



STAKEHOLDERS AND STUDIES: BUILDING UP TO PUBLIC/PRIVATE PARTNERSHIPS

Anna Lynott

Michigan Recycling Coalition Conference

May 15, 2019

MISSING IN ACTION TODAY



Kyle O'Keefe

Director of Innovation and Programs

SWACO

ABOUT RRS

Since 1986 serving industry/governments/non-profits

- Plan and implement materials management and zero waste solutions
- Facilitate recovery value chain collaboration to increase commodity recovery for industry and municipalities
- Analyze packaging recyclability and compostability
- Business case and net system cost analysis
- End market and recovery systems development for circular economies
- Adapt MRF systems & composting facilities with new technologies to process today's recyclables
- Develop and implement multi-stakeholder communications and outreach



recycle.com

WHO IS SWACO?



MORE ABOUT SWACO


SWACO Role	Program
SWACO funds and operates	Administration Drop-off Program Education Market Development
SWACO provides contracting assistance for	Curbside Collection
SWACO funds through contracts to private partners to operate	Yard Waste Management HHW Management Dump Cleanup Litter Collection

FRANKLIN COUNTY FOOD WASTE IN 2018

12.8% of all material landfilled by
Franklin County residents and
businesses is food waste.



152
THOUSAND
TONS



The annual cost to landfill
this material alone
amounts to



\$6
MILLION

The economic loss from
food waste in Franklin
County is estimated at



\$106
MILLION

The background of the right panel is orange with a pattern of overlapping geometric shapes, including a large downward-pointing chevron and several triangles.



192

**MILLION MEALS
ARE LANDFILLED**


by Franklin County
residents and
businesses annually.



69

**MILLION MEALS
ARE MISSED**

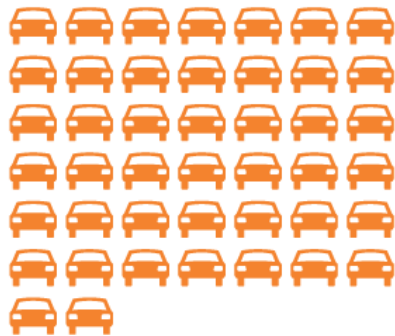
by Franklin County
residents that go
hungry every year.





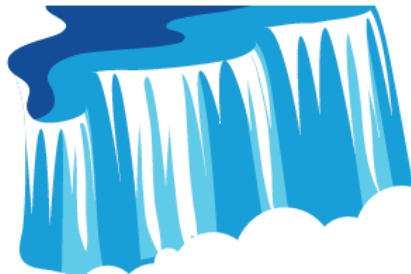
22 million
GALLONS OF GASOLINE

enough to fuel 44k
vehicles for a year



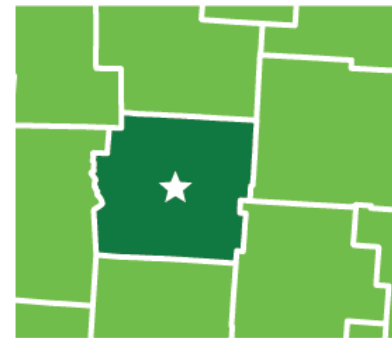
41 billion
GALLONS OF WATER

more than the amount
of water that goes over
Niagara Falls in a month



160,000
ACRES OF LAND

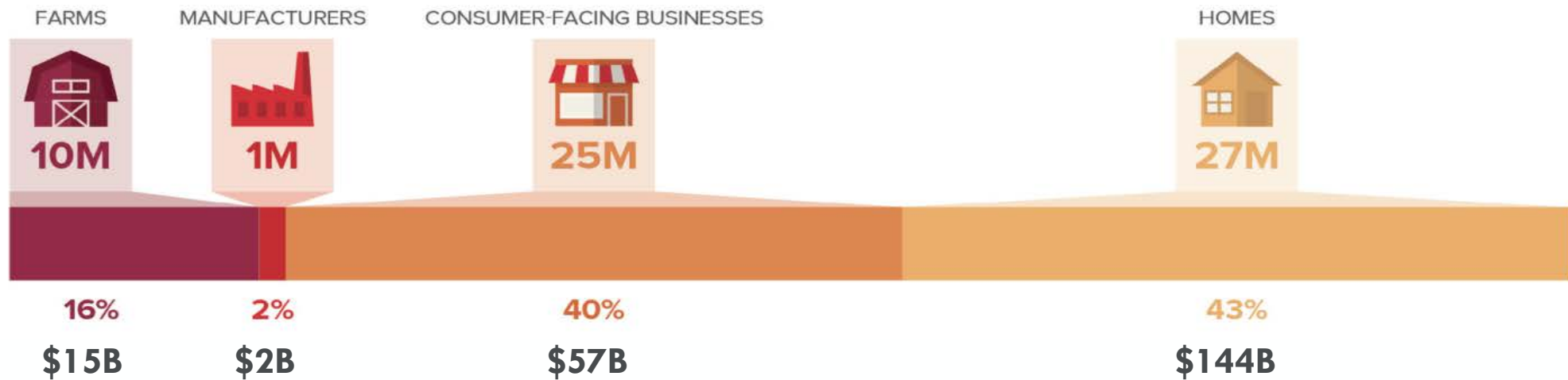
approximately half the
size of Franklin County



