AGENDA

INTRODUCTIONS

PRESENTATIONS

- FOOD WASTE RECOVERY TECHNOLOGY LIGHTNING ROUND
- CULTIVATE CULINARY
- HAMILTON CO. OHIO RECYCLING & SOLID WASTE DISTRICT
- IFSI UPDATE

FEEDBACK WALK & BREAK

STRATEGY GROUP TIME

NETWORKING
THANK YOU 2019 IFSI SPONSORS
HOW MUCH?

33% (Globally) 40% (US) food wasted (EPA, NRDC)

- From cultivation, harvest, transport, prep, table, to trash

22% MSW in US

- What are the largest sources?
SOURCES OF FOOD WASTE

FOOD WASTED BY WEIGHT - 63 MILLION TONS

Waste occurs throughout the supply chain, with nearly 85% occurring downstream at consumer-facing businesses and homes.
WHY FOOD WASTE MATTERS

- EQUITY
  - 1 in 7 Hoosiers struggles with hunger (Indiana Emergency Food Resource Network)
WHY FOOD WASTE MATTERS

ECONOMY

○ $218B loss in US (ReFED)
○ $1,800/yr. per household

10K tons materials creates jobs (ILSR, 1997; EPA, 2016)

○ 1 LF / WTE
○ 4 Comp
○ 15.7 Rec
○ 75-250 Reused

“An estimated 52 million tons of food is discarded in the U.S. each year = $218 billion in food waste.”
-ReFED.com

FOR THE AVERAGE U.S. HOUSEHOLD OF FOUR, FOOD WASTE TRANSPIRATES INTO AN ESTIMATED $1,350 TO $2,275 IN ANNUAL LOSSES.
WHY FOOD WASTE MATTERS

ENVIRONMENT

○ 22% of LF - substantial methane emissions

○ Number (?) way to reverse climate change (Drawdown, Paul Hawken)

Agriculture is resource intensive - water, fertilizer, land

○ How long does it take to create 1 in topsoil?

FOOD WASTE CONSUMES:

💧 21% of all fresh water

🔥 19% of all fertilizer

🌳 18% of cropland

🗑️ 21% of landfill volume
WORKING TOGETHER TO ELIMINATE FOOD WASTE IN INDIANA
STRATEGY GROUPS

Based on food waste mgt. hierarchy, interest, expertise.

Meet monthly & leave with action items

Completed 150 action items since Jan 2019
Source Reduction

What is source reduction?

The modification of back of house practices or processes within the supply chain to reduce food waste prior to consumption, such as waste audits, ordering habits, prep practices, proper storage techniques, etc.
Source Reduction

Goal
Collect data to determine the current state of food waste reduction efforts in Indiana and distribute resources to help commercial food establishments improve their food waste reduction practices.

Target audience
Food service establishments
Source Reduction

Who are we?

Julia Spangler - Sustainable Events Consultant
Emily Jackson - Indiana Recycling Coalition
Julie Schilf - U.S. EPA Region 5
Morgan Bennett - Hamilton County Health Department
Alex Spicer - Ivy Tech Culinary College
Cole Shearer - Landfed food waste nonprofit
Rebecca Koetz - Purdue Extension
Deanna Garner - IDEM
Source Reduction

Indicators of success

- Number of food service establishments using a food waste tracking system
- Number of food service establishments reached by / engaged with IFSI
Source Reduction

Notable actions completed

- Survey to food service establishments:
  - Do you use a food waste tracking system?
  - If yes, what kind?
- Created web page of food waste reduction resources
Source Reduction

Survey results

● Sent to ~250 food service establishments of an estimated ~36,000 in Indiana
● 33 responses
● 19 respondents use a food waste tracking system (57.6%)

Do you use a system to track your establishment’s food waste?
33 responses
Source Reduction

Survey results

- **Most common types of systems:**
  - Your own in-house system (spreadsheets, paper tracking, or other records) - 15
  - Proprietary system provided by parent company (ex: Sodexo WasteWatch) - 4

- **Indicators of success:**
  - 19 establishments using a food waste tracking system (0.05%)
  - ~250 establishments reached by IFSI
  - 33 establishments engaged with IFSI; 28 wish to remain engaged via email
Source Reduction

Resources on website

- Information about various food waste tracking systems
- Cost-saving tips & case studies
- Links to EPA food waste reduction resources
- Information about green certifications for food service establishments
- Contact information for local food waste reduction experts

Website reach

- Google analytics installed June 5
Food Rescue

What is food rescue?

“Food rescue is the practice of collecting edible food that would have otherwise gone to waste from restaurants, grocers and other food establishments and distributing it to local hunger relief agencies” (Food Rescue US)
Food Rescue

Goal

Improve social equity in Indiana through local food recovery

Work with hunger relief organizations to improve efficiencies in the food rescue process, with the goal of redirecting edible food from landfills to feed hungry Hoosiers

Target audience/scope

Food rescue organizations & the Hoosiers they serve
Food Rescue

Who are we?

