



GreenTown Climate & Equity



C4 and Cook County Composting and Recycling: Engaging Schools and Municipal Governments

Jennifer Nelson, Program Director, Seven Generations Ahead

Becky Brodsky, Zero Waste Schools Program Manager

Katrina Thompson, Mayor, Village of Broadview



C4 Municipal Waste Reduction and Composting



Jennifer Nelson

Food Waste Reduction and Composting Program Director





Seven
Generations
Ahead

Nonprofit serving Illinois and the
Midwest since 2001

Mission: Promote ecologically
sustainable and healthy communities



Fox Valley
Sustainability
Network



FOOD TO CLIMATE - Connecting the Dots

Why communities should take action

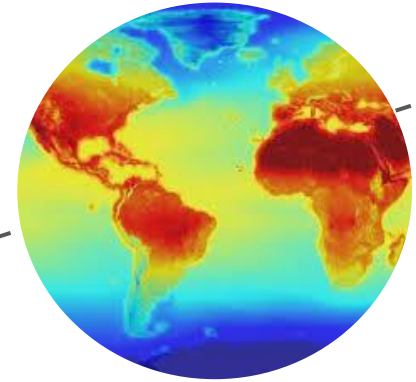
WASTED FOOD

is 21% of material sent to landfills



Wasted food in landfills creates **METHANE**, a greenhouse gas

Increased **GREENHOUSE GASSES** cause **GLOBAL WARMING**



Global warming (due to human activities) leads to long term changes to weather known as **CLIMATE CHANGE**

FOOD LOSS AND WASTE



Food waste is the single largest material sent to landfills.

Photo credit: SCARCE

Environmental Problem

Food production uses

- 50% of our land
- 30% of all energy resources
- 80% of all freshwater

Social Problem

- 38% of all food gets wasted
- 1 out of 7 Americans are food insecure

Economic Problem

For every dollar spent on food, society pays two dollars in health, environmental, and economic costs

Prevent | Rescue | Recycle

PREVENTING/reducing food waste helps conserve the resources used to produce, process, transport, prepare, store, and dispose of food. These resources include:

- land
- water
- labor
- energy



RESCUING/donating and redistributing surplus food provides safe and wholesome meals to those in need and reduces food insecurity.

RECYCLING/composting adds nutrients and organic matter back to soil, benefits agriculture:

- improves soil health
- reduces reliance on synthetic fertilizers
- diverts methane-producing organic materials from landfills
- improves soil water retention

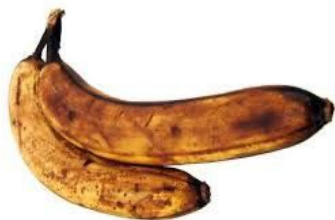


PREVENT wasted food



COMMUNITY MEMBERS

- education and raising awareness
- **community-wide challenge** to reduce wasted food
- **household waste audit program**



<https://www.epa.gov/sustainable-management-food/food-too-good-waste-implementation-guide-and-toolkit>

SMART PREP: PREP NOW, EAT LATER

Prepare perishable foods soon after shopping. It will be easier to whip up meals later in the week, saving time, effort, and money.

HELPFUL TIPS



- When you get home from the store, take the time to wash, dry, chop, dice, slice, and place your fresh food items in clear storage containers for snacks and easy cooking.
- Befriend your freezer and visit it often. Freeze food such as bread, sliced fruit, or meat that you know you won't be able to eat in time.
- Cut your time in the kitchen by preparing and freezing meals ahead of time.
- Prepare and cook perishable items, then freeze them for use throughout the month. For example, bake and freeze chicken breasts or fry and freeze taco meat.

EPA-530-16-F-014-E
February 2016

PREVENT wasted food

LOCAL GOVERNMENT

- food waste reduction actions in **municipal climate action plan**
- **city's commitment** to food waste reduction
- **city facilities** highlight food waste reduction efforts
- Require **public events** to adopt waste reduction strategies



[Achieving Zero Food Waste: A State Policy Toolkit](#)



[Preventing Wasted Food in Your Community: A Social Marketing Toolkit](#)

RESCUE wasted food

COMMUNITY

- Rescue **imperfect produce**
- **Donate food** to feed people
- **Donate money** to local food pantry
- **VOLUNTEER!!!**
- Encourage **local institutions** to donate food
- **Include links to local food distribution** organizations on local websites and in newsletters



RESCUE wasted food

LOCAL GOVERNMENT

- Surplus food donation **incentive or recognition programs**
- **Ordinance** supporting a surplus food capture program
- **Address regulatory and other barriers**
- **Include links to local food distribution organizations on website and in newsletters**

FEDERAL

Bill Emerson Good Samaritan
Food Donation Act

- [USDA Policy Memo SP41 CACFP13 SFSP15-2016: The Use of Share Tables in Child Nutrition Programs](#)
- [USDA Policy Memo SP 11-2012, CACFP 05-2012, SFSP 07-2012: Guidance on the Food Donation Program in Child Nutrition Programs](#)

STATE

Good Samaritan Food Donation Act
CIVIL IMMUNITIES (745 ILCS 50/)

- [Illinois School Board of Education School Nutrition Programs Administrative Handbook](#)

LOCAL

Share food donation SOPs (Standard Operating Procedures) with food businesses and health department

RECYCLE food scraps to return nutrients to soil

COMMUNITY

- **Compost at home** or use a food scrap collection service
- **Use finished compost** in your yard and garden
- Provide **community education** on composting
 - block parties
 - local events
- Promote **composting at community gardens** and urban farms



