



THE FOOD MATTERS BEGINNER'S GUIDE



NRDC
NATURAL RESOURCES
DEFENSE COUNCIL

With support from:



The
ROCKEFELLER
FOUNDATION



WHY FOOD WASTE?

**UP TO 40% OF ALL
FOOD GOES UNEATEN**

**ENOUGH TO FEED 164
MILLION PEOPLE**



21%

**OF U.S. AGRICULTURAL
WATER USE**

19%

OF CROPLAND

21%

OF FERTILIZER

22%

OF LANDFILL CONTENT

37m

CARS-WORTH OF GHGS

UP TO 40 PERCENT OF FOOD IN THE UNITED STATES IS WASTED. Producing food that we don't consume also swallows up roughly 20 percent of America's cropland, fertilizers, and agricultural water—and generates greenhouse gas emissions equivalent to 37 million passenger vehicles each year. Yet, 41 million Americans lack consistent access to adequate and nutritious food. But the solutions to the enormous challenge of food waste are often well within reach, and their implementation can have substantial positive impacts, particularly at the local level. By reducing the amount of food that is thrown out, cities can stabilize their waste management costs and make progress toward climate and sustainability goals. By rescuing surplus food, municipalities can address food gaps in local communities. And by recycling food scraps, cities can minimize what goes into landfills and incinerators.

The Food Matters Project

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In 2017, NRDC, with support from The Rockefeller Foundation, released two Food Matters reports that looked at what we waste and how we can expand the amount of food rescued in three U.S. cities: Denver, Nashville, and New York City.

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Since then, NRDC has been working with a network of municipalities, including our model cities, Denver and Baltimore, to drive dramatic, system-wide food waste reduction.

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This guide builds on NRDC's extensive research and experience working with cities on food waste to help more of them implement effective food waste reduction strategies of their own.



GETTING STARTED

POWER IN NUMBERS: LEVERAGE OTHER CITIES IN THE FIGHT AGAINST FOOD WASTE

Cities are leading the charge on food waste, and there is power in numbers. Connecting to other national or international city networks allows you to share best practices and learn from others' experiences, saving your city time and money. Here are a few city networks and organizations you can get involved with, in addition to NRDC.

- Urban Sustainability Directors Network (USDN), a network of local government professionals across the United States and Canada dedicated to creating a healthier environment, economic prosperity, and increased social equity.
- C40, a network of the world's megacities committed to addressing climate change.
- ICLEI, a global network of more than 1,750 local and regional governments committed to sustainable urban development.
- Milan Urban Food Policy Pact (MUFPP), an international agreement signed so far by 209 cities around the world committed to improving the food system.

The Toolkit



City officials looking to reduce food waste should start by reading NRDC's *Tackling Food Waste in Cities: A Policy and Program Toolkit*. It is aimed at municipal policymakers and agency staff nationwide who want to start a program or implement policies to prevent food from being wasted in the first place, increase donation of surplus food, and recycle food scraps.

The toolkit and package of resources is designed to offer cities a starting point and a clear path for continued progress and impact. Taking relatively small steps can have a big effect and help make communities more resilient, economically vibrant, and equitable.

THE TOOLKIT INCLUDES:

- a carefully chosen set of approaches to tackle food waste at the local level
- examples of successful programs and policies implemented by NRDC in a variety of cities

How to Use the Toolkit

The toolkit is divided into four sections. Each section identifies one or more strategies, which can be thought of as “what” a city can do. Within each strategy are one or more actions, which can be thought of as “how” a city can accomplish it.



RETHINK

contains foundational strategies designed to define the scale and nature of the problem and to inform future policy and program development.



REDUCE

involves preventing food from being wasted in the first place.



RESCUE

suggests how to redirect surplus food to those in need.



RECYCLE

explains how to capture food scraps as a resource through composting and anaerobic digestion.

Taking relatively small steps can have a big effect and help make communities more resilient, economically vibrant, and equitable.



STRATEGIES TO CONSIDER

Identify the strategies that are the most relevant to your city's circumstance from the wheel below. Use the tools described on the following pages to help you implement the strategies to catalyze change.





