types of food. Examples include apples, lettuce, and fresh herbs.
6) Baked goods	Baked goods and bread-like products unmixed with other food types or in original form, including pastries. Examples include bread, cake, and tortillas.
7) Dry foods	(Grains, Pasta, Legumes, Nuts, Cereals): Cooked or uncooked grains, pastas, legumes, nuts, or cereals unmixed with other food types or in original form. Examples include flour, nuts, lentils, and cereal.
8) Snacks, condiments, other	Includes confections, processed snacks, condiments, and other miscellaneous items. Examples include candy, chips, and sauces.
9) Liquids, Oil, Grease	Items that are liquid, including beverages. Examples include bottled water, liquid coffee, and soda.
10) Cooked, prepared, leftover	Items that have many food types mixed together as part of cooking or preparation. Examples include lasagna, burritos, falafel, stir-fry, sandwiches, and pizza.
11) Unidentifiable	Use only if necessary

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# Commercial and Institutional Case Studies

#	Practice Category	Target*	Description	Examples
1	Service Practices	BOH	Changes in practices related to the serving of food or food options.	Trayless dining, plate size change, plate composition change, menu alterations
2	Portion Size/Production Amounts	BOH, FOH	Attempts to better match customer demand/appetite with offerings	Smaller portion size offerings, prepare smaller batches
3	Back of House Practices	BOH	Improvements in protocols, practices or staff behavior related to the preparation and storage of food	Staff training on waste reduction, staff motivation or incentive programs, improved storage practices or equipment, using BOH edible scraps in other products
4	Waste Awareness Campaigns	BOH	Integrated waste awareness education and behavioral interventions targeted at staff.	Weekly trainings, display/communication of weekly waste metrics
5	Alternative Merchandising, Displays, Promotions	FOH	Changes to sales strategies that minimize opportunities for wasting or maximize sales of food at risk of wasting	Less-stocked product displays, sale of soon-to-expire food or tired produce
6	Pre-production Tools	BOH, FOH	Strategies to minimize overproduction in catering and cafeterias through improved forecasting or dynamic/responsive service practices	Use more pre-prepared or semi-prepared foods, using data to modify ordering or production
7	Measurement/Analytics	BOH	Tracking wasted food and analyzing its effects on operations	Food loss and waste inventories, waste reduction software and analytics

\*FOH: Front-of-house; BOH: Back-of-house

# The True Cost of Food Waste

**Visible  
costs**

**Disposal  
costs**

*On average,  
the true cost  
of wasted  
materials is  
about 10  
times the cost  
of disposal*  
(Hall, PLOS 2009)