RECYCLE food scraps to return nutrients to soil

LOCAL GOVERNMENT

- **Curbside food scrap collection** for residents
- **Incentives for commercial food waste generators** to divert food waste
- **Reduce regulatory barriers**
- **Procurement policy** favoring use of finished compost products in earth disturbing activities

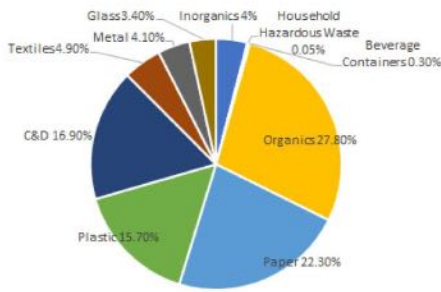


[Composting Food Scraps in Your Community: A Social Marketing Toolkit](#)

MUNICIPAL COMPOSTING

Composting is nature's way of recycling. It is the process that converts organic material, including food scraps and yard waste, into nutrient-rich, fertile soil that can be used to grow more food and other plants. By composting our post-consumer food, we **transform these scraps from waste into a vital resource.**

Across the nation, composting is developing as a viable, locally-based industry that achieves multiple objectives related to economic development, job creation, cost savings, and environmental sustainability.



2015 Illinois Commodity/Waste Generation and Characterization Study Update

Composting is vital to implement because it provides many benefits to **people**, the **environment**, and our **economy**. Many Illinois municipalities provide compost hauling services to residents due to yard waste being banned from landfills in Illinois since 1990. With almost 30% of our garbage being organics (yard waste and food scraps), there is significant opportunity to compost food scraps. In many cases, this will make a significant difference in waste diversion while not adding any additional hauling cost for either the municipality or the residents.

Options for residential composting:



Seasonal Residential
Ride-Along With Yard
Waste



Residential Year Round
Compost (3rd Bin)



Container Swap



Drop Off Events



Municipal Drop Off

Why compost food scraps?

Composting programs is growing, so improving municipal sustainability and cost savings may support for current governance and attract prospective residents to the area.

As of 2021, Illinois ranks in the county for number of municipalities offering food collection.

WATER

Creating "dead zones" in our water while storm water runoff is high, compost reduces the need for fertilizers, increases filtration and improves soil, mitigating erosion and sediment runoff.

Water Stewardship of water use of natural and built environment to reduce stormwater.

ECOSYSTEMS

Urban development is hurting our ecosystems and natural resources. Composting combats this by improving soil texture and soil's ability to retain nutrients, air and water.

GRC GOALS MET: (1) Conserve, restore and enhance natural features and ecosystems; (2) Sustain beautiful landscapes that provide ecosystem services

CLIMATE CHANGE

By reducing their carbon footprint, methane produced by landfills through composting found in landfills, which is a potent greenhouse gas.

ENERGY

There is currently still a lack of a robust market in renewable energy. Diverting organics from landfills supplies anaerobic digestion operations with materials for renewable energy sources.

GRC GOALS MET: (1) Advance renewable energy; (2) Engage the community in clean energy practices

WASTE

Organic material is wasted when disposed of in landfills and decreases the life expectancy and capacity of landfills by taking up space. Composting diverts 20% of materials, recovers valuable nutrients, and increases the capacity and longevity of landfills.

GRC GOALS MET: (1) Divert waste from landfills; (2) Engage the community in waste reduction and recycling.

Sevens Generations Ahead
Sustainable Communities



According to a survey by BioCycle and the Institute for Local Self-Reliance (ILSR) of residential food waste collection programs across the U.S. . 2021

Food Scrap & Composting Coalition
Partnership between Kinship Foundation and The Chicago Community Trust.

SNAPSHOTS

Municipal Food Scrap Collection in Illinois

70+ Illinois municipalities offer food scrap collection for residents

- 6 year-round programs in Lake County
- 2 year-round programs in Cook County
- Others are seasonal during yard waste collection season

MOUNT PROSPECT, Illinois

Unlimited Organics Collection Program - in addition to the collection of yard waste, the village will accept organics material including fruits, vegetables, meat, etc. **This service is provided to all residents for no additional charge.** Service is provided from April – mid – December.



SNAPSHOTS

Municipal Food Scrap Collection in Illinois



DIVERSION

2013: 9.93%
2014: 12.18%
2015: 12.86%
2016: 12.36%
2017: 12.51%
2018: 14.24%
2019: 16.18%
2020: 16.51%
2021: 16.13%
2022: 17.03%

OAK PARK, Illinois

Oak Park's CompostAble program began as a pilot program in 2012 as an addition to the annual fall yard waste collection service.

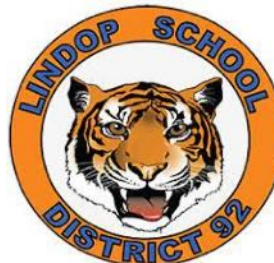
- extended through the winter months
- January 2013: program expanded Village-wide
- now: about 25% of the residential customer base is participating
- now includes drop off locations
- Price went from \$14/month in 2013 to \$15.68/month



