STATE & LOCAL GOVERNMENT ACTION TO ADDRESS WASTE OF FOOD

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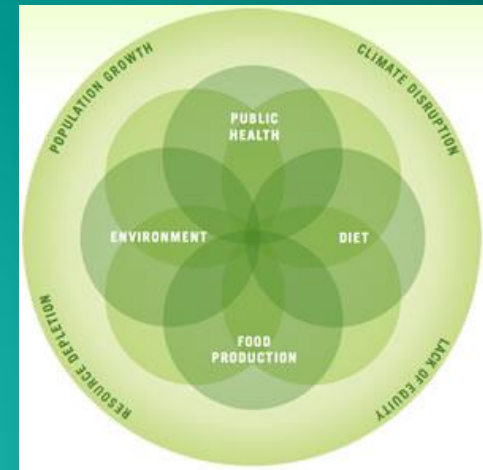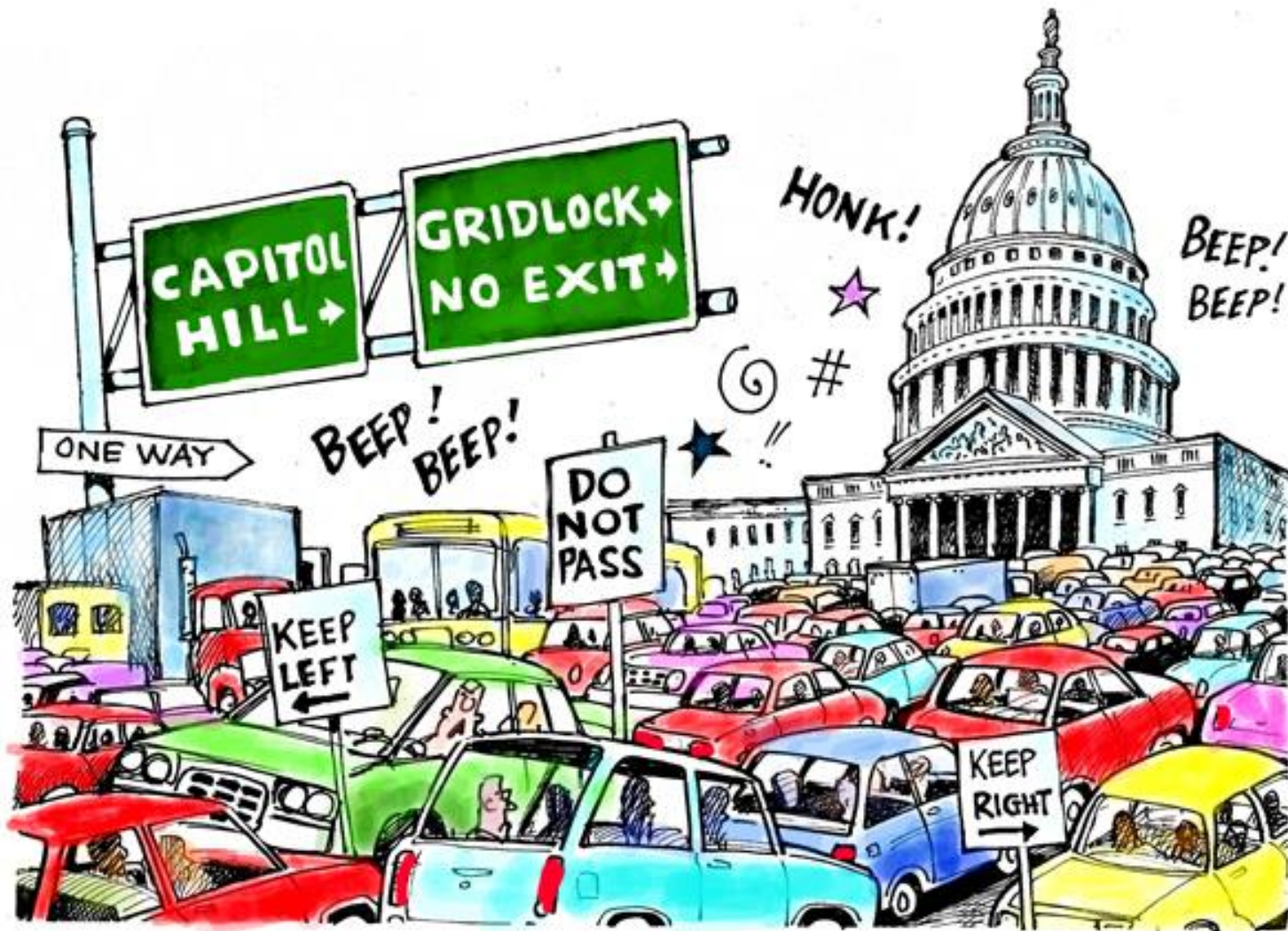*Johns Hopkins Bloomberg School of Public Health*