Secure a public commitment from your mayor or other senior policymaker, both to set the course for transparent and accountable progress and to gain momentum and visibility for your city's efforts.



FOUNDATIONS OF AN EFFECTIVE STRATEGY

MEASURE, SO YOU CAN MANAGE

- NRDC's [Baseline Calculator](#) and [assessment methodologies](#) are indispensable starting points for any city trying to tackle food waste. By identifying where, how, and why food waste occurs, cities can more easily develop a road map or action plan.
- Likewise, [tracking progress](#) through a robust set of metrics is imperative to maximize impact and ensure longevity in food waste initiatives.

IDENTIFY CO-BENEFITS AND USE THEM TO YOUR ADVANTAGE

- Different cities have different social, economic, and environmental priorities driving local policy. Addressing food waste can support job growth, increase resiliency, reduce food insecurity, and relieve a multitude of other urban pain points. Cite these, as relevant, to enlist the support of elected officials and other key decisionmakers.

BUILD STAKEHOLDER RELATIONSHIPS AND COMMUNICATE ABOUT THE WORK

See our [Food Waste Strategic Communications and Partnership Guide](#)

- This companion piece to the toolkit provides a framework for effective communication between cities and internal and external audiences.
- When a thoughtful communications plan is executed to create awareness and celebrate solutions, the city can gain broader support from stakeholders to continue to implement a food waste strategy. It can also validate the use of city budgets for this work and even lead to unexpected funding or support from organizations inspired by stories they see in the media.

DEDICATE CITY STAFF TIME TO LEAD THIS WORK

See our [Job Description for a Food Waste Coordinator](#)

- Identify dedicated personnel to lead and manage relationships across departments. Addressing food waste is not the sole responsibility of any one city office or agency, so strong leadership is essential to galvanize internal support and coordinate a variety of staff with disparate departmental objectives.

ENGAGE LOCAL PARTNERS

See our [Local Grants Program Case Study](#)

- Work with local partners to anticipate and address roadblocks that local nonprofits and service providers may encounter when trying to implement new city-led food waste reduction activities. The people closest to a problem are the best equipped with the knowledge and experience to design solutions.



Rethink Tools



Guide to Making a Public Commitment on Food Waste

Making a public commitment to reduce food waste is an important way to harness city leadership and constituent buy-in. It also increases accountability and can inspire other cities.

Start developing a food waste baseline by contacting NRDC today: foodmatters@nrdc.org



Assessing Progress on Food Waste Interventions at the City Level

Cities engaging in food waste initiatives are increasingly interested in assessing how effective those initiatives are, in order to determine where to allocate current and future resources for food waste policies and programs.

Public Commitment to Reduce Food Waste

- Making a public commitment to reduce food waste demonstrates municipal initiative and leadership, increases accountability, and gives you access to a community that can support your work. Ideally, a public goal will be developed and publicized at the outset of your food waste work, by the mayor's office or another relevant agency. This guide provides examples of public commitments and details how to decide which commitments make sense, which stakeholders will be involved, and what the initiative will mean for your city.
- Review the examples of different public commitments for inspiration, and determine how to make a public commitment that best supports your work.

Food Waste Generation and Food Rescue Potential Baseline Calculator Guide

- To help cities set short-term and long-term targets and elevate strategies for food waste reduction and food rescue, NRDC developed a calculator based on our [original research](#). This research provides detailed methodologies for conducting a food waste assessment in municipalities.
- Beyond understanding how much and what food is wasted, these insights can help you frame the issue when working with local partners.

Assessing the Progress on Food Waste Interventions at the City Level

- It is important to be able to measure how effective a city's food waste initiatives are in order to determine where to allocate current and future resources for food waste policies and programs. The toolkit provides a wide range of potential metrics cities can use to assess progress on food waste interventions. This list of "starter" metrics can be customized and expanded according to the city's needs, priorities, and ability to collect data.
- To best assess progress over time, a metrics framework should be set up before work around food waste begins, but adopting metrics is useful at any point. Download the list and work through it with relevant parties to determine which metrics you can or would like to be able to track in your city.