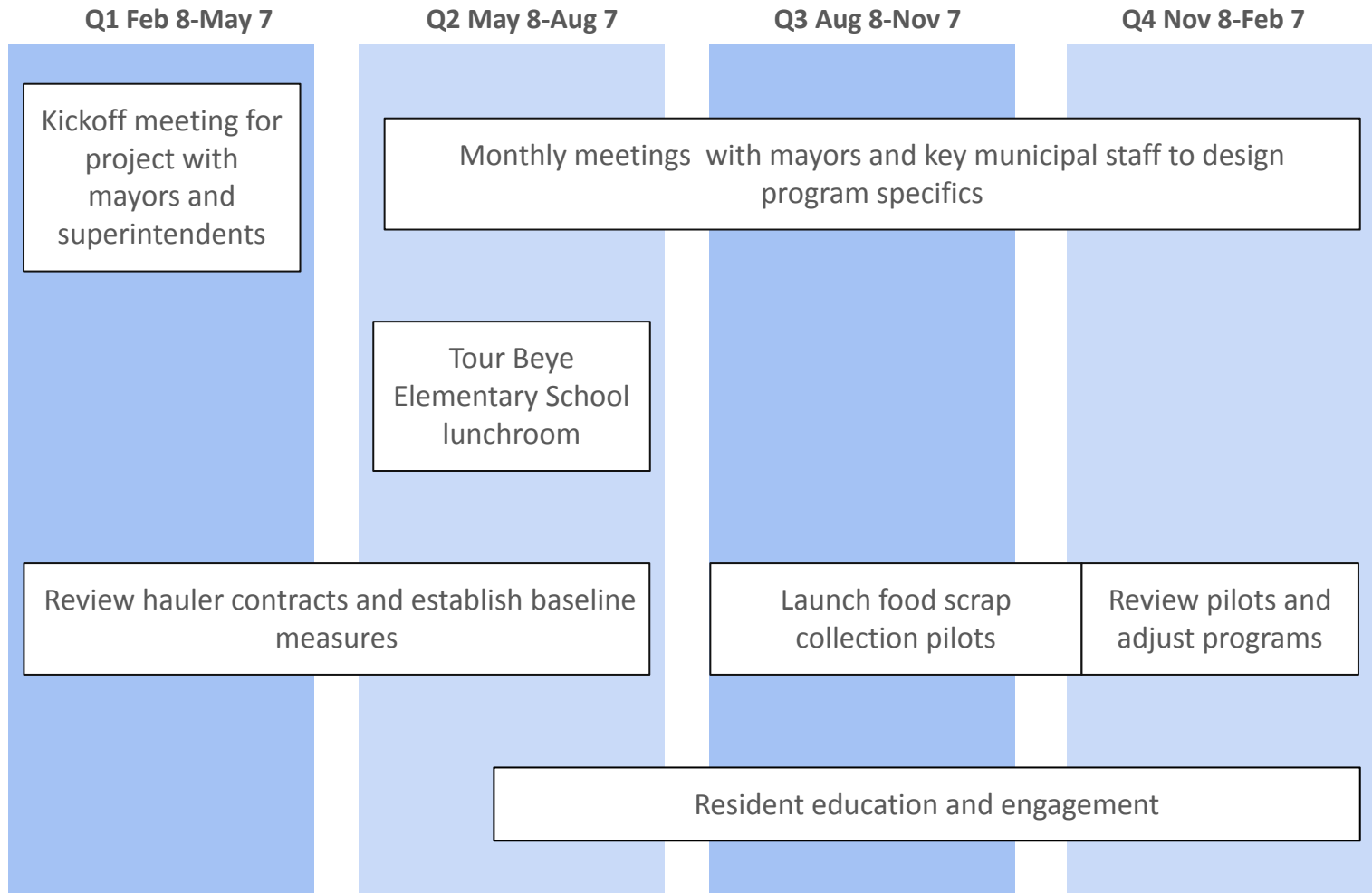
C4 Compost and Food Waste Reduction Project Kickoff