**Invisible  
costs**

**Lost  
materials  
Energy cost**

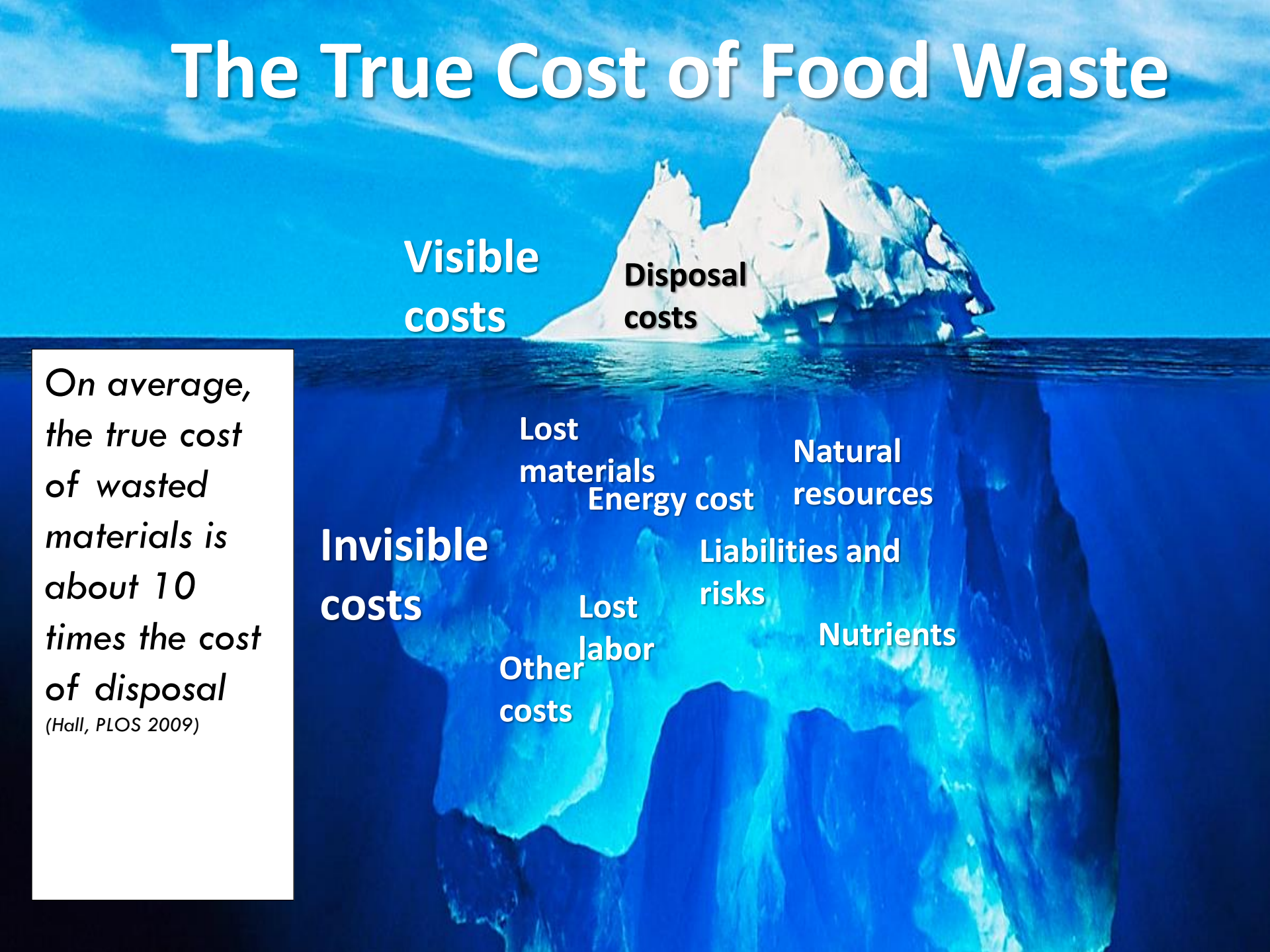
**Natural  
resources**

**Liabilities and  
risks**

**Lost  
labor**

**Nutrients**

**Other  
costs**



# Measurement Study Outcomes

Reduce the generation of wasted food and assess success by developing more robust data to understand:

1. How much edible food is discarded
2. How and why it is wasted
3. What practices can help reduce wasted food

Develop basic methods for other cities, states, and countries to establish their own baselines and assess progress

Develop new business cases for wasted food prevention in government and business



# Where We Want to Be in Five Years

- Households/businesses generate less wasted food
- Measurable progress made
- Research gaps filled, results shared
- Foundation built to support prevention priorities
- Communities of practice built
- Economic, social and environmental trade-offs of different food rescue pathways understood
- Economic, psychological, social, and structural drivers leading to wasted food understood
- Conversation and metrics of success has shifted

# How Can We Get There Together?

## Better Baselines and More Actionable Data

- Sector specific food waste analytics -- root causes of wasted food and types/amounts of avoidable waste.
- Disclosure requirements for food waste data and supply chain transparency
- Date labelling

## Filling Research Gaps

- Analysis of infrastructure development needs based on inedible scraps
- Real and perceived food safety opportunities to mitigate food loss



# How Can We Halve Wasted Food by 2030?



**Food waste**—  
*edible food that  
is thrown away*



**Resilient  
Supply  
Chains**



**Healthy  
Sustainable  
Eating**

Target

Measure

Act



# Thank you

Ashley Zanolli

Oregon DEQ

zanolli.ashley@deq.state.or.us

Christa McDermott (Research Lead)