FOOD WASTE IN THE SUPPLY CHAIN



FOOD WASTED BY WEIGHT — 63 MILLION TONS ECONOMIC COST TO SOCIETY: (\$218 billion)



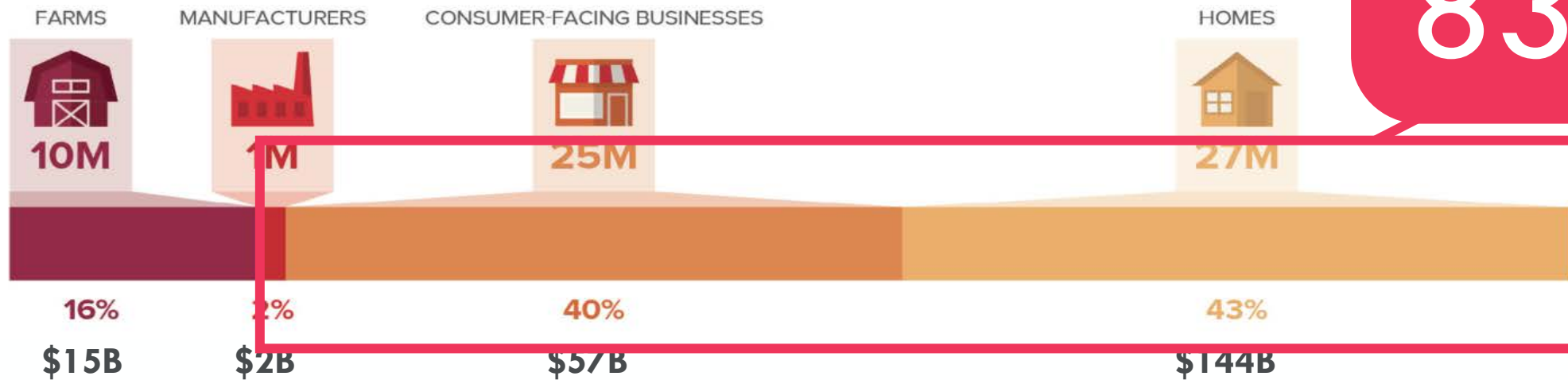
FOOD WASTE IN THE SUPPLY CHAIN



62.5 MILLION TONS OF FOOD WASTE IN THE U.S. EVERY YEAR

Consumer Level
83%

FOOD WASTED BY WEIGHT — 63 MILLION TONS ECONOMIC COST TO SOCIETY: (\$218B)





