

CENTRAL OHIO FOOD WASTE ACTION PLAN



CENTRAL OHIO
FOOD WASTE INITIATIVE

MAY 2019

Coordinated By:

SWACO
FROM WASTE TO RESOURCES

LETTER FROM SWACO

Every day, Central Ohioans landfill nearly a million pounds of the very thing that nourishes and sustains us – food. The amount of food wasted in Central Ohio, and throughout the U.S., has grown over the decades and recent years, and the social, economic, and environmental impacts of this wastefulness is enormous.

Central Ohio's community mindset and willingness to collaborate can change this narrative. Reducing food waste is within our control. For this reason, organizations, businesses, non-profits, government agencies, schools, and communities have come together to form the Central Ohio Food Waste Initiative and work collectively to tackle the issue of food waste.

Together, we strive to cut food waste in half by 2030. To accomplish this, we need your help. Join us by learning more and taking action.



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Solid Waste Authority of Central Ohio



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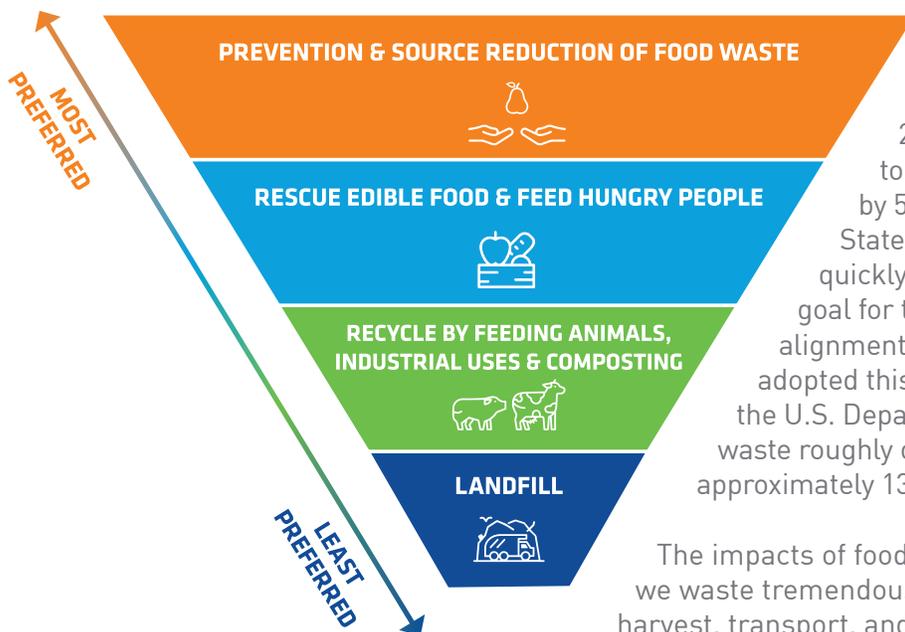
ABOUT THE CENTRAL OHIO FOOD WASTE INITIATIVE

Food waste is a complex and systemic issue that impacts the health of our society, economy, and environment in ways we often might not consider. Developing effective solutions for addressing this pervasive problem requires all members of the community (individuals, government, businesses, and institutions) to work together. The Solid Waste Authority of Central Ohio (SWACO) formed the Central Ohio Food Waste Initiative (COFWI) in September 2018 to bring together a diverse set of organizations to help build a unified approach towards reducing food waste and leveraging it to benefit our region. COFWI takes a holistic approach to combating food waste by creating solutions geared toward the hierarchy preventing food waste, rescuing and redistributing edible food, and recycling food through composting and other technologies.

CUT FOOD WASTE IN HALF BY 2030

The following document was created as the result of a series of collaborative engagements with partnering organizations that see value in reducing food waste in the Central Ohio region. Based on those engagements and the input gathered, this document serves as a pathway of opportunities and solutions for the regional community to coalesce and pursue. While holistic, the document does not intend to be comprehensive. Rather it provides a living framework for collaboratively advancing the front lines on food waste, which requires a flexible and adaptive approach. With collective input, several projects that could be implemented immediately are outlined within the document. To learn more about this initiative and to get involved, please visit www.COFWI.org.

FOOD WASTE, THE OPPORTUNITY



Awareness of the food waste issue is growing throughout our country and around the world. In 2015, the United Nations set a goal to reduce the amount of food waste by 50 percent by 2030¹. The United States Environmental Protection Agency quickly followed suit by replicating this goal for the country². To reinforce and create alignment with these efforts COFWI has also adopted this goal. According to estimates from the U.S. Department of Agriculture, Americans waste roughly one-third of all food produced, or approximately 133 billion pounds annually.

The impacts of food waste are vast. By wasting food, we waste tremendous amounts of energy to grow, harvest, transport, and preserve food. Natural resources such as water, soil, fertilizer, and cropland are depleted, and expanding crop fields causes destruction of natural

habitats. At the same time, our population continues to grow, driving demand for food, yet families and individuals are increasingly becoming food insecure. Wasting food also comes at a cost - the Natural Resource Defense Council (NRDC), which began raising awareness about food waste in 2012, estimates that wasting food costs the country \$218 billion annually³. On average each American family of four spends \$1400 a year buying food it will never eat, whether at home or in restaurants⁴.

Locally, this topic hits home. It is estimated that 12.8 percent of all material landfilled by Franklin County residents and businesses is food waste⁵. For 2018, this represents over 152,000 tons of food waste landfilled. Currently, SWACO has a new study underway that will help to evaluate the amount of food waste generated, and preliminary results suggest that we could be wasting even more. Our community has also echoed the importance of this issue in a recent public opinion poll which identified that 86 percent of residents were concerned with the amount of food being wasted every day in central Ohio.

86% OF RESIDENTS ARE CONCERNED ABOUT THE AMOUNT OF FOOD WASTED EVERY DAY IN CENTRAL OHIO

Landfilling this material cost Franklin County residents and businesses just over \$6 million annually, but the total economic loss is even greater. Based on existing models, the systemic economic loss from food waste generated in Franklin County is estimated at \$106 million a year⁶. Much of this waste food could have been prevented or perhaps rescued and donated.

In Franklin County, according to research conducted by Mid-Ohio Foodbank, 69 million meals are missed every year by Franklin County residents that go hungry. At the same time, we estimate that 192 million meals are being landfilled by Franklin County residents and businesses annually. Simply put, recovering more edible food that would otherwise be wasted could dramatically reduce the number of food insecure residents in Central Ohio.