Bellwood | Broadview | Maywood

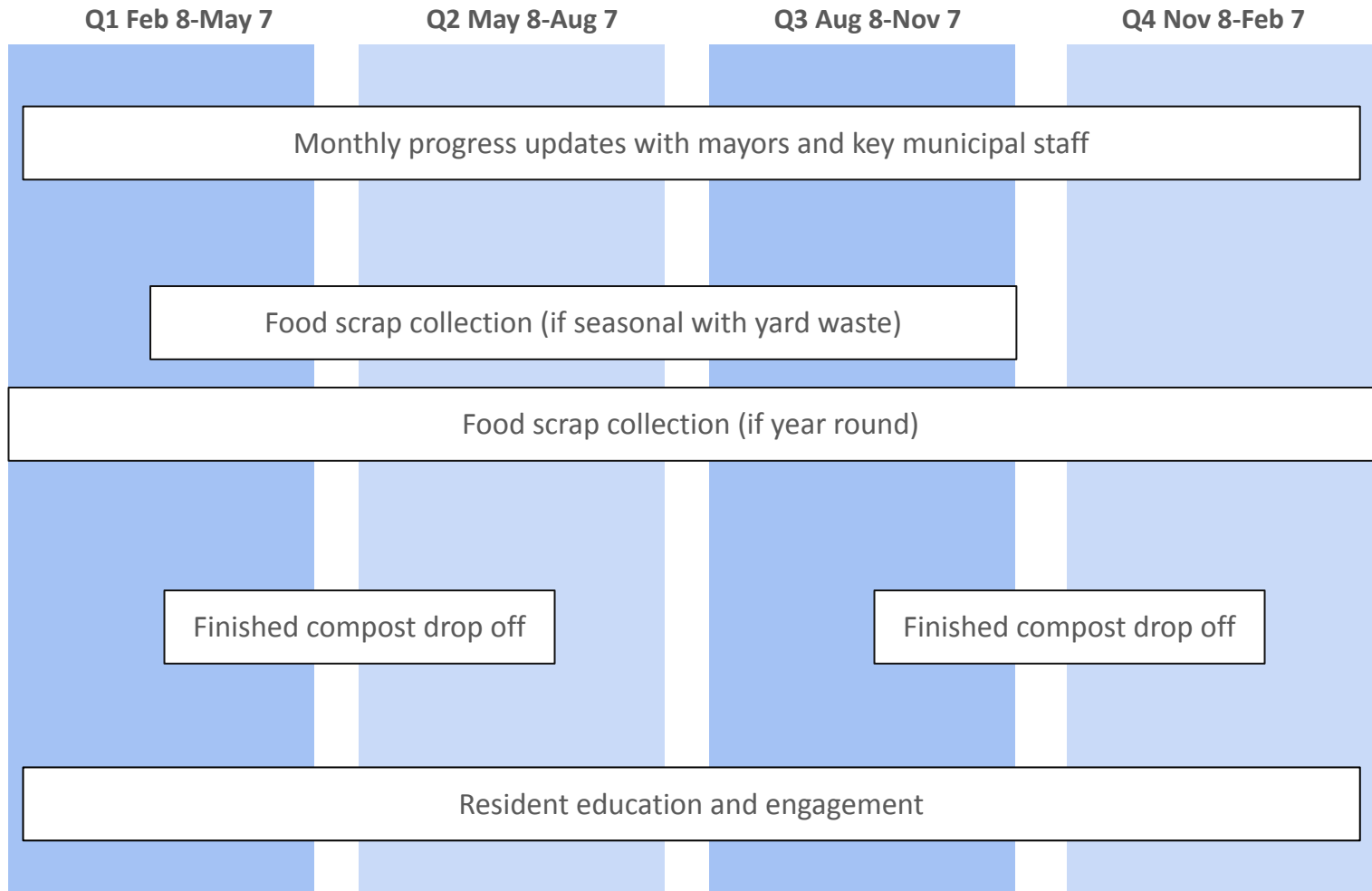
March 1, 2023



THE PROCESS - Year 1



THE PROCESS - Year 2



RESOURCES – Reducing Wasted Food and Composting



COMPOSTING

Working to strengthen Illinois

- Policy
- Infrastructure
- Education



WASTED FOOD

Building connections across the food supply chain to

- PREVENT/reduce
- RESCUE/donate
- RECYCLE/compost



Website

illinoiscomposts.org

[Composting at Home](#) webpage

Infographics

[Municipal Composting Impact](#)

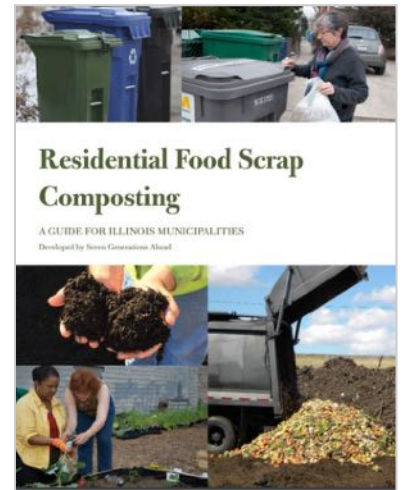
Guides and Toolkits

[Residential Food Scrap Composting: A Guide for Illinois Municipalities](#)

[Illinois Composting Municipalities by County](#)- Spreadsheet of municipalities with available residential curbside food scrap composting programs.



Illinois Municipal Residential Food Scrap Composting Programs									
Location					Program Information Basics				
County	Municipality	Duration	Type	Acceptable Items	Cost to Resident	Hours	Municipal Website		
Champaign	Champaign Heights	Seasonal (April to October)	Curbside	Food scraps, yard waste, brush and large items	Free	8:00am - 5:00pm	www.champaignheights.org		
Champaign	Barrington	Seasonal (April to October)	Curbside	Food scraps, yard waste, brush and large items	Free	8:00am - 5:00pm	www.barrington.org		
Champaign	Bloomington	Seasonal (April to October)	Curbside	Food scraps, yard waste, brush and large items	Free	8:00am - 5:00pm	www.bloomington.org		
Champaign	Urbana	Seasonal (April to October)	Curbside	Food scraps, yard waste, brush and large items	Free	8:00am - 5:00pm	www.urbanatoday.com		
Champaign	Urbana	Seasonal (April to October)	Curbside	Food scraps, yard waste, brush and large items	Free	8:00am - 5:00pm	www.urbanatoday.com		



GET STARTED

- Advocate for recycling and composting in your municipality
- Start or join an environmental/conservation commission or Go Green group
- Encourage decision makers to learn from municipalities and schools in the area that are composting

RESIDENTIAL

[Residential Food Scrap Composting Guide](#)

SCHOOLS

[Zero Waste Schools Toolkit](#)


[Food Waste Reduction Toolkit for Illinois Schools](#)



Residential Food Scrap Composting

A GUIDE FOR ILLINOIS MUNICIPALITIES
Developed by Seven Generations Ahead





“Our challenge should not be how to grow more food, but to feed more people while wasting less of what we already produce.”

-World Wildlife Fund

Thank you!

Jennifer Nelson

Program Director

Illinois Food Scrap & Composting Coalition, Founding
Board Member; Education Committee Chair

Wasted Food Action Alliance, Co-Facilitator

jennifer@sevendgenerationsahead.org

708.628.5272



Zero Waste Schools



Becky Brodsky, Zero Waste Schools Program Manager



Zero Waste Schools Program

We work with school staff and students to shift operations and minds towards generating zero waste through **source reduction, recycling, composting, and food recovery.**

- Help schools plan effective waste reduction strategies
- Provide on-the-ground support for operational changes
- Educate students and staff about the How and Why of going zero waste
- Connect schools with local partners and opportunities
- Drive policy changes and infrastructure development that promote zero waste

Our work

- Commercial composting and recycling
- Plastics reduction
- Food waste reduction
- Waste audits
- Education
- ZW resources



ZERO WASTE SCHOOLS EVENT GUIDE

Make your next school event a good time for everyone, including the planet, go for zero waste! With a little advanced planning, school picnics, festivals, sporting events, graduation parties, meetings, and more can all be accomplished with a lot less waste. Zero waste is a path, and even small steps are great opportunities to teach others how it can be done. Zero waste is a path, and even small steps toward the goal of zero waste can make a difference.