September 15, 2017

Johns Hopkins Center for a Livable Future
www.jhsph.edu/clf

- Food systems & public health
- Research, policy/practice, communications
- Food systems & public health certificate, concentration, doctoral fellowship
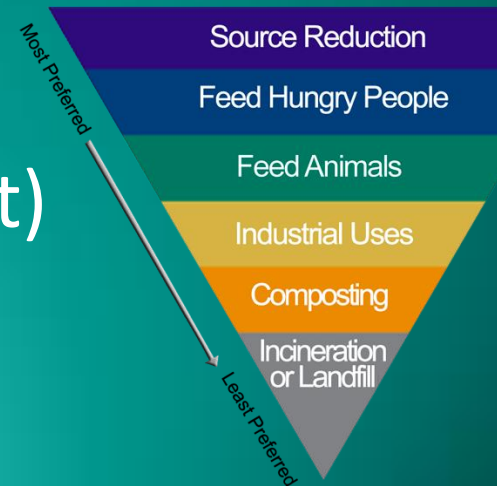- Wasted food = major focus

Why State/Local?

Why State/Local?

- Easier to get action
- Much innovation, ferment, excitement
- Stakeholder engagement; new stakeholders/ partners
- Most appropriate level for some policy work

Today's focus
- Government planning (our report)
- Legislation (Harvard)

Most Preferred

Source Reduction

Feed Hungry People

Feed Animals

Industrial Uses

Composting

Incineration or Landfill

Least Preferred

Setting Targets

U.S., E.U., U.N. GOAL:
Halve waste of food by 2030

How do we get there?

????

What Do You Get From Planning?

- Framework of shared goals – unites
- Set priorities, influence resource allocation
  - Public, philanthropic
- Shape and inform public policy, program development
- Planning contributes to community collaborations
- Markers of success
- Sometimes legally binding

Governmental Plans

- Objective: Advance future planning efforts by sharing what's been done
- Planning documents, published by governments, with actionable strategies/policies: 93
  - 36 municipalities
  - 18 counties
  - 19 states
  - 19 countries (Western Europe, East Asia, and North America)
- Systematically compared
- Interviewed 17 state/local government staff