HOW CITIES ARE ALREADY RETHINKING FOOD WASTE

- NRDC worked in Atlanta with the Mayor's Office of Resilience to estimate a baseline level of food waste in the city and assess how much surplus food could potentially be rescued for redistribution to community members facing food insecurity—a key concern for the city. NRDC estimated that 125,000 tons of food waste is generated in Atlanta each year, about one-third from residences and one-fourth from restaurants.
- Armed with this information, the Mayor's Office began engaging local businesses. In the first three months of the program, six restaurants were able to donate 21,000 meals. Furthermore, Atlanta is now including food rescue as part of its broader strategy to combat hunger and increase food access within the city.





Reduce Tools

Increasing Public Awareness About Food Waste Prevention Guide

Food waste education doesn't have to be hard. In Denver, the Solid Waste Management department has integrated several food waste prevention messages throughout its standard outreach materials. To learn more and see examples, check out [this blog](#).



Denver Recycles included food waste prevention messaging on wastewater bills for Denver households.



- Given the magnitude of consumer household food waste, it is important for cities to both raise awareness and provide action-oriented strategies. NRDC has produced a public education campaign, Save The Food, to raise awareness about the impact of household food waste and help arm consumers with tools to prevent food from going to waste at home. Cities can use these assets to further their public education goals without the high cost of designing a brand-new campaign.
- Download the Public Education Tactics document to begin brainstorming ways to use the campaign and determine a distribution plan that will work best for your city. Visit <https://savethefood.com/partner-kit> and download the ads.

Restaurant Challenge Guide

- The restaurant sector is often a city's largest commercial generator of food waste. City-led food waste challenges can encourage local food businesses to adopt specific practices to reduce the amount of food going to waste, donate surplus food, and recycle food scraps.
- Download this Restaurant Challenge Guide to target food waste reduction in this sector in your city. Consider how to involve local green or sustainable business certifications. Our [resource library](#) contains downloadable, editable versions of the materials for customization.



Example of social media collateral from Denver Restaurant Challenge.

HOW CITIES ARE ALREADY REDUCING FOOD WASTE

- The City of Denver conducted a two-month [restaurant challenge pilot program](#) in which 8 restaurants adopted food waste reduction strategies. During the pilot:

1,900
SERVINGS OF SURPLUS FOOD WERE DONATED
BY ONE RESTAURANT ALONE

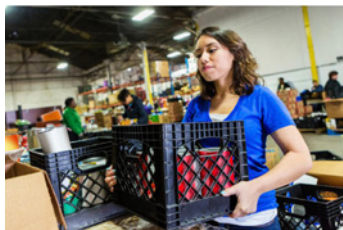
MORE THAN
3,600
POUNDS OF FOOD SCRAPS WERE RECYCLED

RESTAURANTS PARTICIPATING IN THE INITIAL PILOT
INCREASED THEIR WASTE DIVERSION ABOUT
70%

After the success of that pilot, the city conducted another two-month challenge, with 10 new restaurants participating.



Rescue Tools



Food Rescue Landscape Assessment Guide

This guide shares some of NRDC's key lessons learned and is accompanied by an array of additional tools to help cities conduct food rescue landscape assessments of their own.

Food Rescue Landscape Assessment Guide

- NRDC assessed the food rescue landscape in Denver and Baltimore and recommended specific changes to enhance each system's effectiveness. This guide shares some of our key lessons learned and offers an array of tools to help cities conduct assessments of their own.
- The Food Rescue Landscape Assessment is ideally done during the early phase of work, to help a city better understand the local rescue gaps and priorities. It is best conducted in partnership with a local organization that is familiar with the food rescue landscape and other local partners. The Office of Food Policy, if your city has one, could be a helpful lead agency in conducting this assessment. Read through the Food Rescue Landscape Assessment Guide and download the tools, then adapt them to your local circumstances.



LESS THAN 10 PERCENT OF FOOD DONATIONS IN BALTIMORE ARE SOURCED FROM BUSINESSES AND INSTITUTIONS LOCATED WITHIN THE CITY.