What is zero waste?
According to the Zero Waste International Alliance, zero waste is the conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging and materials without burning and with no discharges to land, water, or air that threaten the environment or human health.

Get to zero waste with the 5 R's: **Refuse, Reduce, Reuse, Recycle, Rot (Compost)**. While recycling and composting are important ways to divert waste, it's even better to refuse, reduce, and reuse to avoid creating waste in the first place, so prioritize those strategies whenever possible.

BEFORE THE EVENT

Volunteers
Think about what volunteer roles you may need in advance and allow enough time to recruit them. Depending on your event, you may need volunteers to:

- Monitor sorting stations and help guests sort their waste into recycling, compost, and landfill.
- Purchase or bring existing foodware and other items that are reusable, recyclable, or compostable.
- Purchase food that minimizes waste.
- Wash and store reusable items after the event.
- Coordinate with the school custodian to set up sorting station bins and make sure the sorted material gets to the right place after the event.

For larger or more complex events, it can help to appoint a zero waste coordinator to oversee waste reduction initiatives and assign tasks to volunteers.

Event promotion
Make sure to advertise that the event will be zero waste in advance so guests know what to expect and can come prepared. If needed, for example, if you'd like guests to bring their own water bottles or other reusables, include that information with your event promotion. Promoting the event electronically, rather than with physical invitations or fliers, is also a great way to reduce waste.

LUNCHROOM WASTE AUDIT GUIDE

Why conduct a lunchroom waste audit?
Lunchrooms are one of the biggest sources of waste in schools. On any given school lunch day, schools are served from three meals ending up in landfills. While single-use materials are being up-cycled, much of the waste, food is often the largest component by weight in lunchroom waste bins.

Waste from school lunchrooms has environmental, economic, and social impacts. While food waste and other organic materials decompose in landfills, they generate methane, a greenhouse gas that absorbs over 25 times more heat than carbon dioxide in the atmosphere. Additionally, when food is landfilled, the nutrients contained in the food are lost, along with the energy, water, and labor that went into its production, transportation, and preparation in the United States, 40% of all food is landfilled. 1 in 7 Americans face food insecurity.

A small amount of lunchroom waste can be generated or diverted from landfills through source reduction, prevention, food recovery, and composting. Conducting a waste audit is a great first step schools can take to reduce waste. Waste audits are also opportunities for students to learn the potential for prevention initiatives and to practice their skills in their own school.

About this guide
This waste audit guide will help you determine how much of your school lunchroom waste stream is: what you can take back (prepared pre-packaged food and/or other items that can be taken back, reused, or recycled).

- Single-use items
- Recyclable
- Compostable food scraps
- Landfill trash

This guide is accompanied by a sortable data form. After the data is collected, you can use it to create pie charts to show your data graphically.

U.S. Department of Agriculture, National School Lunch Program
New Mexico State University Extension Service
U.S. Environmental Protection Agency, Understanding Food Waste Programs
www.epa.gov/foodwasteandrecycling/understanding-food-waste-programs

Why go zero waste?

- Gives students something positive that they can do on a daily basis to combat climate change
- Empowers students and provides leadership opportunities
- School can serve as a model for other schools
- Potential for cost savings
- Can make curricular connections
- Contributes to community zero waste goals



The problem with single-use plastics

About half of all plastic produced is used once then thrown away-- by design.



The US generates the most plastic waste of any country in the world
-- 42 million metric tons per year.

.