GOVERNMENTAL PLANS TO ADDRESS WASTE OF FOOD

Irena Gorski
Sameer Siddiqi
Roni Neff

2017

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of PUBLIC HEALTH

Environmental Health & Engineering

https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-a-livable-future/news-room/News-Releases/2017/government-efforts-to-reduce-wasted-food-gaining-traction.html
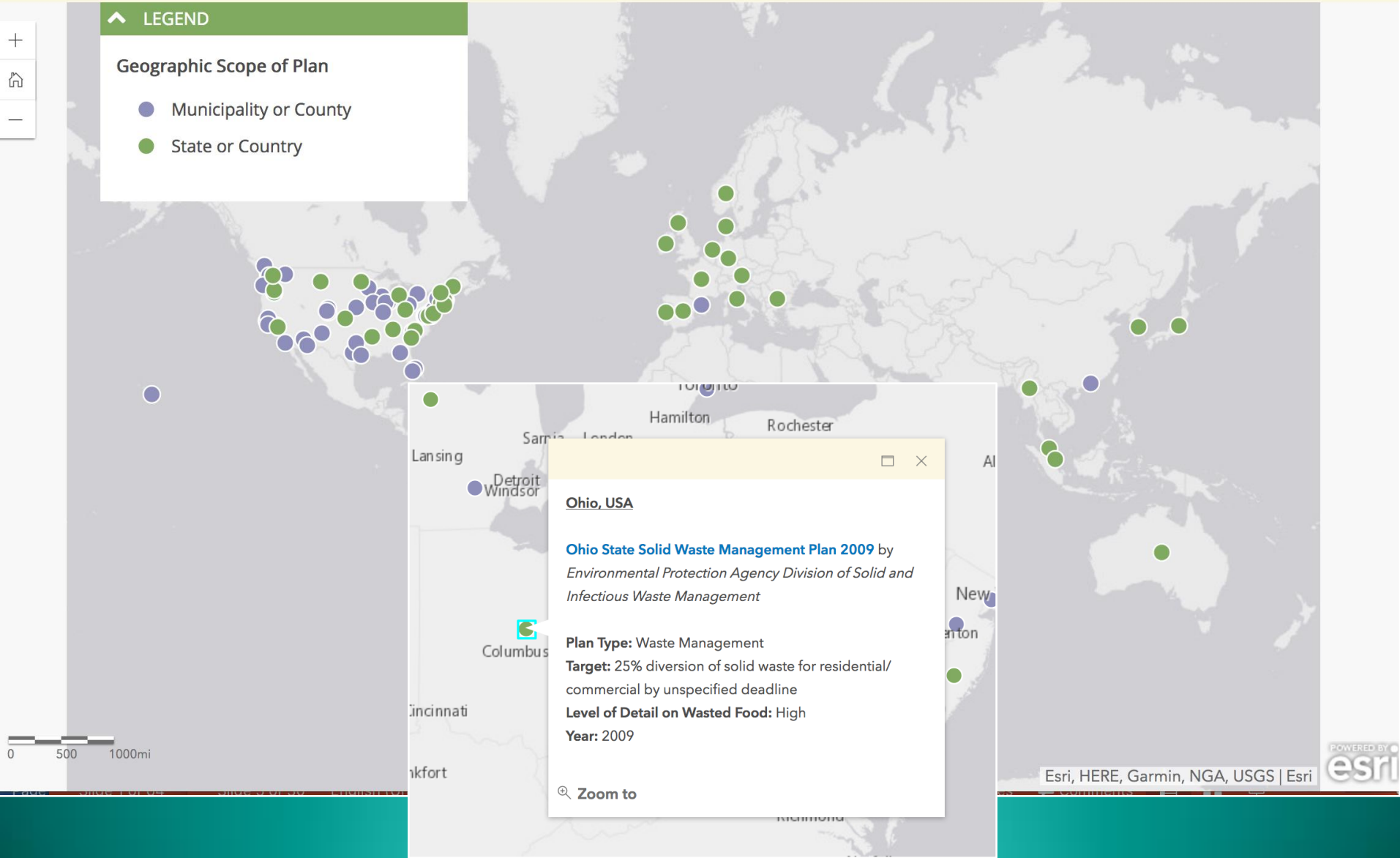
Governmental Plans to Address Waste of Food

The plans include strategies for prevention, recovery, and recycling. Updated 9/6/2017

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▲ LEGEND

Geographic Scope of Plan

- Municipality or County
- State or Country

Ohio, USA

Ohio State Solid Waste Management Plan 2009 by *Environmental Protection Agency Division of Solid and Infectious Waste Management*

Plan Type: Waste Management
Target: 25% diversion of solid waste for residential/ commercial by unspecified deadline
Level of Detail on Wasted Food: High
Year: 2009

🔍 **Zoom to**

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Esri, HERE, Garmin, NGA, USGS | Esri

POWERED BY esri

Example Plan

LOCAL FOOD ACTION PLAN
CITY OF COLUMBUS & FRANKLIN COUNTY, OHIO

GOAL D: Prevent food-related waste.