Emily Jackson - Indiana Recycling Coalition
Nora Spitznogle - Second Helpings
Dawn Barnes and Anne Radtke - Society of St. Andrew
Stacey Risk - Gleaners Food Bank of Indiana
Jodi Leamon - Allen County Department of Environmental Management
Alex Sindorf & Kate Howe - Indy Hunger Network
Heather Conner - Dedicated individual
Rebecca Koetz - Purdue Extension, The Nature of Teaching
Food Rescue

Indicators of success

- Local receipts of food received at food banks (in lbs. or qty.)
- Tax write-offs for food donations

Notable actions completed

- Needs assessment of local food rescue orgs
- Food Rescue Resources webpage
Food Rescue

Data Highlights: Needs assessment of food rescue orgs

**infrastructure:** physical space, cold storage, refrigerated trucks are common bottlenecks for IN’s hunger relief organizations

**communication:** efficient communication btwn food banks, the smaller pantries they redistribute to, & truckers w. time sensitive loads of food

**education:** increased awareness among food donors on what can be safely donated & liability protection

**composting:** many food banks end up with food that cannot be distributed prior to spoilage & seek affordable systems to compost their food waste
Food Rescue

Webpage

Define food waste, food rescue, gleaning, food bank vs. food pantry, food insecurity

Map of food donation locations:
IFSI map; Indiana emergency food resource network; food drop

Donation information:
Good Samaritan Act; what can be donated; tax benefits

Credible food rescue resources:
Meal Connect; USDA; ReFED; K12 Food Rescue; Indy Food Drop; Food Rescue US
Food Rescue

Webpage Cont’d

School food rescue resources

Food rescue technology/donation matching software

Indiana food rescue organizations

Food rescue team contact info
Food Waste Composting

What is food waste composting?

**BENEFITS OF FOOD WASTE COMPOSTING**

- Reduces methane emissions, a greenhouse gas, that results from organics decomposing in landfills
- Restores soil health by:
  - enriching with nutrients
  - assisting in moisture retention
  - suppressing pests and plant disease
- Reduces need for costly chemical fertilizers - reducing the pollution burden on our waterways
- Encourages the growth of beneficial microorganisms that break down organic matter to create nutrient-rich humus

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Our largest waste stream is the least recycled waste stream.

**Total MSW Discards (after recycling)**

- Food waste: 21.1%
- Paper & paperboard: 14.8%
- Plastic: 17.0%
- Wood: 8.7%
- Glass: 5.1%
- Rubber, leather & textiles: 11.2%
- Metal: 4.9%
- Yard trimmings: 12.0%
- Other: 4.7%

**Total MSW Recovery (by material)**

- Food waste: 2.0%

Food Waste Composting

Goal

The Food Waste Composting Strategy Group is energized by the many benefits of & opportunities for organics recycling in Indiana and is dedicated to increasing the rate of food waste composting in Indiana.

Target Audience

Large food waste generators - offers biggest opportunity

(CFBs = 40%; HH = 43% - but HHs harder to reach)
Food Waste Composting

Who are we?

- Thomas Kreke, Tom Leas, Amy McClure, Nathan Schoaf - IDEM
- Jim Poyser - Earth Charter IN
- Suzi Denton - Ray’s Trash & Recycling
- Jessica Davis - IUPUI
- Kelvin Okamoto - Green Bottom Line
- Heather Maybury - Earth Mama Composting
- Gary Roe - EcoPartners
- Emily Jackson - IRC
- Hannah Jones - Purdue
- Sammie Choudhary - Carmel High School

*This is a living list as our group continues to grow!
Food Waste Composting

Indicators of Success

Commercial Food Waste Composting

- Increase in food waste as % of material composted at permitted compost sites in Indiana
- Increase in # permitted compost sites accepting food waste

Residential Food Waste Composting (baseline data to be collected in 2019)

- Increase in # of curbside collection subscriptions
- Increase in # of communities with access to curbside composting
# Food Waste Composting