Food being wasted at the local level has a ripple effect on the environment considering all of the energy and resources that goes toward producing, transporting, and preparing food. Food wasted locally represents: 22 million gallons of gasoline lost annually, or enough to fuel 44,000 vehicles for a year. Roughly 160,000 acres, or about half the landmass of Franklin County, are used to produce food that is never eaten and an estimated 41 billion gallons of water is lost annually.

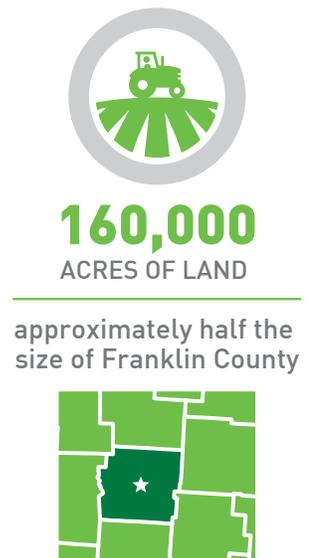
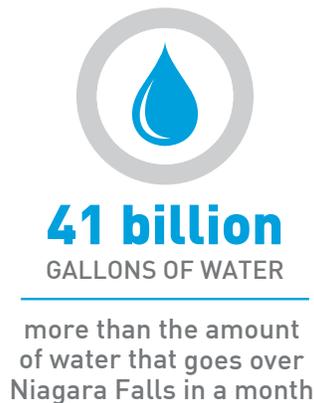
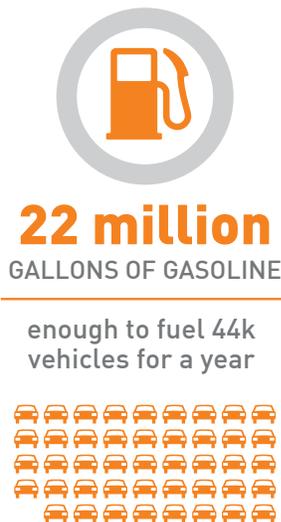
We all have a role to play when it comes to reducing food waste. In fact, much of the food waste occurs at the household level from food that has spoiled to forgotten leftovers and food not eaten because of confusing expiration labels. By taking small steps in our daily lives, we can make a significant impact. To become empowered and to learn more about how you can reduce food waste at home, visit www.COFWI.org.

Addressing the issue of food waste is central to creating a more resilient community. From alleviating hunger to creating abundant natural resources, as a community, we can turn this problem into a solution that benefits our society, the environment, and our economy.

FRANKLIN COUNTY FOOD WASTE IN 2018



FOOD WASTED IN CENTRAL OHIO IS THE EQUIVALENT TO WASTING :



COLLECTIVE IMPACT

Central Ohio is fortunate to have established agencies, organizations, and businesses involved in food waste prevention, rescue, and recycling. In November 2016, the City of Columbus and Franklin County adopted the [Local Food Action Plan](#) (LFAP) to serve as a policy platform for enhancing local food opportunities. LFAP was developed through a multi-stakeholder process and included reducing food waste as one of its four goals. The Ohio State University has also launched the Food Waste Collaborative to help advance solutions within the University and hosts an annual summit on the issue. Mid-Ohio Foodbank and the local chapter of Food Rescue US work to redirect potentially wasted edible food to those who need it. Other local collaborators who have been engaged on the issue include retailers, such as Kroger, who recently committed to zero waste goals and food waste reduction strategies, as well as the Ohio Restaurant Association and Ohio Grocers Association, to name a few. In other words, a lot of great work is already underway to address food waste within the region, but there is an even greater opportunity to unify these efforts in a coordinated approach.



COFWI was established to bring together organizations and businesses to work together in collaboration rather than in isolation from one another, and to develop a common agenda with shared goals and mutually reinforcing activities. This approach, known as Collective Impact, brings people together in a structured way to achieve social change.

Collective impact starts with a common agenda. All participants come together to collectively define the problem and create a shared vision to solve it. With this shared purpose, there is also shared measurement. The group agrees to track progress in the same way, which allows for continuous improvement. Collective Impact

fosters mutually reinforcing activities – coordinating collective efforts to maximize the end results. Continuous communication is critical to building trust and relationships among all participants. Finally, there is a strong backbone or a team dedicated to orchestrating the work of the group.

The Collective Impact process started with a kick-off meeting in September 2018, when stakeholders gathered for the first time under the Central Ohio Food Waste Initiative. Fifty eight participants gathered to review potential solutions to food waste and to discuss the opportunities and challenges of each. Participants then identified preferred approaches for shaping collaborative action. Participants were invited to future working sessions that would focus on three areas of food waste: prevention, rescue, and recycling.

After kicking off the initiative in September, the COFWI stakeholders met three times during the months of October and November, to encourage regular engagement and to drive action. After the first working session in early October, it was quickly evident that the stakeholders were interested in being engaged in all three areas. During the next two meetings, the content and processes were designed to accommodate as many stakeholders who would want to participate.



Preliminary outreach & invitation

Survey participants
Assessed Existing Activities and Compiled Data



1st session

(half-day)

Goals and Purpose
Build Collective Knowledge
Gather feedback on potential solutions



2nd session

Present refined solution areas
Gather feedback on definitions and details
Gain consensus on solutions
Begin to prioritize "good places to start"

3rd session

Breakout groups for priority solutions (schools, existing programs, awareness campaign)
Gather feedback and refine solutions



4th session

Large group participation on actionable approaches for priority solutions
Gather feedback and refine solutions

Conclusions

Develop Food Waste Action Plan
Launch website
Launch working groups for priority areas



CENTRAL OHIO FOOD WASTE SOLUTIONS

Potential Solutions

Developing solutions for food waste requires understanding of the different areas of focus, target audiences, and the length of time to implement. For COFWI, the first step was to identify existing activities, programs and services in place to tackle food waste. Stakeholders were surveyed to learn about the existing landscape of food waste management in Central Ohio. The current activities are the foundation upon which new initiatives and solutions can be built.

PREVENTION: STOPPING WASTE FROM OCCURRING IN THE FIRST PLACE

RESCUE: REDISTRIBUTING FOOD TO PEOPLE

RECYCLING: REPURPOSING WASTE AS ENERGY, AGRICULTURAL, AND OTHER PRODUCTS

Next, best practices were compiled on food waste reduction, recycling and rescue from across the industry and from model programs across the country. Referencing the seminal report by [ReFED](#), potential solutions were categorized under three headers: Prevention, Rescue, and Recycling. The three categories assist with identifying solutions and illustrate the interconnectedness of each to achieve the overall goal of leveraging food waste as a resource in Central Ohio. For example, food waste collection is increasingly becoming a service for many parts of the country, yet preventing food waste in the first place creates the most benefits.