SWACO'S APPROACH

- Food Waste Action Plan Development
- Centralized Composting Feasibility Study



**Local
Government**



**Community
Groups**



Agencies



Schools



Businesses



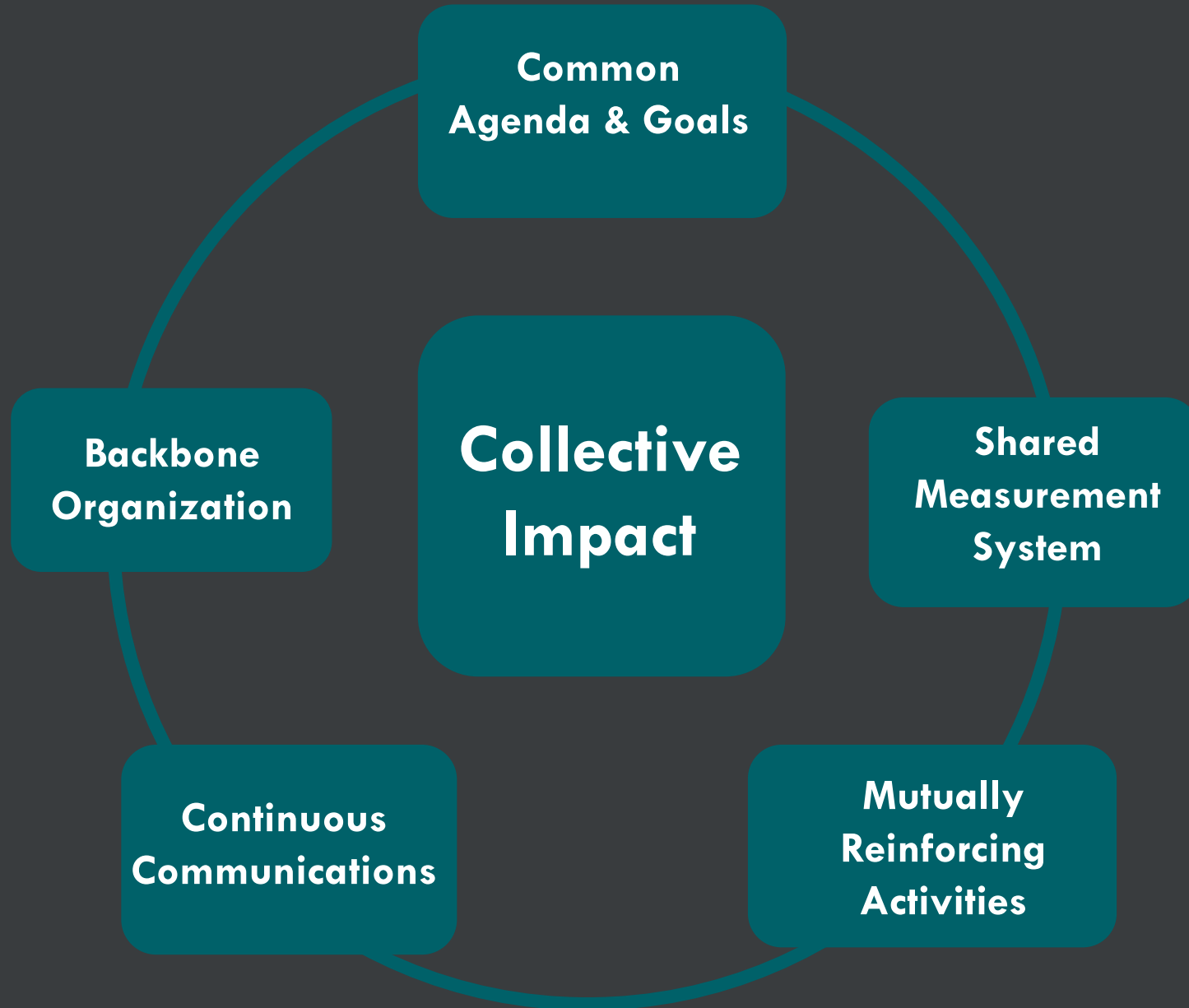
Industry



Associations



Manufacturing





CENTRAL OHIO
FOOD WASTE INITIATIVE

www.cofwi.org

PARTICIPATING STAKEHOLDERS



Food Waste Collaborative



Kick-off Session 9/20/18

**Working Session #1 –
10/4/18**

**Working Session
#2 – 10/30/18**

**Working
Session #3 –
11/14/18**

20 potential Phase I solutions

9 potential Phase I projects

**Best
places to
start**

More collaborative ^
^
^



More foundational projects >>>

**Good places to start...
What Phase I projects
are collaborative and
more foundational?**

WHAT SOLUTIONS EMERGED?