Portland State University

Community Environmental Services

Christa@pdx.edu





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# ESTIMATING QUANTITIES AND TYPES OF FOOD WASTE AT THE CITY LEVEL

NOVEMBER 2017



<https://www.nrdc.org/resources/food-matters-what-we-waste-and-how-we-can-expand-amount-food-we-rescue>

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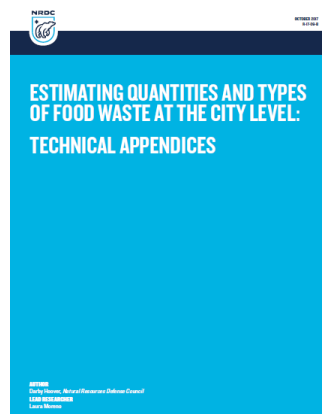
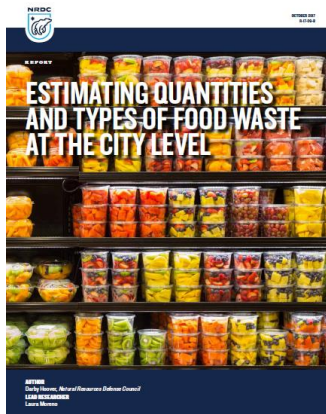
Darby Hoover

dhoover@nrdc.org

# New NRDC Reports

<https://www.nrdc.org/resources/food-matters-what-we-waste-and-how-we-can-expand-amount-food-we-rescue>

## Baseline Food Waste



## Rescue Potential



## Case Studies

OUR WORK > FOOD WASTE > EMPOWER CITIES TO PREVENT, RESCUE, AND RECYCLE  
**Food to the Rescue: San Francisco Composting**

Case Study | October 24, 2017 | Yvonne Maglica & Andrea Specht

From fork to farm and back

Co-authored with Alice Healy, formerly of NRDC



**WASTED:**  
HOW AMERICA IS LOSING UP TO 40 PERCENT OF  
ITS FOOD FROM FARM TO FORK TO LANDFILL

SECOND EDITION OF NRDC'S ORIGINAL 2012 REPORT



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# Baseline Food Waste Assessment

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## Objectives:

- Assess how much food is going to waste in commercial and residential sectors in Denver, Nashville, and NYC, including characteristics of residential food wasted (e.g. reasons for waste, discard destinations, types of food wasted, edibility).
- Contribute to working model for other cities to perform similar assessments and to inspire initiatives to address wasted food.