These actions will bolster existing food waste prevention efforts, while supporting new and impactful strategies that decrease the amount of food-related waste going to local landfills.

ACTIONS

D-1	Prevention education for multiple groups	...ments, Pre-K-12 schools
D-2	Help residents increase backyard composting	...nts who access
D-3	Policies, zoning, health codes to support recovery & diversion	
D-4	Training/incentives for businesses	...d businesses to develop, adopt and
D-5	Build support for recovery infrastructure	...ge-scale food waste

D-1: GETTING STARTED

CURRENT STATUS

In process but will require addition of new elements

WHO

Columbus 2020, Columbus Department of Public Service, Columbus Department of Development's Green Business & Urban Agriculture Strategic Plan, Columbus GreenSpot, Mid-Ohio Foodbank, Minority and Neighborhood Health Advisory Committees, Franklin County Economic Development and Planning, Neighborhood Associations, Ohio Grocers Association, Ohio Restaurant Association, Ohio State Food Waste Collaborative, Schools and Districts serving Columbus and Franklin County, Solid Waste Authority of Central Ohio, and USEPA's Food Recovery Challenge

OBJECTIVES

1. Widespread, accessible and relevant food waste prevention education campaigns tailored to each food system sector and linked with community and neighborhood efforts (See action D-2.)
2. Consumers, local governments, local food businesses and pre-K-12 schools are actively promoting food waste prevention education campaigns

STARTING STEPS

- Identify existing food waste prevention educational resources and programs
- Assess gaps, needs and opportunities for further community education
- Engage consumers and local food businesses to implement a locally relevant large-scale food waste prevention education campaign
- Incorporate household food waste prevention tips into the Columbus GreenSpot website
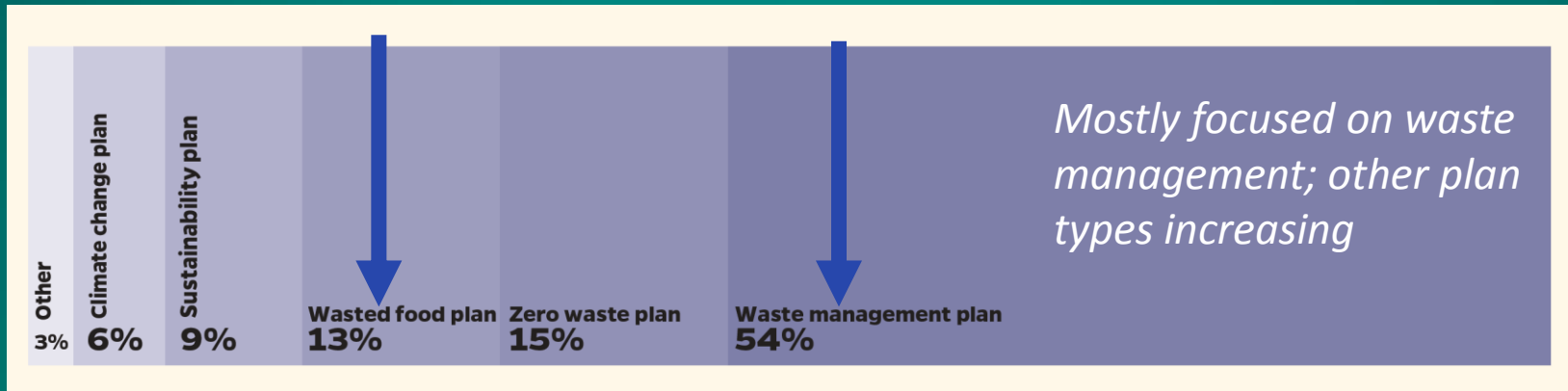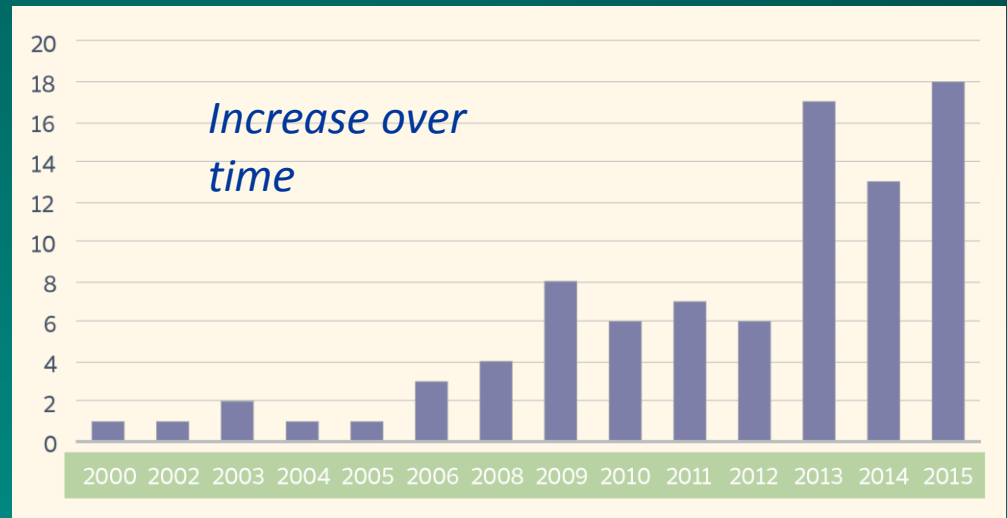
POTENTIAL MEASURES