Single-use plastics in school lunches

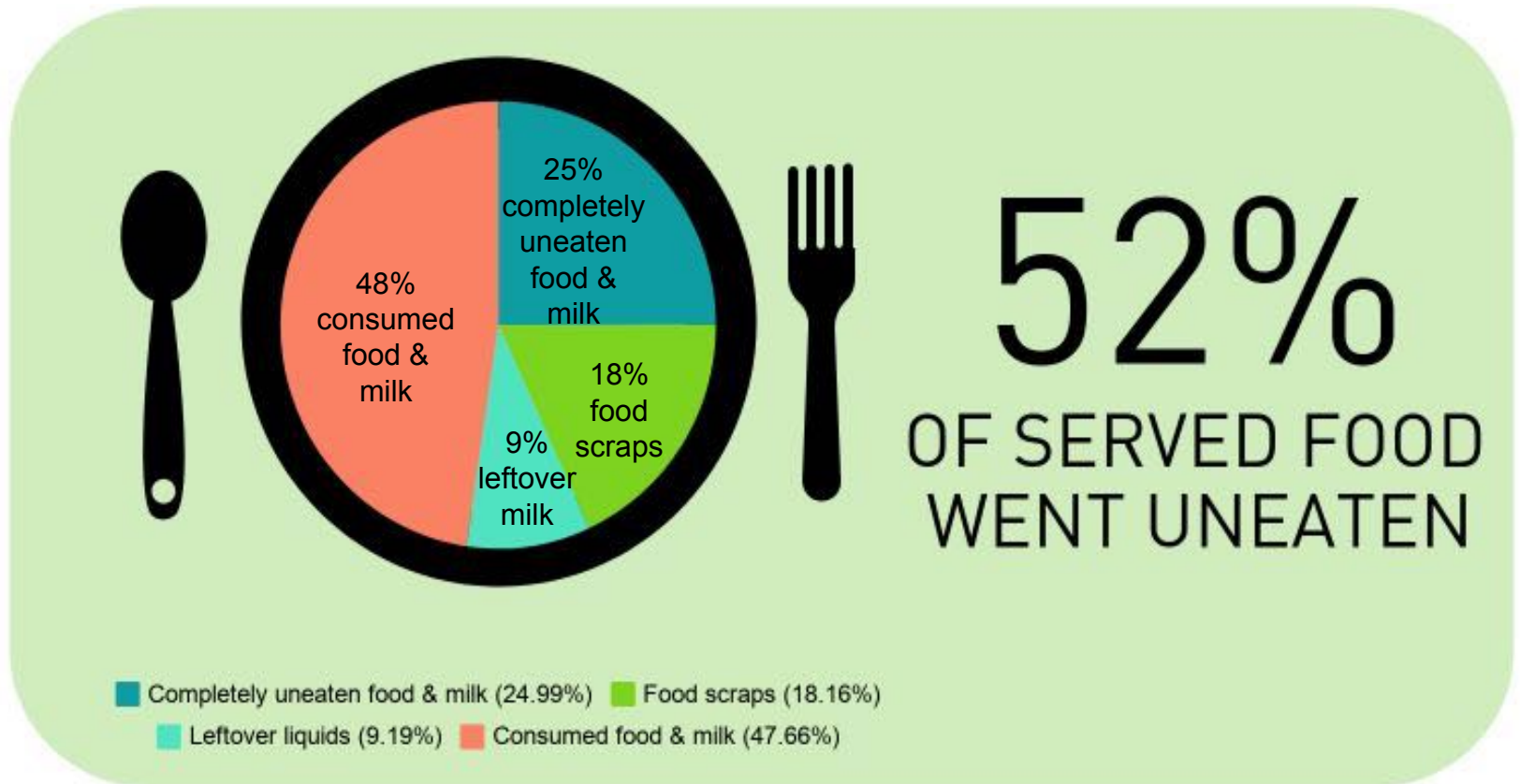


The problem with food waste

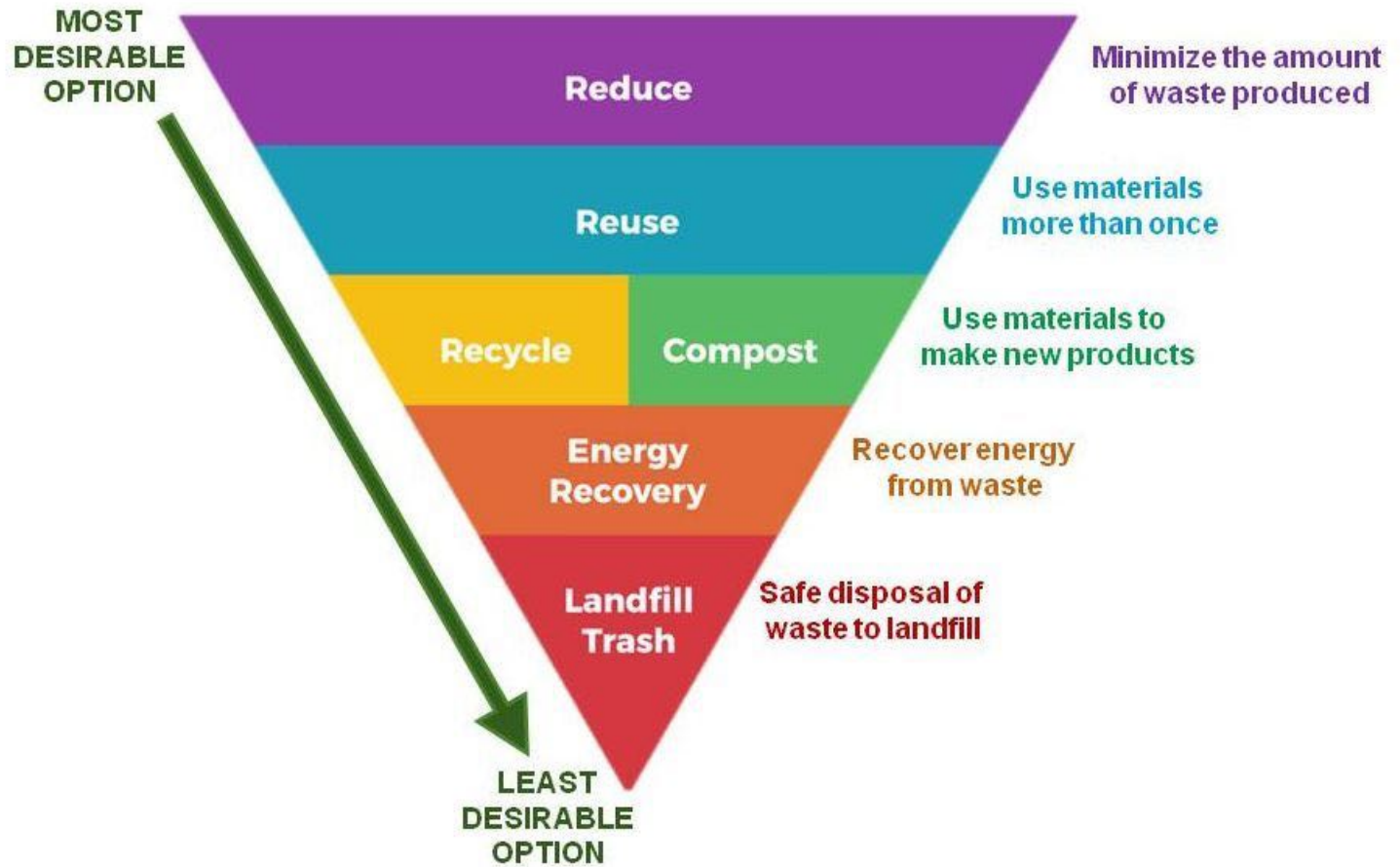
- Over 7 billion school meals are served each year in the U.S.
- Much of that food is going to landfills rather than nourishing students
- 1 in 6 children is food insecure
- Wasting food wastes the water and energy used in growing, processing, transporting, and preparing the food
- Wasting food wastes money and labor along the entire supply chain
- Food waste in landfills produces methane – a harmful greenhouse gas that contributes to climate change