Prevention



Rescue



Recycling





Proposed Solutions – Prevention

Residential

Consumer In-home Awareness/Education Campaign

School Curriculum & Program Campaign

Grocery & Retail Point of Sale Consumer Messaging Campaign

Commercial

Employee Training/Education Campaign

Advocate for Improved Date Labeling Standards



Proposed Solutions - Rescue

Commercial

Increased Capacity for Rescue Outlets

Food Rescue Promotion & Training

Support Sharing Tables and Food Rescue in Schools

Value-add Products from Rescued Foods

Advocate for Increased Tax Deduction Benefits for Donating Food

Proposed Solutions – Recycling

Residential

Commercial

Food Waste Composting Facility Feasibility Study

Catalyze Smart Growth of Community Food Waste Drop-off Programs

Promote Existing Programs & Services

Evaluate and Pilot Residential Curbside Collection of Source Separated Organics

Promote and Pilot Food Waste Collection with Schools

Promotion of Decentralized Food Waste Recycling

Businesses Incentives and Resources for Diversion

Increase Regional Competition and Capacity for Food Waste Recycling Solutions

Support Innovation and Entrepreneurs to Develop and Enhance Food Waste Prevention, Rescue, and Recycling Solutions

BEST PLACES TO START

Promoting Existing Services



School Curriculum and Resources



Consumer Messaging



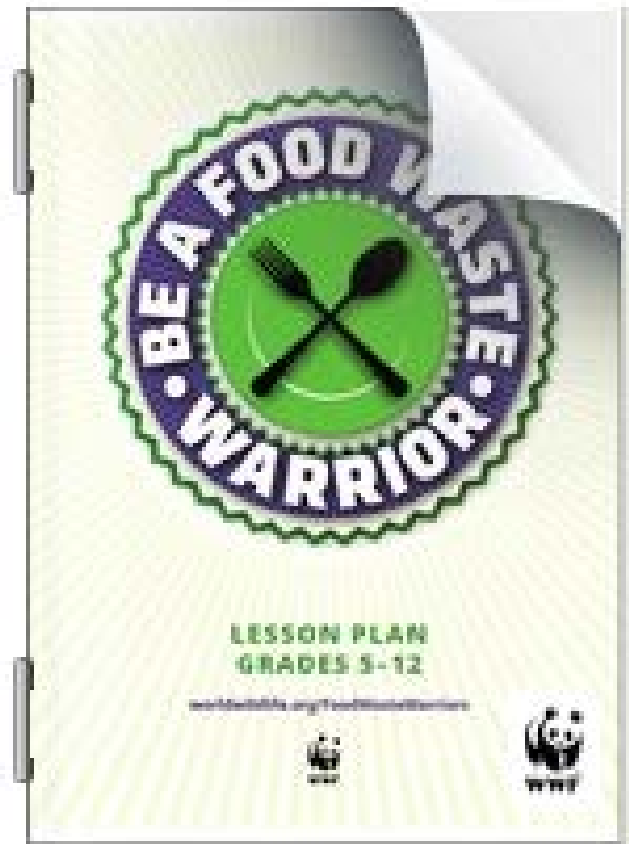
PROMOTING EXISTING RESOURCES



CENTRAL OHIO
FOOD WASTE INITIATIVE

WWW.COFWI.ORG

SCHOOL CURRICULUM AND RESOURCES



CONSUMER MESSAGING



... Each year it cost Central Ohioans over 6 million dollars to landfill food

A black-bordered square sign with white background. The text 'EAT ME FIRST' is written in large, bold, black, sans-serif capital letters. Below this, in smaller black text, it says 'Keep a tray with this sign in your fridge for things that need to be used up right away. For more tips, visit SaveTheFood.com.' At the bottom of the sign, there is a black rectangular box containing the text 'SAVETHEFOOD.COM' in white. To the right of this box are two logos: the 'Ad Council' logo and the 'NRDC' logo.