Our Baltimore rescue assessment found that to increase local food donations, the city should:

1. Better leverage policy tools and programming around the goal of local food donation
2. Look for ways to enhance coordination among food rescue organizations and last-mile organizations, for instance, through regular convenings
3. Expand client voice in designing solutions to improve food rescue efforts
4. Secure in-kind and other financial support to expand physical infrastructure and "people" capacity in the food rescue system
5. Engage and support prospective food donors, such as by providing guidance on food donation or matching them with a local food rescue organization

HOW FOOD MOVES THROUGH THE FOOD RESCUE SYSTEM

Surplus food donors



Food rescue organizations



Distribution/ service centers



Last mile organizations



Recipients

HOW CITIES ARE ALREADY RESCUING FOOD

To take advantage of learnings and recommendations from the City of Baltimore's survey, done with the Maryland Food Bank, [click here](#).

Food Rescue Client Survey Guide

- A core aim of NRDC's work in the food rescue space is ensuring that the voices of those who seek food assistance are present in any community conversation about food rescue. One of many potential strategies for engaging food assistance clients is to conduct periodic surveys seeking feedback on issues like satisfaction with the quality and cultural appropriateness of the food offered, barriers to accessing food support, and ways to make the city's food rescue system more nimble, responsive, and reflective of community aspirations.
- The survey can be conducted at any point, but it is important to convene a set of local stakeholders to react to and incorporate feedback from end users into the current system. These stakeholders could be from local food banks, food rescue organizations, and/or the city.



Rescue Tools (cont'd)

Food Donations From Farms Guide

- In many communities, the need for donated fresh fruits and vegetables and other farm-fresh products goes far beyond what is currently being donated. In Nashville we conducted a survey of area farmers to gauge their attitudes and behaviors regarding food donation, and in New York State we successfully advocated for passage of a law providing financial incentives for farmers to donate unsold food. The Food Donations From Farms Guide shares survey best practices, a case study on a food donation incentive policy, and tax information.
- The survey of area farmers could be key to engaging them upfront as you plan this work. The policy portion of the guide is best suited for a policymaker. It includes insights around policy design, coalition makeup, and campaign strategy. The tax documents are helpful to understanding how to communicate new tax policy to people who are not tax experts.

Health Inspector Training for Food Donation Guide

- The donation of surplus food by grocery stores, restaurants, and other licensed food facilities is vital to addressing food insecurity in our communities. On average, health inspectors visit 500 sites per year. If equipped with the right tools, these inspectors can be ambassadors of safe food donation and can help unlock new sources of surplus foods for rescue. The Health Inspector Training for Food Donation Guide provides strategies for engaging health inspectors, key tools, target milestones, and insights from NRDC's engagement with public health departments in a variety of cities.
- Read through the guide and download the tools that can be used to train health inspectors in any city and communicate the city's food rescue goals to food facilities.



Template brochure for food donation guidelines for licensed food facilities. Available for download on Food Matters website.

Read this [case study](#) to learn about how Nashville implemented a matchmaking program for food rescue to help individual facilities generating surplus food connect with recipient organizations.



Guide for Funding Food Scrap Recycling

Addressing food waste requires sustained financial support, both public and private. Here are some tips for funding food scrap recycling and food rescue strategies at the city level.

Check out [this Guide](#) for tips on funding food scrap recycling strategies in cities, and a few pointers on how to approach food rescue funding.



Recycle Tools

Food Scrap Recycling Landscape Assessment Guide

- In Denver and Baltimore, NRDC assessed the local capacity for food scrap recycling and identified key stakeholder needs, opportunities, and barriers to expanding food scrap recycling. The Food Scrap Recycling Landscape Assessment Guide shares key lessons learned and offers tools to help cities conduct assessments in their own communities.
- The Food Scrap Recycling Landscape Assessment is ideally done during the early phase of work to help a city better understand the local food scrap recycling gaps and priorities. It is best conducted in partnership with a local organization or agency that is familiar with the food scrap recycling landscape and other local partners. Read through the guide and download the tools to adapt them to the local circumstances.



TAKE ACTION NOW

1



Read through the case studies to identify the ones most inspiring to you.

2



There are collaborative resources at your fingertips; start identifying potential stakeholders, allies, and partners that you can work with today.

3



Visit the Food Matters site and start using the tools that are most relevant to your city.



FOOD MATTERS