The solutions were further categorized by target audiences broken out by residential and institutional, commercial, and industrial (**abbreviated as ICI**). Twenty potential solutions were identified and collectively agreed upon. Each solution was assessed for clarity about the opportunity, purpose, and measurement. Time and resources for implementing were also evaluated. As far as implementation, some solutions can be accomplished in the near-term, while others are more long-term endeavors that may require the successful implementation of short-term solutions. Many of the solution areas identified are currently underway at some capacity. The goal for having these solution areas is to leverage and help focus collective efforts to achieve greater outcomes. The following tables provide a brief overview of the 20 solutions areas. More details on each solution area can be found in the appendix.



Proposed Solutions Prevention	
Residential	ICI ⁷
A1 Consumer In-home Awareness Campaign	A5 Employee Training/Education Campaign
A2 School Curriculum and Program Campaign	A6 Advocate for Improved Date Labeling
A3 Grocery Retail In-Store Point of Sale (POS) Consumer Messaging Campaign	
A4 Foodservice Point of Sale (POS) Consumer Messaging Campaign	



Proposed Solutions Rescue	
ICI ⁷	
B1 Increase Capacity for Rescue Outlets	
B2 Food Rescue Promotion and Training	
B3 Support Sharing Tables and Food Rescue in Schools	
B4 Value-Added Products from Rescued Foods	
B5 Advocate for Increased Tax Deduction Benefits for Donating Food	



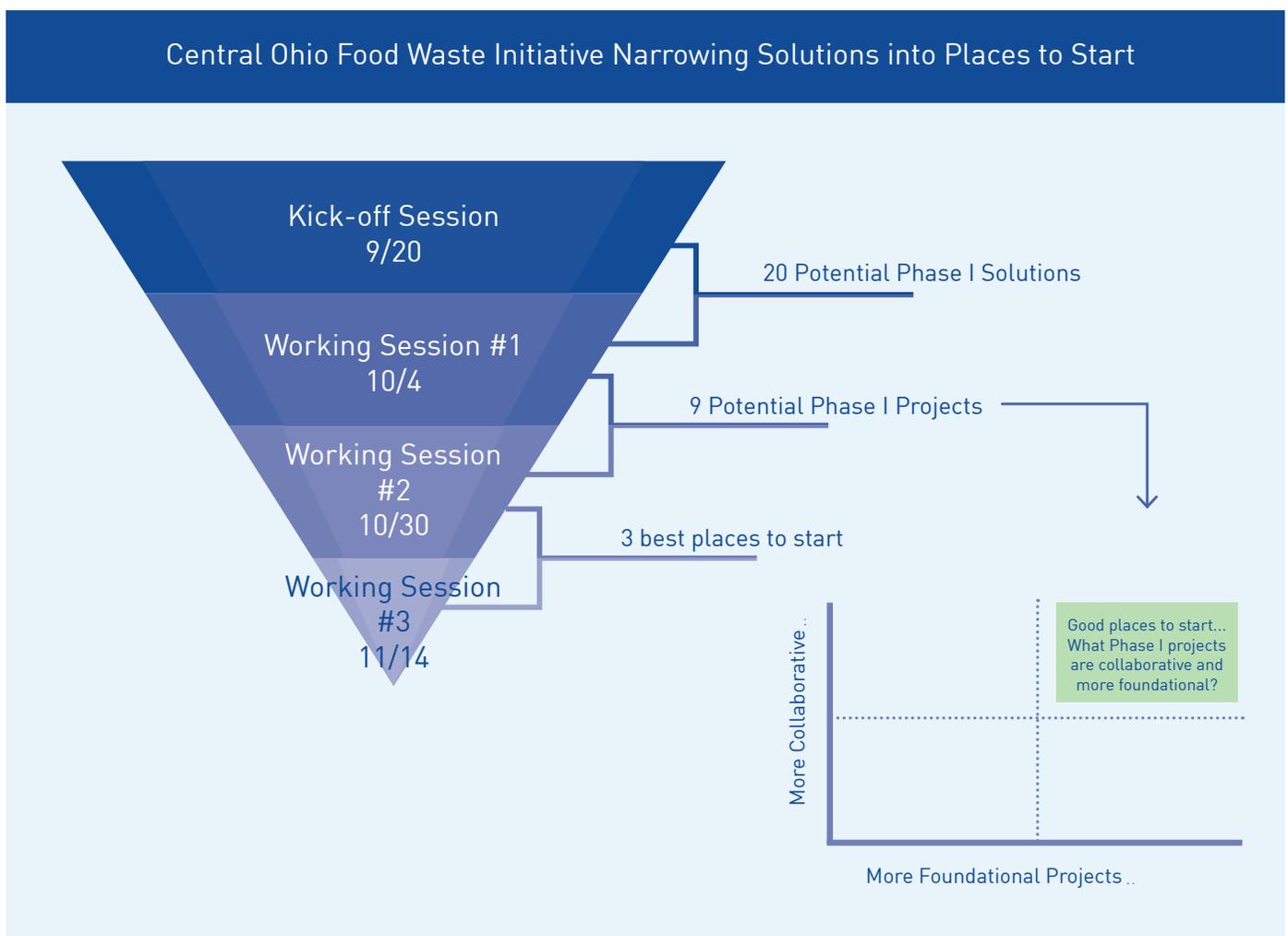
Proposed Solutions Recycling	
Residential	ICI ⁷
C1 Catalyze Smarth Growth of Community Food Waste Drop-off Programs	C4 Promote Existing Services and Programs
C2 Evaluate and Pilot Scalable Residential Curbside Collection of Source Separated Organics	C5 Promote and Pilot Food Waste Collection with Schools
C3 Promotion of Decentralized Food Waste Recycling	C6 Business Incentives and Resources for Diversion
C7 Food Waste Composting Feasibility Study	
C8 Increase Regional Competition and Capacity for Food Waste Recycling Solutions	
C9 Support Innovation and Entrepreneurs to Develop and Enhance Food Waste Prevention, Rescue, and Recycling Solutions.	