- Implementation of a locally relevant, community-wide food waste prevention education campaign
- Volume of food waste entering the Franklin County Sanitary Landfill
- Number of local food system stakeholders involved in food waste prevention education
- Number of GreenSpot members reached with food waste prevention communications

RESOURCES

Existing resources leveraged in new ways
- The Ohio Environmental Protection Agency, The Ohio State University and the Solid Waste Authority of Central Ohio facilitate community collaborations, lead education campaigns and provide a variety of educational resources. Public agencies can leverage this ongoing work and engage local food businesses and food system stakeholders in planning and disseminating food waste prevention education.

Findings

Increase over time

Mostly focused on waste management; other plan types increasing

Other 3% | Climate change plan 6% | Sustainability plan 9% | Wasted food plan 13% | Zero waste plan 15% | Waste management plan 54%

Level of Focus on Wasted Food
- 31% "high"
- 54% "moderate"
- 15% "minimal"

Types of Activities

Activity Type	# Actions
Composting and Digestion	258
Education, Training, and Jobs	147
Research and Surveillance	90
Donation and Uses for Surplus	28
Operational and supply chain	14
Packaging	5

- Many strategies underutilized
  - Source reduction, donation logistics, landfill bans/fees, compost infrastructure

Targets

Target (Cut waste by…)	% Plans
No target	38%
0 - 25%	12%
26 - 50%	19%
51 - 75%	17%
76 - 99%	3%
100%	11%

About ¼ had goal specific to food or organic waste
Average time to goal year: 8.5 years
Range: 1-20 years
Some had no timeframe

Data & Evaluation

- 87% had baseline data
    - Few had info on types, quantities, sources of wasted food
    - Few had economic (41%), environmental (26%), health (3%) impact data
- 33% had evaluation component, few robustly described

40% of food produced in the U.S. is wasted.

How much of our RDA* of nutrients does the country throw away every day?