## Methodology:

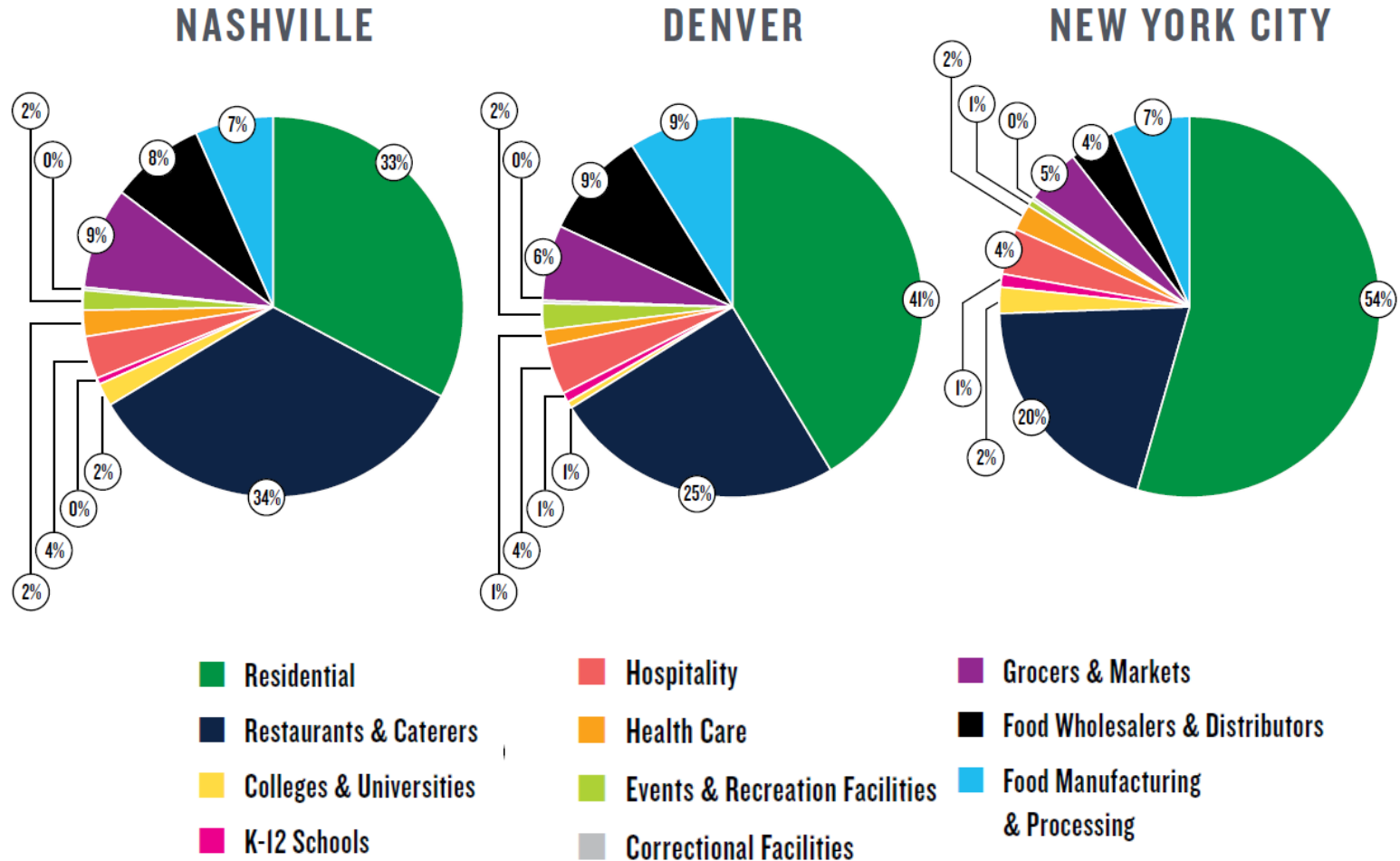
### **Residential (613 households):**

- Kitchen Diaries - How much, what, why, where food was discarded: one week
- Bin Digs - Sampled trash from randomly selected households (277)
- Surveys - One before and one after kitchen diary

### **Industrial, Commercial, Institutional (ICI):**

- Estimates - Formulas for each sector + regional facility data
- Bin Digs - Sampled trash/compost from a variety of sectors (145)