BEST PLACES TO START

The compilation of solutions was integrated into the Collective Impact process for stakeholder review and prioritization. Over the course of the three working sessions, the stakeholders organized the solutions around the premise of the best places to start. This approach allowed the group to hone in on solutions that were most collaborative and foundational to serve Central Ohio and tackle the food waste challenge in the region. The foundational solutions will serve future initiatives by creating the right environment for their success through awareness, participation, and infrastructure.

The solutions identified as best places to start are:

- Promoting Existing Services and Programs
- Piloting School Curriculum, Share Tables and Rescue, and Collection
- Developing a Consumer Awareness Campaign



PROMOTING EXISTING SERVICES AND PROGRAMS

The solution centered on promoting existing services and programs initially focused on recycling services. Once the stakeholder engagement process was underway, the solution set expanded to include both prevention and rescue opportunities as there are already many services and programs available in the community that rescue, collect, and process food waste.

For example, some services provide collection of food waste from large generators only, while others offer collection from residents. Small to medium-scale food waste composting facilities are available in and around Central Ohio and much of the food waste currently collected is used as animal feed at farms in the region. Combined, these existing service providers processed over 10,000 tons of food waste generated in Central Ohio during 2017.

Opportunities for rescuing and redistributing edible food are also available through organizations such as Mid-Ohio Foodbank, Food Rescue US, and numerous food pantries. In addition to local food waste diversion services, there is a wealth of existing information and tools available online to help audiences reduce food waste. From a hotel food waste reduction guide to a party guest meal planning calculator, Central Ohio can leverage existing content that is available for consumers, food industry sectors such as grocers and restaurants, business and organizations and schools.

The culmination of all this information resides on a new website featuring the Central Ohio Food Waste Initiative (available at www.cofwi.org). The site will serve as a resource portal for anyone interested in learning more about how to prevent, rescue, and recycle food waste. As part of the collaborative process, the partners engaged in COFWI will support promotion of the website through their own channels, increasing visibility of solutions and resources for everyone in Central Ohio.

Promoting Existing Services and Programs	
Solution	C-4
Current Status	In progress
Partners	GoZERO Services/Econopia, Columbus Public Services, Columbus Green Spot, Mid-Ohio Foodbank, Columbus City Council, Franklin County Economic Development and Planning, Hilliard City Schools, Ohio Environmental Protection Agency, Innovative Organics Recycling, Kroger, Ohio Department of Rehabilitation and Corrections, The Ohio State University, City of Upper Arlington, Food Rescue US
Objectives	Compile existing services and programs for food waste prevention, rescue, and recycling already available in Central Ohio. Promote resources on a centralized location to assist consumers, businesses, and institutions with implementing food waste reduction efforts.
Actions	<ul style="list-style-type: none"> • Compile resources from stakeholders • Compile available resources beyond Central Ohio • Organize information for ease of use • Update and modify COFWI website • Connect with partners to promote site and drive traffic
Potential Measures	<ul style="list-style-type: none"> • Number of visitors to the website • Amount of food waste reduced and diverted

PILOTING SCHOOL CURRICULUM, SHARE TABLES, RESCUE, AND COLLECTION

Schools provide an ideal platform for introducing waste reduction and diversion activities. Being that schools are foundational institutions dedicated to educating future generations, implementing practices such as food waste reduction and diversion helps to introduce and promote these beneficial activities within communities and families.

Two school districts already work closely with SWACO on waste reduction and diversion practices and both recently received grants to address food waste. The districts are Columbus City Schools and Hilliard City Schools. Building on these existing efforts, SWACO and Columbus City Schools were recently awarded a grant from the World Wildlife Fund (WWF) to implement and pilot food waste curriculum in four schools. Project partners also include Kroger and Food Rescue US.

The outcomes of the project will include food waste measurement in schools, documentation and case studies of the curriculum impacts, and creation of lessons and resources. All outcomes of the project will contribute to expanding food waste reduction curriculum and activities in schools throughout the region.

Piloting School Curriculum, Share Tables and Rescue, and Collection	
Solution	A-2, B-3, C-5
Current Status	In progress
Partners	SWACO, Columbus City Schools, Hilliard City Schools, GT Environmental, Inc, Up Periscope Creative, Kroger, Food Rescue US, World Wildlife Fund
Objectives	Implement and document food waste curriculum in four schools in the Columbus and Franklin County region. Share lessons learned from regional food waste efforts in schools.
Actions	<ul style="list-style-type: none"> • Help schools plan and prepare to implement WWF curriculum pilot • Implement WWF pilot during the spring of 2019 • Document and report results • Share learnings from the Pilot and other districts such as Hilliard City Schools
Potential Measures	<ul style="list-style-type: none"> • Waste audit data and food waste reduction results • Survey of students, staff and teachers • New food waste reduction resources for schools • Articles, local media, and press coverage

DEVELOPING A CONSUMER AWARENESS CAMPAIGN

Changing personal behaviors and habits can have significant impacts on reducing food waste. This change will likely be a function of increased awareness about food waste, how it represents a misuse of resources, and why it is important environmentally, economically, and socially. Creating consumer awareness and behavior change will help to advance food waste prevention efforts and establish a foundation for communicating and engaging the public on potential new services.

A working group has been established to help guide efforts for developing a shared consumer awareness and messaging campaign for the Central Ohio region. The campaign will raise awareness about food waste and serve as a call to action. The group will identify metrics to track the campaign's success, which will also provide data other activities and future campaign phases.

Developing A Consumer Awareness Campaign	
Solution	A-1, A-3, A-4
Current Status	In progress
Partners	GoZERO Services/Econopia, AR Creative Group, City of Bexley, Columbus Public Services, Columbus Green Spot, Mid-Ohio Foodbank, Columbus City Council, Franklin County Economic Development and Planning, Giant Eagle, Hilliard City Schools, Ohio Environmental Protection Agency, Innovative Organics Recycling, Kroger, Ohio Department of Rehabilitation and Corrections, Ohio State University, City of Upper Arlington, Elytus, Food Rescue US
Objectives	Through a shared campaign, increase awareness about the issue to change consumer food waste behaviors.
Actions	<ul style="list-style-type: none"> • Convene COFWI Working Group • Engage marketing firm to assist in the campaign development • Conduct research to inform campaign development • Develop and launch campaign
Potential Measures	<ul style="list-style-type: none"> • Number of Homes reached • Number of Impressions (communications, emails, online ads, social media) • Pre/Post Surveys measuring sentiment and consumer behavior change/actions • Number of Communities, businesses, and organizations adopting the shared campaign • Amount of food waste reduced or diverted

FOOD WASTE COMPOSTING FEASIBILITY STUDY



Having the necessary infrastructure for collecting and processing recovered food waste is currently one of the greatest limitations to diverting food waste in Central Ohio. To better understand this issue and assess possible options for alleviating it, SWACO is conducting a food waste composting feasibility study. The feasibility study will evaluate conditions, business models, and partnership strategies for establishing the needed infrastructure and capacity for composting food waste generated in the region. The study will be completed in the summer of 2019.