FRANKLINTON FARMS — COMMUNITY COMPOSTING



HILLIARD CITY SCHOOLS — COMPOSTING PROGRAM





FEASIBILITY STUDY

FEASIBILITY STUDY

Modeling
generation
and
potential
capture
rates

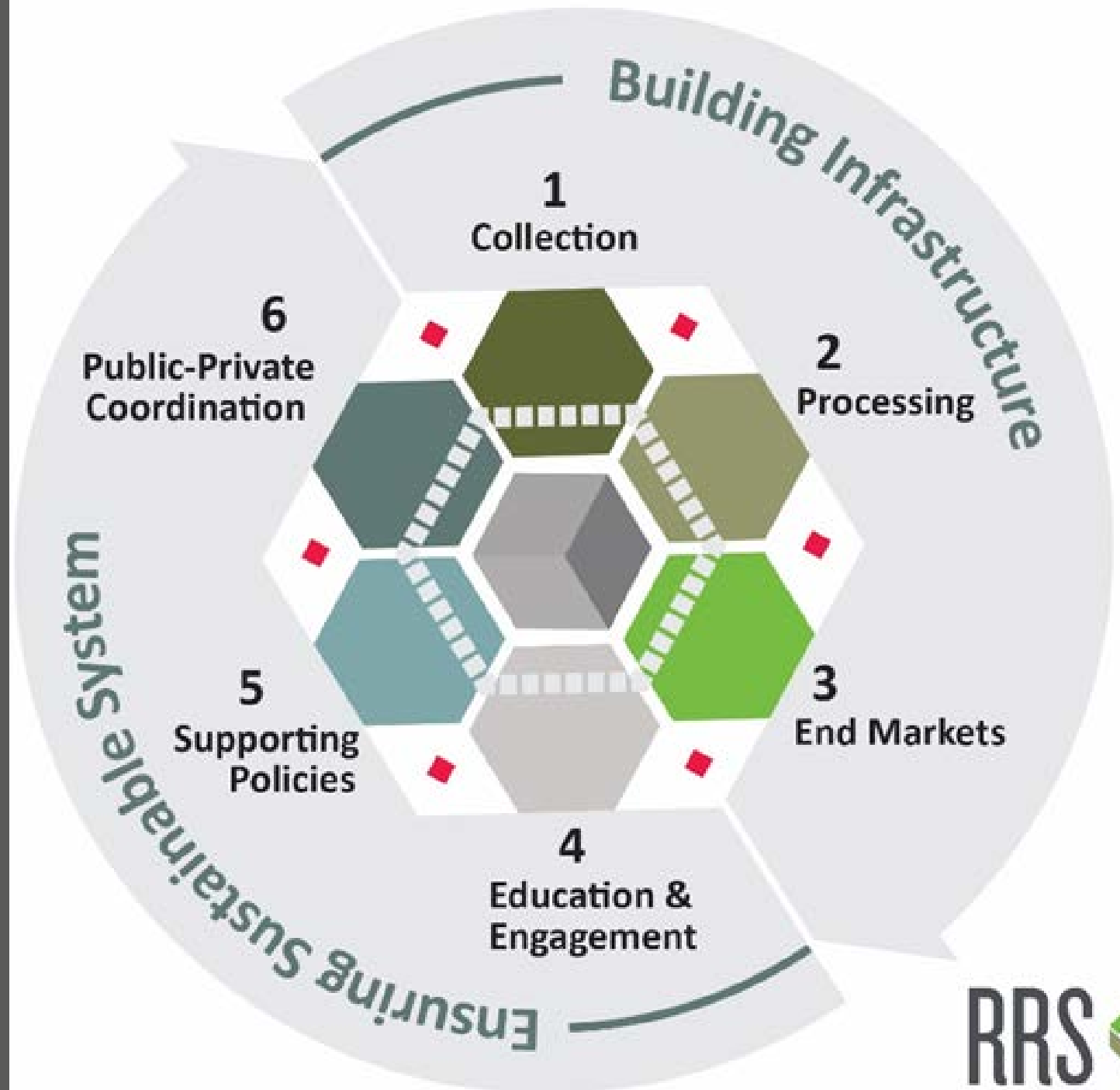
Size of
facility

Identify
facility
types that
work with
the
materials
available

Funding

Setting up
for success

KEYS FOR SUCCESSFUL MUNICIPAL PROGRAMS





MODELING ORGANIC WASTE

- Type/characteristics of organic waste to be collected
- Type of collection of organic waste
- Seasonal volume fluctuations
- User participation

GENERATION AND CAPTURE RATES

Total Food Waste	135,861	Total Green Waste	242,869
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Capture Rate	Food Waste	Green Waste	Total
30%	40,758	72,861	113,619
60%	81,517	145,721	227,238
80%	108,689	194,295	302,984



RECOMMENDED FACILITY TYPES

- Open Windrow:
 - Least costly capital/operation
 - Passive aeration/mechanical turning
 - Least tolerant of FW < 10 – 15%
 - Most common facility in the US
- Aerated Static Pile
 - More costly capital/operation
 - Mechanical aeration/no turning
 - Highly tolerant of FW

FACILITY SIZING

Facility Type	Materials	Green Waste*	Food Waste **	Bulking Agent**	Total
Windrow	YW+Res FW	145,721	10,800	-	156,521
Aearate Static Pile	Comm. FW + MF FW	-	60,000	60,000	120,000
Total		145,721	70,800	60,000	276,522