The food consumed vs. the food not eaten/partially eaten



Getting to zero waste



Source: Solana Center for Environmental Innovation

Waste prevention/reduction

Single-use plastics reduction

- Reusable food ware
- Bulk dispensers
- Eliminate straws
- Plastic Free Lunch Day
- Zero waste lunches from home



Procurement choices

BAD

Polystyrene trays & spork packets



BETTER

PFAS-free molded fiber compostable foodware



BEST

Reusable trays, utensils, cups



Food waste reduction

- 'Offer Versus Serve' method
- Scheduling
 - Longer seated lunch time
 - Recess before lunch
- Menu planning & food preparation
 - Student taste tests
 - Serve cut fruit, instead of whole fruit
- Share Tables



Share tables

Share tables are where students may place **items from the school lunch** (unopened, factory-sealed items or whole fruit) they did not eat.

Depending on local health codes, foods left on a share table may be:

- Taken by other students during the same meal period: “Two-way share table” (students give & take)
- “One-way” share table: (students give but don’t take items directly)
- Used in future reimbursable meals
- Donated to a food pantry or other outside organization



Check with your local health department for regulations around share tables.

Waste diversion

We help lunchrooms that look like this...



Become zero waste lunchrooms that look like this...



Lunchroom sorting station



Steps to a zero waste lunchroom

- Build a Zero Waste Team
- Plan waste reduction strategies
 - Procurement, prevention
 - Food recovery, share tables
 - Composting, recycling
- Coordinate operational changes
 - Hauling
 - Sorting stations & bags
- Educate about the How & Why
 - All students & teachers
 - Food service & facilities staff
- Organize student monitors
- Implement strategies
 - Launch new routines
 - Launch day waste audit
- Right-size hauling services
- Communicate & celebrate impact



Zero Waste Team meeting



Compost/Organics hauling



Education/Monitoring



Waste audit

Getting started with commercial composting

Before starting a composting program, schools will need to:

- Identify a hauler
- Find out what organic materials the hauler accepts
 - All food scraps?
 - Compostable foodware?
 - Compostable liner bags?
- Select collection containers for the lunchroom

In Illinois, the [Illinois Food Scrap and Composting Coalition](#) website can help schools find the following services in their area:

- Food scrap haulers
- Commercial compost processors



Waste audit



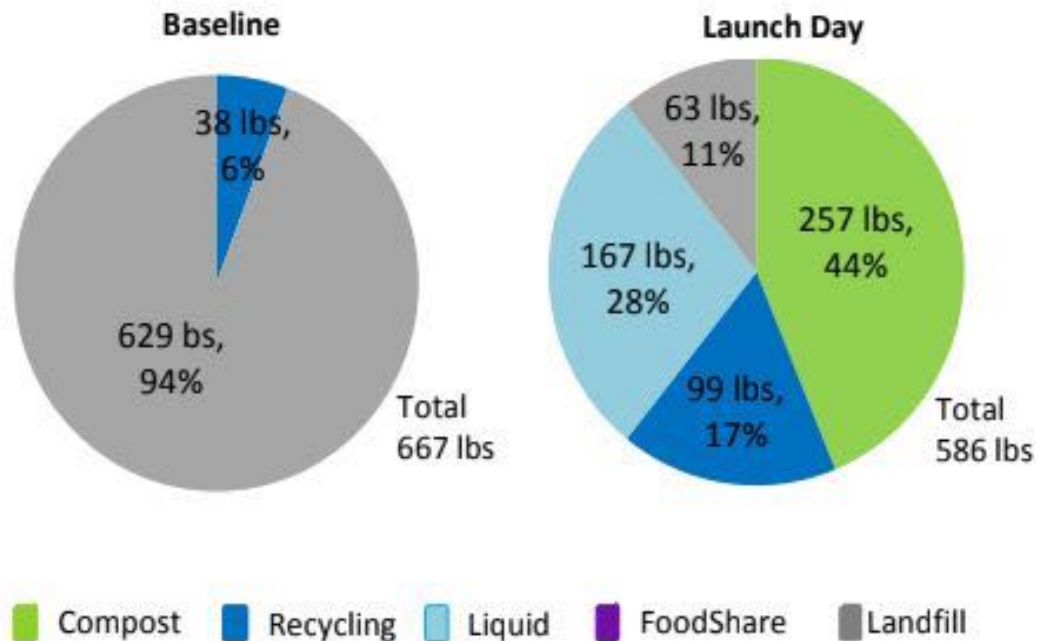
Impact: Diversion with recycling and commercial composting

Launch day at Sandoval Elementary
(1,015 K-5 students)



The lunchroom went from 25 trash bags per day to 2 bags per day.