LOOKING FORWARD

The purpose of the Initiative and the creation of the action plan is to unify and strengthen efforts to reduce and eliminate food waste in the region. The action plan is intended to provide a framework for coalescing partnerships, supporting collaboration, and encouraging joint efforts that leverage our collective abilities under this common cause.

**NEW SERVICES, PROGRAMS,
AND RESOURCES WILL EMERGE THAT
POSITION THE REGION AT
THE FOREFRONT OF REDUCING
FOOD WASTE.**

With many projects already underway, and more to come, SWACO and the Initiative will continue to build out the solution areas identified in the action plan. This process will be guided, and its success defined, by the participation and direction of the greater Central Ohio community. As a result, we believe that new services, programs, and resources will emerge that position the region at the forefront of reducing food waste.

No matter who you are or where you work, there is a role you can play to support this effort. Many resources and services are available today to help you get started. If you are interested in a more active role in the initiative, we encourage you to contact us. To learn more, get involved, or take action, visit www.cofwi.org.

APPENDIX A: DETAILED PREVENTION, RESCUE, AND RECYCLING SOLUTION AREAS

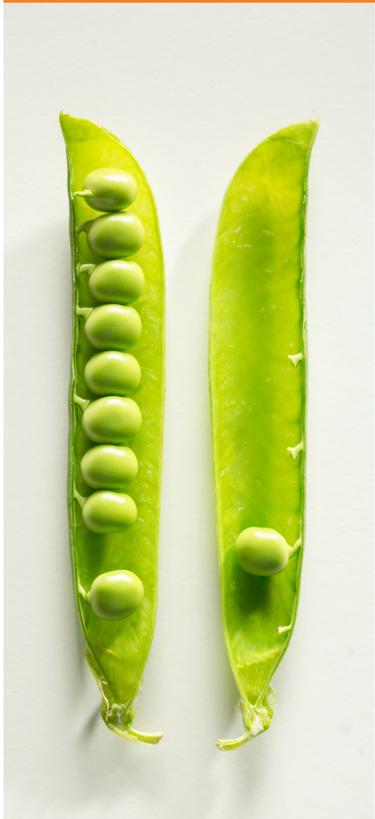
Solution Description	Solution Type	Target Audience	Page
A-1 Consumer In-Home Awareness Campaign	Prevention	Residential	17
A-2 School Curriculum and Program Campaign	Prevention	ICI	18
A-3 Grocery In-Store Point of Sale (POS) Consumer Messaging Campaign	Prevention	Residential	19
A-4 Food Service Point of Sale (POS) Consumer Messaging Campaign	Prevention	Residential	20
A-5 Employee Training/Education Campaign	Prevention	ICI	21
A-6 Advocate for Improved Date Labeling	Prevention	ICI	22
B-1 Increase Capacity for Rescue Outlets	Rescue	ICI	22
B-2 Food Rescue Promotion and Training	Rescue	ICI	23
B-3 Support Sharing Tables and Food Rescue from Schools	Rescue	ICI	24
B-4 Value-Added Products from Rescued Foods	Rescue	ICI	24
B-5 Advocate for Increased Tax Deduction Benefits for Donating Food	Rescue	ICI	24
C-1 Catalyze Smart Growth for Community Food Waste Drop-off Programs	Recycling	Residential	25
C-2 Evaluate and Pilot Scalable Residential Curbside Collection of Source Separate Organics	Recycling	Residential	25
C-3 Promotion of Decentralized Food Waste Recycling	Recycling	Residential	26
C-4 Promotion of Existing Programs and Services	Recycling	ICI	26
C-5 Promote and Pilot Food Waste Collection in with Schools	Recycling	ICI	27
C-6 Business Incentives and Resources for Diversion	Recycling	ICI	27
C-7 Food Waste Composting Feasibility Study	Recycling	Residential ICI	28
C-8 Increase Regional Competition and Capacity for Food Waste Recycling Solutions	Recycling	Residential ICI	28
C-9 Support Innovation and Entrepreneurs to Develop and Enhance Food Waste Prevention, Rescue, and Recycling Solutions	Prevention, Rescue, Recycling	Residential ICI	29

Consumer In-Home Messaging Campaign

A-1

Target Audience: Residential

Solution Type: Prevention



Opportunity

The most significant impact on food waste generated within homes will result from consumer behavior change. Change must be affected by increasing consumer awareness and readiness to change baseline behavior related to purchasing, storage and handling, and preparation of food in homes.

Objective/Purpose

Create consumer awareness about food waste and provide tips and resources for waste prevention and reduction.

- Increase awareness of food waste and associated costs
- Communicate about food waste directly to residents
- Act as part of large-scale food waste prevention advocacy campaign
- Provide consumers with tips/info on how to reduce wasted food (pair with tools, re-sources, FAQ's).

Measurement and Impact

Measurement Metrics could include:

- Number of Homes reached
- Number of impressions (communications, emails, online ads, social media)
- Pre/Post Surveys measuring sentiment and consumer behavior change/actions

Other Needs/Considerations

- Aligns with LFAP Goal D-1
- Expand food waste prevention education campaigns for consumers, local governments, pre-K-12 schools and food businesses.

School Curriculum and Program Campaign

A-2

Target Audience: ICI / K-12

Solution Type: Prevention



Opportunity

Long-lasting and meaningful behavior change in the residential setting will be a result of consumers changing learned behaviors. This change will be a function of increased awareness about the causes of food waste, how it represents a misuse of resources, and why it is important environmentally, economically and socially. Perhaps the most effective institution to engage in this type of awareness campaign is the school system, both K – 12 and higher education and culinary trade programs.

Objective/Purpose

Develop educational resources that increase student awareness and participation in food waste reduction practices.