## Data Highlights - Compost Composition

<table>
<thead>
<tr>
<th>State of Food Waste Composting in Indiana</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total MSW (total discards) (IDEM Rec. Activity Reports)</td>
<td>6919548</td>
<td>7630293</td>
<td>8218862</td>
<td>8218862</td>
</tr>
<tr>
<td>LF/WTE</td>
<td>6108309</td>
<td>6357848</td>
<td>6839243</td>
<td>6839243</td>
</tr>
<tr>
<td>Composted (all organics)</td>
<td>343921</td>
<td>340217</td>
<td>412446</td>
<td>448972</td>
</tr>
<tr>
<td>% MSW Composted</td>
<td>5%</td>
<td>4%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Food Waste Composted (Annual Comp. Facility Reports)</td>
<td>851</td>
<td>2348</td>
<td>4616</td>
<td>7149</td>
</tr>
<tr>
<td>% Compost that's Food Waste</td>
<td>0.25%</td>
<td>0.69%</td>
<td>1.12%</td>
<td>1.59%</td>
</tr>
<tr>
<td>Total Estimated Food Waste (LF/WTE * 22%) (EPA, REFED)</td>
<td>1522301</td>
<td>1678664</td>
<td>1808150</td>
<td>1808150</td>
</tr>
<tr>
<td>Food Generation &amp; Consumption (Estimated Food Waste/40%)</td>
<td>3805751</td>
<td>4196661</td>
<td>4520374</td>
<td>4520374</td>
</tr>
<tr>
<td>Estimated Food Waste Composting Rate (FWC/Generation) (IFSI)</td>
<td><strong>0.022%</strong></td>
<td><strong>0.056%</strong></td>
<td><strong>0.102%</strong></td>
<td><strong>0.158%</strong></td>
</tr>
</tbody>
</table>

*data in tons, statewide, annual*
Food Waste Composting

INDIANA’S FOOD WASTE COMPOSTING STATS

<table>
<thead>
<tr>
<th>Year</th>
<th>Total % MSW Composted</th>
<th>% Compost = FW</th>
<th>FW Composting Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015 USA</td>
<td>9.9</td>
<td>5.3</td>
<td>9</td>
</tr>
<tr>
<td>2015 IN</td>
<td>5</td>
<td>0.25</td>
<td>0.022</td>
</tr>
<tr>
<td>2016 IN</td>
<td>4</td>
<td>0.69</td>
<td>0.056</td>
</tr>
<tr>
<td>2017 IN</td>
<td>5</td>
<td>1.12</td>
<td>0.102</td>
</tr>
<tr>
<td>2018 IN</td>
<td>5</td>
<td>1.59</td>
<td>0.158</td>
</tr>
</tbody>
</table>

Legend:
- Total % MSW Composted
- % Compost = FW
- FW Composting Rate
Food Waste Composting

Data Highlights - # Compost Sites

- % compost facilities that accept fw = 11% (13 of ~123 sites, 2018)
- Average # compost facilities reporting food waste = 5 (2011 - 2018)
- Total # compost facilities permitted to accept fw = 13 (2018)
- Avg % of those facilities actually reporting fw = 30-38% (2011 - 2018)
Food Waste Composting

Strategy Highlights

Biggest challenges: cost (economies of scale) & contamination (education)

Unexpected challenges: architectural (dock space), land use (NIMBYISM), compostable serviceware

Best Strategies

Education: targeted education & tech assistance to food waste generators (hands on education programs for early adopters via IRC, SWMDs, municipalities, haulers, event orgs)

Infrastructure: investing in Indiana’s composting infrastructure via state, federal, private grant dollars

Policy: informing regulations and rule writing

Economic: driving demand for compost to increase # FW composting facilities (i.e. IDOT, raising LF tip fees)
IFS POTENTIAL

2019 - Building understanding of problem, our roles & our power to change it
- Compiled resources
- Determined best strategies
- Collected baseline data on indicators of success (still in process)

2020 - Sharing what we’ve learned with target audience & decision-makers
- Resource Distribution & Tech Assistance
- State of Food Waste in Indiana Report & list of recommendations
- Policy Promotion

2021 & Beyond - informed projects, programs, policies
- Beyond doing good things - doing effective things

Greatest potential = harnessing our brain power, connecting with one another, putting in the work
QUESTIONS?
Feedback Walk & Break (15 min)

Prompts

● What do you think of the strategies presented? Positive or negative reactions? Do you have other ideas?

● What do you want to know more about? What other strategy group should be formed?

● What is unique about IN that might make one strategy more desirable than others? What are some peer cities and states Indiana should look to as models? Why?

● Who else needs to be at the table? How can IFSI reach all corners of the state or should we target certain areas in IN?

● What accomplishments would excite you to hear about at the next meeting 1 year from now?
STRATEGY GROUP TIME

- FOOD WASTE COMPOSTING (commercial & residential)
- SOURCE REDUCTION
- FOOD RESCUE
- OTHER SOLUTION (ANAEROBIC DIGESTION, FEEDING LIVESTOCK, ETC.)
GET INVOLVED

CONNECT
LIKE IFSI’s FACEBOOK PAGE
SIGN UP FOR IFSI NEWSLETTERS

SUPPORT
DONATE
SPONSOR IFSI

ENGAGE
JOIN A STRATEGY GROUP

Emily Jackson (Em J)
IRC Program Manager
emily@indianarecycling.org
THANK YOU FOR COMING! SEE YOU IN JULY!