# Estimated Food Waste Generated by Sector

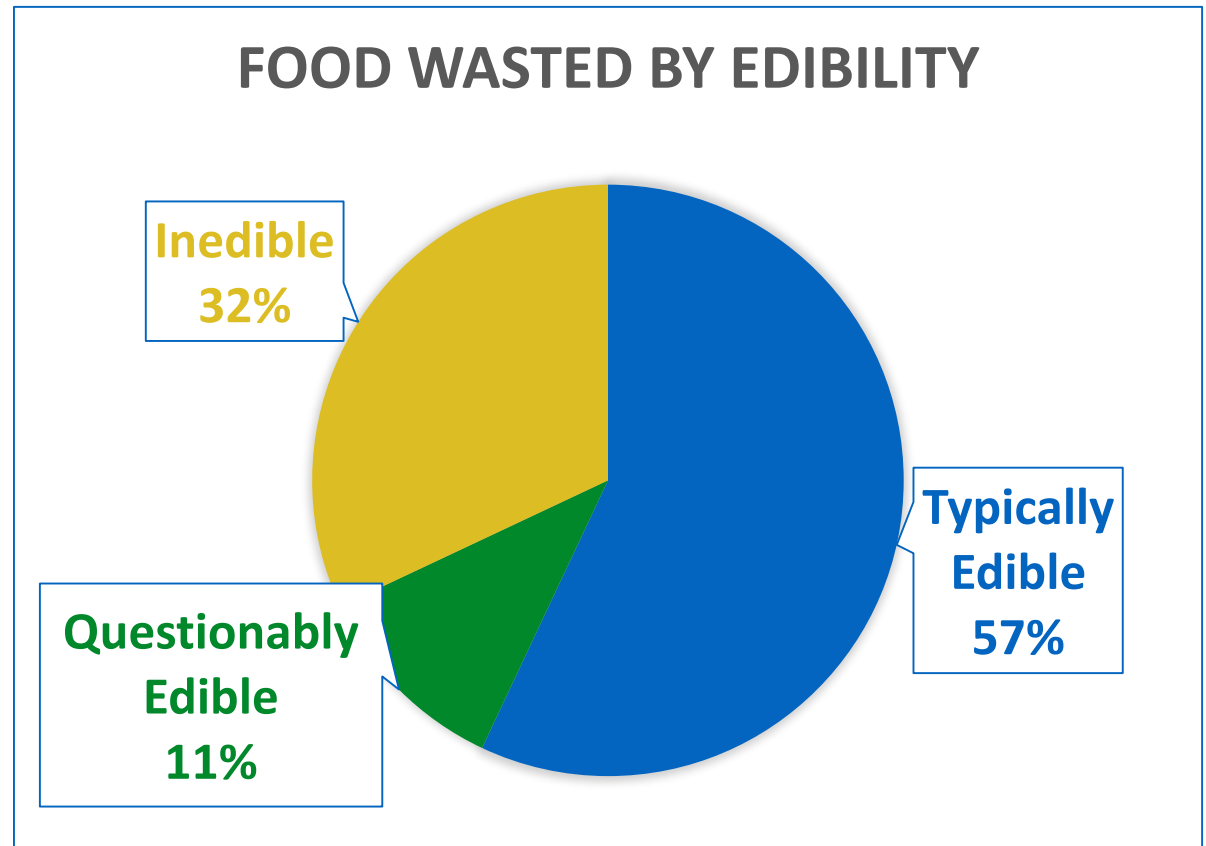


# How Much Food is Wasted (Residential)

**68%** of food discarded was potentially edible

*(includes “questionably edible” items such as beet greens, carrot peels, potato peels, and other items that are technically edible, but may not be eaten based on preference or culture)*

- Average **Total** Food Wasted Per Capita = **3.5 lbs/week**
- Average **Edible** Food Wasted Per Capita = **2.5 lbs/week**



# What Types of Food are Wasted (Residential)

## Most wasted categories:

- Inedible – 31%
- Fruits and vegetables – 27%
- Prepared food/leftovers – 19%

Items included in top 10  
most wasted **total** for  
all cities  
(edible + inedible):

Coffee  
Banana  
Chicken  
Milk  
Apple  
Bread  
Potato

Items included in top 10  
most wasted **edible** for all  
cities  
(typically edible +  
questionably edible):

Coffee  
Milk  
Apple  
Bread  
Potato  
Pasta



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# Why and Where Food is Wasted (Residential)

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## Most common reasons for discarding food:

- Inedible parts – 44%
- Moldy or spoiled – 20%
- Not wanting as leftovers – 11%
- Left out too long – 7%

## Where food is discarded:

- Trash – 53%
- Compost (home, curbside, dropoff) – 31%
- Down the drain – 11%
- Feeding animals (pets) – 2%

- *Average food disposal rate (discarded to trash and down the drain compared to total discarded) = **64%***
- *Average food diversion rate (discarded to compost and feeding animals compared to total discarded) = **33%***