- Educate students on the importance preventing food waste at home and in school
- Equip public educational institutions to influence cultural behavior and knowledge as it relates to reducing food waste.
- Reach students through a range of strategies:
 - o Curriculum
 - o Special projects (composting, etc)
 - o Field trips, special speakers

Measurement and Impact

- Students reached (messed)
- Programs implemented
- Diversion achieved in school-based programs

Other Needs/Considerations

- Align this activity with Recycling Solution ‘promote and pilot food waste composting in schools’
- Aligns with LFAP Goal D-1
- Expand food waste prevention education campaigns for consumers, local governments, pre-K-12 schools and food businesses.

Grocery In-Store Point of Sale (POS) Consumer Messaging Campaign

A-3

Target Audience: Residential

Solution Type: Prevention



Opportunity

Grocery retail, or point of sale, is a common touch-point with consumers for food entering homes. A messaging campaign focused on grocery retail will influence consumers through education, knowledge building and recommendations for behavior change.

Objective/Purpose

Create consumer awareness about food waste and provide tips and resources for waste prevention and reduction.

- Utilize the most common touch-points in the supply chain related to in-home consumer food waste by messaging at the point of sale.
- Educate and Influence consumers at the food retail level
- Part of largescale food waste prevention advocacy campaign. (LFAP Action 157)

Measurement and Impact

Measurement Metrics could include:

- Number of consumer impressions (with help of grocery retail teams)
- Pre/post surveys at the point of sale measuring sentiment and consumer behavior change/actions over time.
- Surveys administered in advance of the campaign could also provide valuable information on current consumer awareness and identify specific areas that should be targeted with a campaign.

Other Needs/Considerations

- This solution is dependent on the willingness of grocery retail stores to participate
- Aligns with LFAP Goal D-1
- Expand food waste prevention education campaigns for consumers, local governments, pre-K-12 schools and food businesses.

Food Service Point of Sale (POS) Consumer Messaging Campaign

A-4

Target Audience: Residential

Solution Type: Prevention



Opportunity

Food service establishments represent a key interface between food service professionals and consumers, and therefore an opportunity for stakeholders to not only showcase their own actions to reduce food waste in food service settings, but also provide educational information to consumers about waste that may be generated in homes. A limited number of marketing collateral pieces will have visibility by many consumers during dining and take-out experiences.

Objective/Purpose

Create consumer awareness about food waste and provide tips and resources for prevention and reduction.

- Utilize one of the most universal consumer touch-points in the supply chain related to In-home consumer food waste by messaging at the point of sale for prepared-food.
- Educate and influence consumers at the food retail level.
- Part of large-scale food waste prevention advocacy campaign. (LFAP Action 157)

Measurement and Impact

- Number of consumer impressions (with help of grocery retail teams)
- Pre/post surveys at the point of sale measuring sentiment and consumer behavior change/actions over time.
- In-home but surveys may be used to gauge the number of impressions and any resulting action that came from those impressions.

Other Needs/Considerations

- This solution is dependent on the willingness of foodservice establishments to participate
- Aligns with LFAP Goal D-1
- Expand food waste prevention education campaigns for consumers, local governments, pre-K-12 schools and food businesses.

Employee Training

A-5

Target Audience: ICI

Solution Type: Prevention



Opportunity

In the commercial setting, employee practices are critical to reducing food waste generated both in back-of-house and front-of-house settings. Institutional guidelines should support best practices such as rightsizing portions, low waste food prep, appropriate food handling and storage, etc. However, in the food service industry where employee turnover is high, guidelines are often only as effective as the training which ensures they are followed.

Objective/Purpose

Establish and distribute simple and effective employee training resources to prevent and reduce food waste.

- Regional food service workers are trained in best practices
- Utilization of currently trained staff and managers knowledgeable in the areas of ServeSafe
- Leverage local culinary training programs to provide workshops to regional food service workers

Measurement and Impact

- Development of resources and case studies showcasing institutional training practices and the impact within the business
- Number of food service employees trained
- Number of programs providing training
- Number of trainers, individual workshops, etc.

Other Needs/Considerations

- Understand if there are existing relationships for education targeted at regional foodservice
- Culinary program curriculum
- Recruit a champion faculty member at training program
- Aligns with LFAP D-4, Provide training, tools and economic incentives for new and existing food businesses to develop, adopt and implement food waste prevention plans.
- Aligns with LFAP Goal D-1
- Expand food waste prevention education campaigns for consumers, local governments, pre-K-12 schools and food businesses.

Advocate for Improved Date Labeling

A-6	Target Audience: ICI	Solution Type: Prevention
	<p>Opportunity Confusion regarding interpretation of date labels on food packaging can lead to unnecessary wasting of food. Improving the consistent application, language and messaging related to date labeling can help to reduce waste.</p> <p>Objective/Purpose Advocate for improved date labeling at the State level to alleviate confusion and reduce food waste.</p> <p>Measurement and Impact</p> <ul style="list-style-type: none"> • Changes in policy to create clarity and consistency in date labeling standards <p>Other Needs/Considerations</p> <ul style="list-style-type: none"> • Date labeling is both a state and national policy issue 	

Increase Capacity for Rescue Outlets

B-1	Target Audience: ICI	Solution Type: Rescue
	<p>Opportunity The robust network of rescue opportunities in Central Ohio can expand its current capabilities to store rescued fresh foods to extend the life and usefulness of those fresh foods, and help to increase the amount of rescued food distributed that has nutritional value.</p> <p>Objective/Purpose Identify and promote equipment, methods, and resources for expanding capacity and extending the life of fresh foods at rescue outlets.</p> <ul style="list-style-type: none"> • Increase capacity to handle fresh and prepared foods • Improve and preserve nutritional value of rescued food • Reduce food wasted at end of rescue chain <p>Measurement and Impact</p> <ul style="list-style-type: none"> • Number of pieces of equipment installed • Reduction of wasted food that requires disposal/collection for composting / increased number of food/meals distributed 	

Food Rescue Promotion and Training

B-2

Target Audience: ICI

Solution Type: Rescue



Opportunity

Successful food rescue is dependent on the participation of establishments that have food to rescue and organizations that are available to distribute rescued food. Both generators and distributors rely on people to make this happen. In addition to volunteers and staff with rescue operations, employees at retail food stores and restaurants must understand how to support food rescue. Helping businesses overcome misconceptions about food donation liability and understanding protections under the Bill Emerson Good Samaritan Action will increase food rescue opportunities.

Objective/Purpose

Promote participation in food rescue activities to both generators (food retail and restaurants) and potential volunteers. Provide trainings and resources to enable participation.