Waste Audits of Cafeteria/Kitchen



Zero Waste Lunchrooms



Zero Waste Schools and C4 - USDA Composting and Waste Reduction Grant Program Feb. 2023 - Feb. 2025



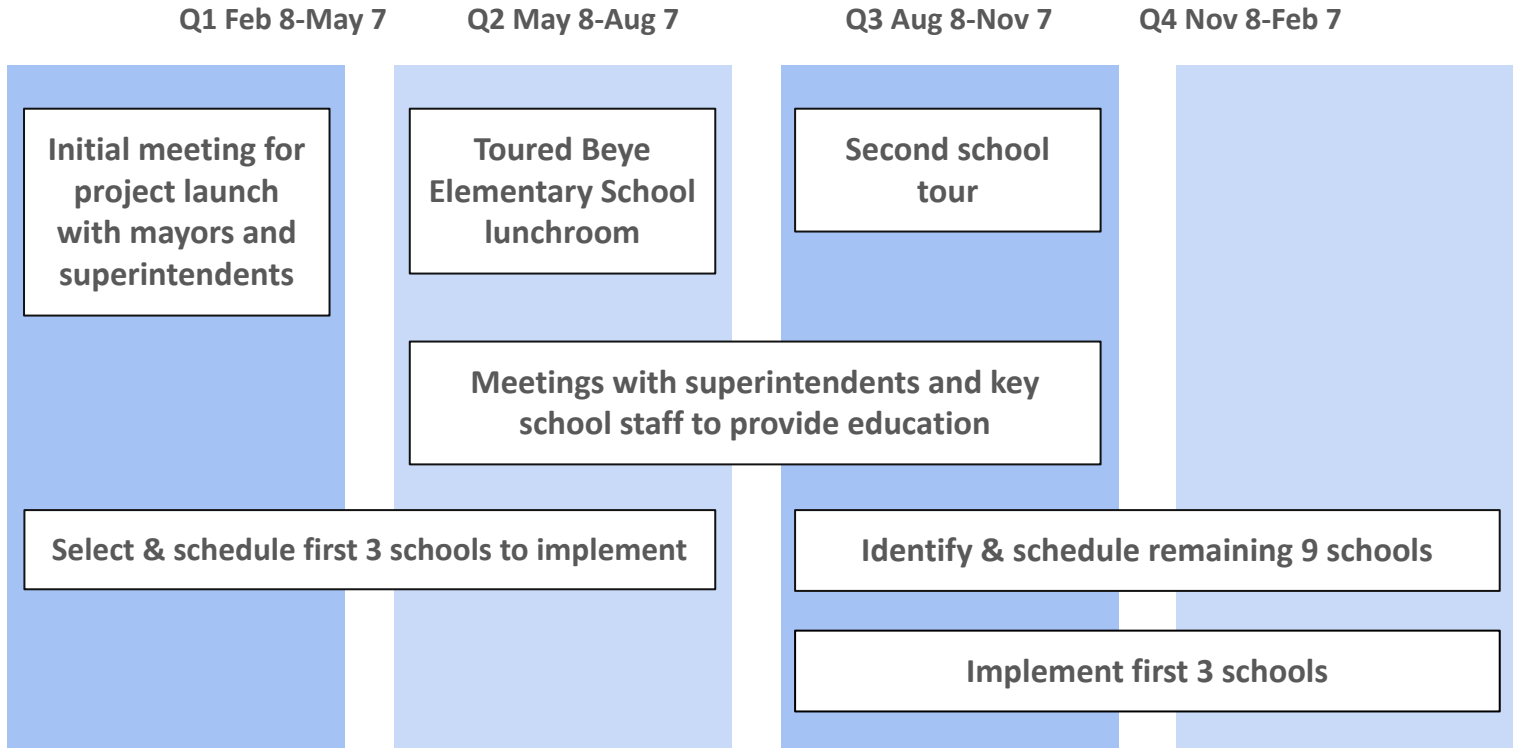
- Working with 12 elementary schools in 3 communities
- Surrounding communities will share best practices
- Working within a tighter timeframe than usual
- Will systematize the program at the district level so it can eventually be implemented in all schools
- Schools will serve as a model for neighboring communities
- Complements the municipal program
- Tailoring the program to meet the needs of each school



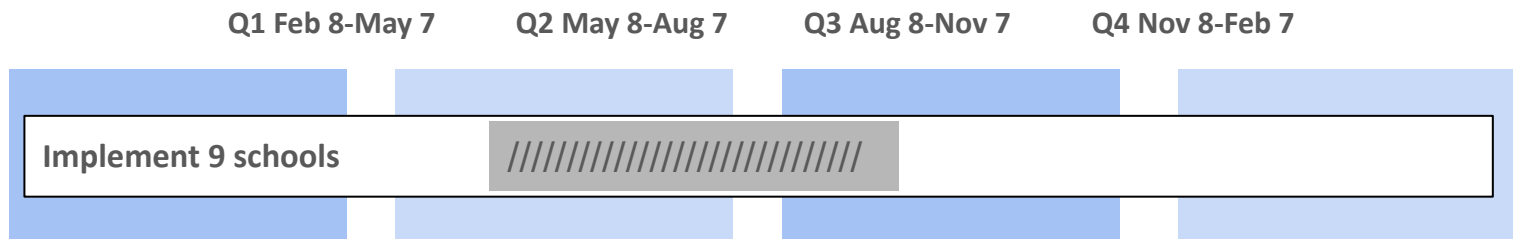
The process



YEAR 1



YEAR 2



How can your school get started?

- Advocate for recycling and composting in your district
- Start a district and/or school green team
- Encourage decision makers to visit schools in the area that are composting
- [Zero Waste Schools Toolkit](#)
- [Food Waste Reduction Toolkit for Illinois Schools](#)
- [Zero Waste Schools monthly e-newsletter](#)
- [IL Green Schools Project](#)



Becky Brodsky, Zero Waste Schools Program Manager

becky@sevendgenerationsahead.org

773.682.7887