*Green waste recovery – 60%

**Residential food waste recovery ~ 30%; Commercial food waste recovery ~ 60%

WINDROW FACILITY PARAMETERS

Facility Characteristics	Units
Total Throughput - Tons	1 56,521
Total Site Area - Acres	25
Total Composting Pad Area - Acres	16
Equipment - pieces	8
Staff - FTE	6
Total Marketed Material - CY	1 56,000

ASP FACILITY PARAMETERS

Facility Characteristics	Units
Total Throughput (incl. 1:1 Bulking Agent) - Tons	1 20,000
Total Site Area - Acres	1 5
Total Building Area - SF	1 5,600
Equipment - pieces	6
Staff - FTE	5
Total Marketed Material - CY	1 47,692

FEASIBILITY STUDY

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and
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Identify
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SPECTRUM OF OPTIONS



- **Open Market Version – Free for All**
 - Create organics diversion regulation
 - Define a siting rubric (consistent with OH law)
 - Let the “Invisible Hand” take care of it

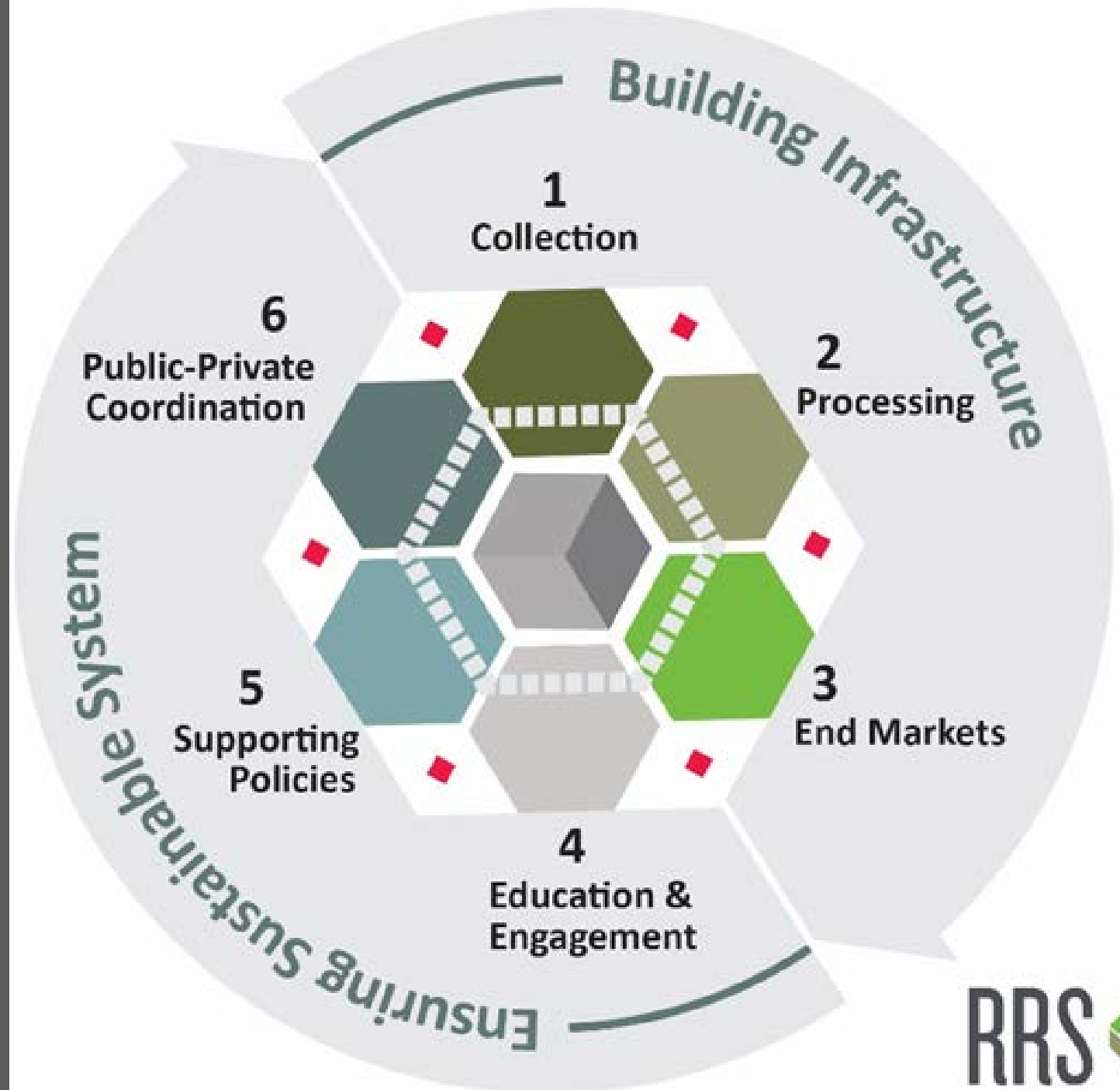


- **Supportive Policy for Organics, selected facility RFP**
 - Greenwaste + Residential FW – Windrow
 - Commercial and MF FW – ASP
 - Community Composting/Backyard Composting

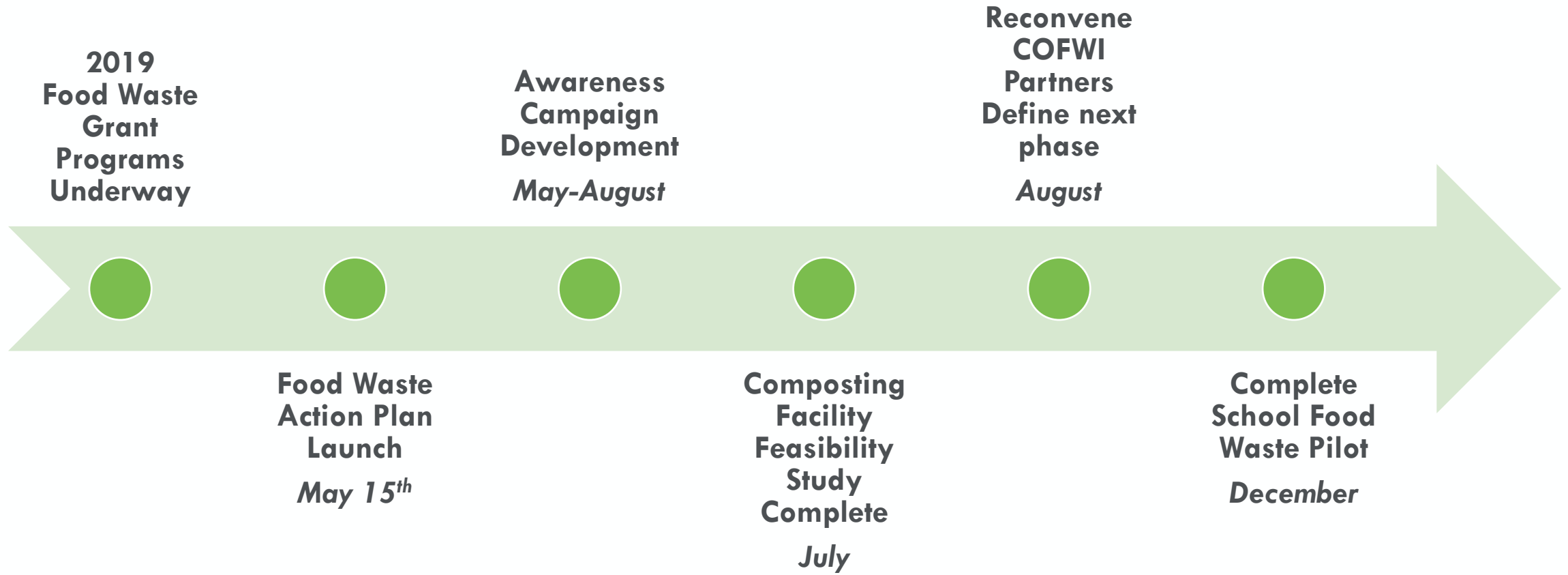


- **Public Ownership**
 - Greenwaste + Residential FW – Windrow
 - Commercial and MF FW – ASP
 - Community Composting/Backyard Composting

KEYS FOR SUCCESSFUL MUNICIPAL PROGRAMS



LOOKING FORWARD





SUMMARY

- Leverage the resources and existing efforts in your community to tackle food waste
- Explore the 3 R's for a holistic approach
- Seek best places to start
- Consider all the factors that will impact feasibility



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