- Increase the number of retail and dining businesses that contribute to rescued food
- Increase the number of volunteers participating
- Improve awareness and understanding of food safety best practices and rules
- Recover more food for distribution to those who need it

Measurement and Impact

- Number of people attending trainings
- Increased number of retail and food service establishments participating
- Increased number of food/meals distributed
- Increased number of volunteers

Other Needs/Considerations

- Includes prepared, fresh, and shelf-stable foods.
- Aligns with LFAP D-4, Provide training, tools and economic incentives for new and existing food businesses to develop, adopt and implement food waste prevention plans.
- Aligns with LFAP D-3, Recommend changes to policies, zoning and health codes that support and encourage food waste recovery and diversion.

Support Sharing Tables and Food Rescue from Schools

B-3	Target Audience: ICI / K-12	Solution Type: Rescue
	<p>Opportunity Schools often produce tremendous amounts of food waste. Sharing tables and rescuing edible food from schools has developed into a best practice around the county. These programs help reduce the amount of food waste generated and help to ensure disadvantaged students and families have access to nutritious foods.</p> <p>Objective/Purpose Establish resources and provide trainings to help schools launch sharing tables and connect with food rescue organizations.</p> <p>Measurement and Impact</p> <ul style="list-style-type: none"> • Number of schools participating in sharing tables • Number of schools participating in food rescue • Aligns with LFAP D-3, Recommend changes to policies, zoning and health codes that support and encourage food waste recovery and diversion. 	

Value-Added Products from Rescued Foods

B-4	Target Audience: ICI	Solution Type: Rescue
	<p>Opportunity Processing potential food waste into value-added products has proven to be an innovative approach to food rescue. Value-adding increases the economic value and job creation potential from food waste streams. Some examples include dehydrating foods, alternative flour sources, and prepared meals such as soup.</p> <p>Objective/Purpose Support businesses and entrepreneurs to start or expand value-added products from rescued foods.</p> <p>Measurement and Impact</p> <ul style="list-style-type: none"> • Number of businesses value-adding rescued foods • Amount of food diverted 	

Advocate for Increased Tax Deduction Benefits for Donating Food

B-5	Target Audience: ICI	Solution Type: Rescue
	<p>Opportunity Financial incentives are a main driver for businesses to donate or divert potential food waste. Increasing tax deduction benefits for donating food may increase food rescue efforts.</p> <p>Objective/Purpose Support legislation that increase tax deduction benefits for donating food.</p> <p>Measurement and Impact</p> <ul style="list-style-type: none"> • Legislative actions <p>Other Needs/Considerations</p> <ul style="list-style-type: none"> • Aligns with LFAP D-4, Provide training, tools and economic incentives for new and existing food businesses to develop, adopt and implement food waste prevention plans. 	

Catalyze Smart Growth for Community Food Waste Drop-Off Programs

C-1	Target Audience: Residential	Solution Type: Recycling
	<p>Opportunity Drop-off programs can provide economically feasible options for collection and processing of food waste items and help to address immediate capacity and demand needs. Food waste drop-off collection can take many forms. Some examples include utilizing small scale composting operations at existing community gardens, [technology/containers], and offering collection services at farmers markets, which is taking place currently.</p> <p>Objective/Purpose Evaluate suitable local options for community food waste drop-off programs. Promote existing opportunities and pilot the most feasible and sustainable approaches. Develop an approach based on analysis and best practices.</p> <p>Measurement and Impact Measure the success of the pilot(s) and programs; participation levels, users, amount of materials diverted, challenges, and financial sustainability</p> <p>Other Needs/Considerations</p> <ul style="list-style-type: none"> • Educational components for users of the drop-offs; how to use effectively • Communication and promotional efforts • Proper management of drop-off sites; preventing them from becoming a nuisance • Coordination with Local Food Action Plan and goal to support zoning and health codes that encourage alternative food waste disposal methods <p>Aligns with LFAP D-3, Recommend changes to policies, zoning and health codes that support and encourage food waste recovery and diversion.</p>	

Evaluate and Pilot Scalable Residential Curbside Collection of Source Separated Organics

C-2	Target Audience: Residential	Solution Type: Recycling
	<p>Opportunity Providing convenient collection to one of the largest generators of food waste – single family household residents – can dramatically reduce the amount of wasted food sent to landfills and increase the opportunity for recycling into compost. Source Separated Organics refers to multiple types of organic material being collected together, such as food waste, yard waste, and other compostable items. Developing cost effective models and incentives for this type of collection will be key to success.</p> <p>Objective/Purpose Pilot projects with a small sample of residential households will allow SWACO and its collaborators to test models for curbside collection of source separated organics, learn from the experience, and inform the development of a feasible program suitable for communities throughout the region.</p> <p>Measurement and Impact</p> <ul style="list-style-type: none"> • Participation of households • Diversion by households/pounds collected • Costs for collection and delivery to processing site <p>Other Needs/Considerations</p> <ul style="list-style-type: none"> • Implementation of this solution will be informed by outcomes of the Feasibility Study and innovation by existing service providers and entrepreneurs. • Coordination with Local Food Action Plan and goal to support zoning and health codes that encourage alternative food waste disposal methods 	

Promotion of Decentralized Food Waste Recycling

C-3	Target Audience: Residential	Solution Type: Recycling
	<p>Opportunity Currently, there are opportunities for residents to divert and recycle food waste. Some of these opportunities include backyard composting, vermicomposting, and use of kitchen disposal systems. While each of these options do have limitations, they can also be effective at diverting applicable portions of the food waste stream.</p> <p>Objective/Purpose Identify and promote low-impact options for residential food waste recycling. Developing support resources, materials, and incentives that enable residential participation.</p> <p>Measurement and Impact</p> <ul style="list-style-type: none"> • New and existing resources available and promoted • Participation levels • Estimated material diverted <p>Other Needs/Considerations</p> <ul style="list-style-type: none"> • Aligns with LFAP Goal D-2, Leverage food waste reduction resources and strategies to increase the number of residents who access training, education and equipment for effective backyard composting. <p>Aligns with LFAP D-3, Recommend changes to policies, zoning and health codes that support and encourage food waste recovery and diversion.</p>	