Waste-O-Matic

Dietary Fiber 19%

Vitamin C 43%

Iron 48%

Calcium 29%

Potassium 18%

Spiker, Hiza, Siddiqi, & Neff. 2017. Wasted Food, Wasted Nutrients: Nutrient Loss from Wasted Food in the United States & Comparison to Gaps in Dietary Intake. *JAND.*
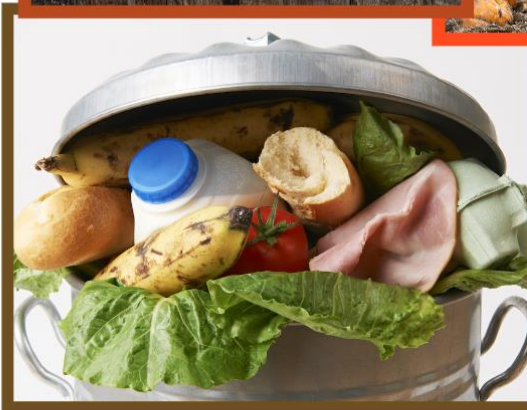
Interviews: Key Facilitators of Plan Success

- Demonstrating potential
  - Pilot projects, evidence, examples from elsewhere
  - Share with relevant stakeholders
  - Quantify feedstock to reduce competition
- Partnerships
  - Form strategic partnerships: communities, waste generators
  - Collaborate across hierarchy
  - Multiple government departments
- Goal-setting
  - Establish evidence-based, measurable, aggressive, realistic goals; evaluate (partner w students)
  - Link to existing goals, plans
  - Define implementation plan, set milestones

http://www.chlpi.org/wp-content/uploads/2013/12/Food-Wa Toolkit_Oct-2016_smaller.pdf

Prevention Policies

- Education
- Date labeling
  - *41 states + DC require for some foods*
  - *20 states + DC prohibit/restrict sale/donation past date*
  - Standardize labels to match, education
- School food
  - Offer vs serve; audits
- $ for programs

Food Recovery Policy

- Liability protection for donors (all states)
  - Sales (discounted), past date
- Tax incentives for donation (9 states+DC)
  - Other types of support – recognition programs; $ for staff, transportation, processing
- Food safety
  - Regulations more donation friendly, clarification to donors, inspectors

- $

Food Recycling Policy

- Organic waste bans or waste recycling laws for food
  - *5 states, several localities; much variation*
  - Prohibit "waste generating entities" from sending to landfills

- Composting/Anaerobic Digestion
  - Incentives to establish
  - Schools, other institutions

State Policies: Ohio Example

- Date labels (2013)
  - Perishables, shellfish
  - No restrictions on donation past date
- Liability protection for food donors
- Tax incentives: NA
- Animal feed (2015)
  - No feeding untreated animal material, need licensed facility to heat treat
- Organic waste bans / waste recycling laws: NA

Strong and Weak Prevention

"Weak" prevention

- Focus on increasing efficiency, reducing unnecessary discards

- Sample interventions:
  - Date labeling
  - Food recovery

"Strong" prevention

- Holistic food system change to address surpluses

Question appropriate levels & patterns of consumption, power relationships, scale of food chains

- Sample interventions:
  - Ugly produce (promote secondary markets; tax incentives);
  - Education to shift behavior patterns

How to encourage?

Mourad M. 2016. Recycling, recovering and preventing "food waste": competing solutions for food systems sustainability in the United States and France. Journal of Cleaner Production. 126: 461-467.

Summary

- State and local level policy is a hotbed of energy, innovation
- Many opportunities for action
- Impact can be great
- Benefit of moving up food recovery hierarchy & toward "strong" prevention
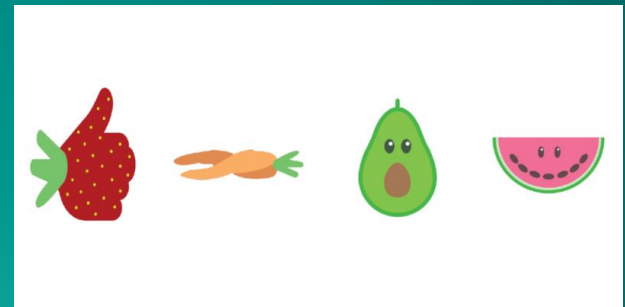- Need evaluation

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