# Residential Surveys: Demographics plus Behavior, Motivation, Attitude, & Knowledge Questions

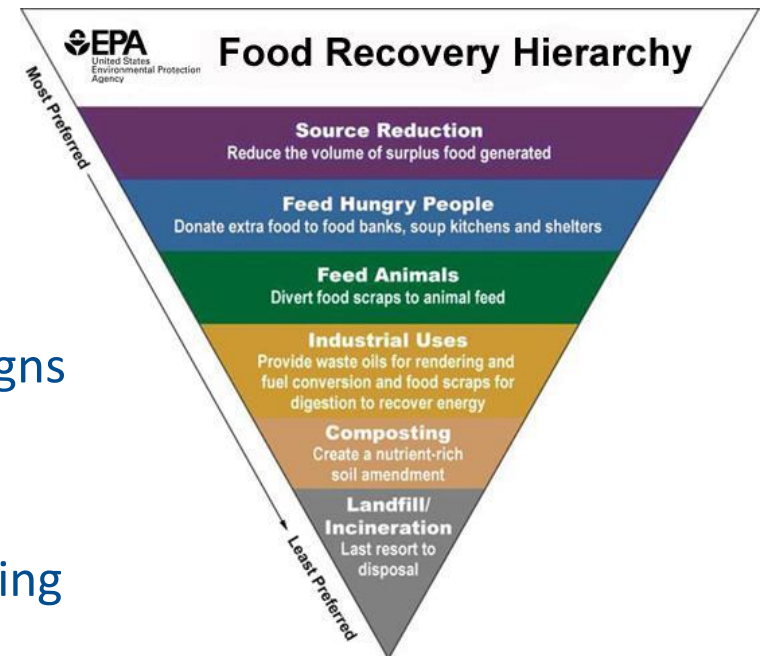
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- **76%** think they waste less edible food than the average American
- **58%** feel less guilty about wasting food if it is composted
- **70%** believe they could reduce food wasted in their home only a little or not at all through changes in behavior
- Several believe household food waste is not as great a contribution to overall food waste as waste in retail and other sectors
- Wasting food occurs across all demographics
  - Smaller households waste more food
  - Income, education, ethnicity, amount spent on food, etc. mostly do not relate to amount of food wasted



# Recommendations from Findings (for cities)

- Conduct city-wide baseline food waste and food rescue assessments
- Match ICI sector baseline food waste data with city goals to direct efforts most effectively to reduce waste and leverage city resources
- Outreach to residents on the scale of the problem of wasting food and contribution of consumers, as well as on how to waste less food (including tips on shopping, storing, cooking, and composting)
- Data on most commonly wasted foods can guide consumer campaigns
- Focus public education wasted food campaigns on saving money and/or environment
- Composting programs should incorporate messaging about the importance of preventing wasted food



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## Recommendations from Residential Participants

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*Responses to “What do you think [city] can do to help residents waste less food?”*

- Composting, e.g. make cheaper or free, available city-wide, offer deals on compost bins, provide neighborhood sites (172)
- Provide education on issues of food waste, e.g. through a Mayor’s challenge, schools, neighborhood groups, billboards (162)
- Provide tips for reducing food waste (43)
- Make it possible to buy food in smaller portions in stores and restaurants, especially for small households (30)
- Do more studies and surveys on food waste (20)
- Focus on restaurants and grocers to reduce food waste (14)
- Don’t really know how a city can help since it is more of an individual issue (9)

*“They could start an ad campaign with slogans like: ‘Save your cash, don’t throw food in the trash!’, ‘Food didn’t come to Nashville for a bachelorette party, don’t let it get wasted!’, or ‘Truth be told, that bread is old, but it still is viable if you scrape off the mold!’”*

# OREGON FOOD STUDY

Christa McDermott, Ph.D.  
Director, Community Environmental Services  
Portland State University



# Oregon Food Study design

- Statewide study of wasted food in households (residential)
- 5 clusters: 3 urban, 2 rural
- Goal: 225 households
- Pre-diary survey
- Waste sort (trash and curbside compost)
- 7 day diary, over 2 week period
- Post-diary survey

# Building on NRDC cities study

- Points of overlap
  - *Basic design*
  - *Survey questions*
- Some key differences – the diary:
  - *Online diary - is it easier or harder? For whom?*
  - *Tracking food disposed outside of the home*
  - *Participants can upload photos of their food*
  - *Additional loss reasons/context*

# Building on NRDC cities study

- Some key differences – sample:
  - *Age of children in household – differences in households with young children, older children, and teens*
  - *Curbside compost access*
    - 2 clusters with curbside compost service
    - 2 with limited or new compost service
    - 1 no compost service
  - *2 rural clusters in study sample (goal of 116 rural participants)*



# Questions?

Christa McDermott, Ph.D.  
Community Environmental Services  
Portland State University  
[christa@pdx.edu](mailto:christa@pdx.edu)