Promote Existing Programs and Services

C-4	Target Audience: ICI	Solution Type: Recycling
	<p>Opportunity A variety of service providers already exist in Central Ohio, each with their unique services and offerings. For example, much of the food waste currently being diverted goes to a local anaerobic digestion facility and used to create energy or is sent to farms and used as livestock feed. Some services are only offered to large generators while others provide collection options for residents. Combined, these existing service providers processed over 10,000 tons of food waste generated in Central Ohio during 2017.</p> <p>Objective/Purpose Promote existing options service providers to businesses and events through COFWI microsite and other outlets.</p> <p>Measurement and Impact</p> <ul style="list-style-type: none"> • Listing options on the microsite • Metrics will correspond with tonnage of material diverted and reported annually. <p>Other Needs/Considerations</p> <ul style="list-style-type: none"> • Work with service providers and agencies to ensure service providers and existing facilities are in compliance with rules and regulations. • Aligns with LFAP D-2, Leverage food waste reduction resources and strategies to increase the number of residents who access training, education and equipment for effective backyard composting. • Aligns with LFAP D-4, Provide training, tools and economic incentives for new and existing food businesses to develop, adopt and implement food waste prevention 	

Promote and Pilot Food Waste Collection in Schools

C-5

Target Audience: ICI / K-12

Solution Type: Recycling



Opportunity

Schools provide an ideal platform for introducing waste reduction and diversion activities. Implementing practices such as food waste reduction and diversion helps to introduce and promote these beneficial activities within communities and families.

Objective/Purpose

Promote resources, technical assistance, and support for establishing food waste diversion and composting opportunities in schools. Promote solutions that are adaptable and scalable.

Measurement and Impact

- Resources developed
- Number of schools participating
- Amount of food waste diverted (and reduced)
- Potential savings from landfilling costs

Other Needs/Considerations

This solution is dependent on the capacity and available options of existing service providers. Implementing such programs requires tremendous support from school administrations, including dedicated educational efforts and participation from staff, faculty, and students. Engagement and participation of the hauler/processor will be critical for success.

Business Incentives and Resources for Diversion

C-6

Target Audience: ICI

Solution Type: Recycling



Opportunity

Businesses are top generators of food waste. Cost, convenience, and ease of implementation are some of the biggest barriers to initiating food waste diversion practices. Providing new programs, services, resources, and incentives designed for businesses will help to alleviate challenges and increase participation in food waste diversion activities.

Objective/Purpose

Establish incentives and resources to increase business participation in food waste diversion activities.

Measurement and Impact

- Number of new programs, resources, and incentives offered
- Number of programs, resources, and incentives used
- Amount of food waste diverted
- Financial and environmental benefits

Food Waste Composting Feasibility Study

C-7	Target Audience: Residential, ICI	Solution Type: Recycling
	<p>Opportunity Scalable, reliable, and affordable options for food waste composting remains one of the biggest limitations to diverting food scraps within Central Ohio. While a lot of food can be rescued or prevented from becoming waste in the first place, the capacity to compost is a necessity for diverting food waste from landfills and has the potential for diverting the most amount of material.</p> <p>Objective/Purpose The feasibility study will help to determine viable options for developing a scalable composting facility capable of accepting food waste and compostable materials from the central Ohio region.</p> <p>Measurement and Impact The feasibility study will result in a written report. Metrics associated with a potential facility may include:</p> <ul style="list-style-type: none"> • Tons of food waste and other organic materials received. • Contamination levels and amounts. • Tons of marketable product produced. • Reduction of food waste within the waste stream (next waste characterization cycle) <p>Other Needs/Considerations The study will explore local and regional partnerships. The study will take into consideration the capacity and support of existing facilities accepting food waste.</p>	

Increase Regional Competition and Capacity for Food Waste Recycling Solutions

C-8	Target Audience: Residential, ICI	Solution Type: Recycling
	<p>Opportunity Capacity and market competition for viable food waste recycling solutions, such as composting, is currently one of the biggest barriers to increasing food waste diversion in the region. Evaluating and potentially pursuing recommendations included in the feasibility study may help to establish additional capacity and competition, helping to increase access to services and reduce cost. Other food waste recycling solutions such as depackaging capabilities and services may emerge as a result of increased visibility and demand from businesses and residents.</p> <p>Objective/Purpose Support opportunities to increase regional capacity and competition for food waste recycling solutions. Advance scalable solutions that promote a resilient system for food waste recycling.</p> <p>Measurement and Impact</p> <ul style="list-style-type: none"> • Number of accessible food waste recycling operations • Regional capacity for diverting and recycling food waste <p>Other Needs/Considerations</p> <ul style="list-style-type: none"> • Exploration of local and regional partnerships • Aligns with LFAP D-3, Recommend changes to policies, zoning and health codes that support and encourage food waste recovery and diversion. • Aligns with LFAP D-4, Provide training, tools and economic incentives for new and existing food businesses to develop, adopt and implement food waste prevention plans. 	

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

C-9

Target Audience: Residential, ICI

Solution Type: Prevention, Rescue, and Recycling



Opportunity

Creating solutions to solve the complex nature of food waste requires creativity, ingenuity, and persistence. These solutions will likely emerge through innovative approaches and supporting entrepreneurs within the food waste arena. Leveraging public-private partnerships, economic development initiatives, businesses support resources, and grant opportunities could help to fuel advancements in food waste reduction and diversion services.

Objective/Purpose

Through new and existing resources and partnerships, support innovation and entrepreneurs to develop solutions for enhancing food waste prevention, rescue, and recycling in Central Ohio.

Measurement and Impact

- Number of new businesses or services being offered
- Funding support, such as grants, leveraged
- New partnerships, programs, or resources offered to support food waste innovation

Other Needs/Considerations

- Aligns with LFAP D-3, Recommend changes to policies, zoning and health codes that support and encourage food waste recovery and diversion.
- Aligns with LFAP D-4, Provide training, tools and economic incentives for new and existing food businesses to develop, adopt and implement food waste prevention plans.

APPENDIX B

1 <https://sustainabledevelopment.un.org/sdg12>

2 <https://www.epa.gov/sustainable-management-food/united-states-2030-food-loss-and-waste-reduction-goal>

3 <https://www.nrdc.org/resources/wasted-how-america-losing-40-percent-its-food-farm-fork-landfill>

4 www.savethefood.com

5 <https://www.swaco.org/DocumentCenter/View/973/Final-SWACO-Waste-Characterization-Report---June-2013?bidId=>

6 <http://www.fao.org/policy-support/policy-themes/food-loss-food-waste/en/>

7 ICI: institutional, commercial, and industrial