



Background Memorandum

Model Executive Order on Municipal Leadership on Food Waste Reduction

I. INTRODUCTION

The Model Executive Order on Municipal Leadership on Food Waste Reduction (Model) is a template that can be adapted and issued by a mayor or other local government executive authority to (1) reduce the amount of food wasted throughout municipal operations; (2) highlight the importance of reducing food waste to businesses, residents, and other community members; and (3) demonstrate food waste reduction measures that businesses and other entities may voluntarily replicate.

NRDC (Natural Resources Defense Council) and the Environmental Law Institute (ELI) developed the Model to provide a resource for local officials, municipal staff, and stakeholders who are interested in advancing food waste reduction measures and facilitating diversion of food waste from landfills and incinerators. The Model is part of an ongoing effort to provide municipalities and advocates with tools to reduce the time and resources associated with taking food waste reduction actions.¹

This Model provides municipalities with options to lead by example (LBE) by instituting policies and programs within and across city government to raise awareness about and reduce food waste. Given the large amount of food that some municipalities procure and the many people that they employ, the impact of food waste reduction measures in municipal operations can be substantial and far-reaching. For example, New York City purchases \$500 million worth of food each year and employs around 325,000 people across dozens of agencies. The best practices that municipalities implement as part of an LBE program can lead to direct reductions in municipal food waste generation and disposal. Additionally, LBE allows municipalities to raise awareness about food waste and encourage food waste reduction, not only among municipal employees but among businesses and other local entities as well. (These points will be discussed in greater detail in a later section of the Memorandum.)

II. HOW TO USE THIS MODEL

Overview. The "off-the-shelf" version of the Model (without footnotes/commentaries) is intended to provide clean, streamlined language that can be easily adopted by municipalities. The footnoted version with commentaries provides additional background information, explains the benefits of key provisions and alternative approaches, and provides links to examples—all of which is intended to help guide municipalities in tailoring the Model to their specific circumstances. The Model, in combination with this background memo, is intended to help mitigate the substantial transaction costs associated with researching, drafting, and enacting measures, which often prevent resource-strapped municipalities from taking much-needed steps to advance food waste reduction.

Legal framework. The Model is drafted in the form of an executive order to be issued by a municipality's mayor. While the Model refers to "municipalities," which are typically defined as cities and towns, it also can be used by other types of local government such as counties. Similarly, the Model references actions by the "mayor" but could be used by other municipal executive authorities such as city managers.

Generally, executive orders are an appropriate governance tool for actions that address the administration of a municipality's internal functions or implementation of existing ordinances (as opposed to imposing new requirements on private, nongovernmental entities, for example).3 Determining the optimal governance tool to employ, however, always requires a caseby-case assessment. For example, even in jurisdictions where a mayor has the power to issue an executive order, an ordinance or resolution may be more likely to last through transitions to future mayoral administrations. The Model is structured such that it can be reframed as an ordinance with relatively few changes to the document.

Municipalities vary widely with respect to the scope of authority they have been granted by their states. For example, some jurisdictions have limited authority to adopt policies and ordinances under their state constitutions and statutes, while others, mostly "home rule" jurisdictions, may have broad authority. In some jurisdictions, municipal home rule charters also specify municipal powers and functions.⁵ In addition, the type or form of municipal government (e.g., mayor/council, council/city manager) can affect the delineation of responsibilities between the legislative and executive branches.⁶ Finally, nomenclature may vary from jurisdiction to jurisdiction, and as a result, the same governance tool can be referred to in a variety of ways.

Accordingly, in some cases, it may be advisable to consult with a municipality's legal experts to determine whether the mayor has the authority under the state constitution, statutes, and home rule charter, if any, to adopt the Model in the form of an executive order. In some jurisdictions, for example, it may be more appropriate to use alternative tools, such as regulations or administrative policies, or a legislative vehicle such as an ordinance or resolution.9

Semiautonomous and quasi-governmental entities. Semiautonomous entities are local government units that have a degree of independence from a municipality or other form of central or general-purpose government. The U.S. Census Bureau's Government Units Survey explains that there are "numerous single-function and multiple-function districts, authorities, commissions, boards, and other entities, which have varying degrees of autonomy." These entities can take a wide range of forms and are referred to by various names including, but not limited to, special districts, quasi-municipal corporations, and special authorities. II Examples include school districts, airport authorities, and solid waste districts. I2 Semiautonomous entities may have their own governing bodies, budgets, and staff, for example, but the municipality plays an oversight or regulatory role that can include appointing governing board members.¹³ Quasi-governmental entities are typically defined as organizations that have both a public and a private component, such as convention centers and sports venues that are municipally owned but privately operated.14

Semiautonomous and quasi-governmental entities typically are not subject to executive orders, which are intended to govern executive branch activities. ¹⁵ Jurisdictions differ, however, with respect to the general authorities granted the mayor (or other executive authority), as discussed above. State laws and local ordinances and charters also may specifically address the scope of mayoral authority vis-à-vis semiautonomous and quasi-governmental entities.

Accordingly, the Model does not require—but strongly encourages—these entities to develop strategies for preventing food waste, rescuing surplus food, and recycling food scraps and to report regularly on activities that reduce food waste.

Funding, LBE measures can be funded in a variety of ways including through existing or future municipal operating budgets that typically provide for employee salaries and facility costs. 16 The rules and procedures governing budgets vary considerably, as do municipal economic and political dynamics—all of which will influence availability of and access to operating funds. In addition, federal and state government grants, such as the funding provided by the landmark Inflation Reduction Act, may provide opportunities to secure funds for food waste reduction measures.¹⁷ Whether a municipality is eligible for grant funding must be determined on a case-by-case basis. Finally, philanthropic support may also be available to support LBE measures.¹⁸

III. OVERVIEW OF KEY PROVISIONS

Food waste reduction target. Section 4 of the Model establishes a measurable, quantitative food waste reduction goal toward which the municipality will work. The Model is consistent with the federal food waste reduction target of 50 percent by 2030, but the target may be increased or otherwise modified on the basis of local circumstances and community input. 19 Meaningful public involvement in setting the target is necessary to ensure that the target is successfully and equitably achieved. For example, Washington, D.C., has set a food waste reduction target of 60 percent by 2032. This target is established in the city's Sustainable DC 2.0 Plan, which was informed by conversations with and survey results from thousands of D.C. residents.²⁰

Staffing. The Model specifies in subsection 5.1 that the municipality should hire or designate a City Food Waste Reduction Coordinator (Coordinator) and/or convene a cross-agency working group (Coordinating Body) to lead food waste reduction efforts across all municipal agencies. Creating a Coordinator position adds capacity and can help facilitate cross-agency collaboration, advancing efforts to reach the municipal food waste reduction target. A Coordinator and/or Coordinating Body can also communicate with the public about the city's actions and progress and promote resources and opportunities for businesses and citizens to join it in pursuing the food waste reduction goal. Although a dedicated position is optimal,

a municipality may not be able to hire a dedicated Coordinator due to resource limitations, political climate, or other circumstances. In that case, municipalities can rely on existing staff to implement the Model, and in fact many cities currently are making meaningful progress on food waste reduction without a City Food Waste Reduction Coordinator. For example, in Asheville, North Carolina, the city's sustainability coordinator is responsible for municipal food waste reduction efforts.²² In addition to sustainability employees, staff from many agencies across a municipality, such as general services, health, and sanitation, are well positioned to contribute to a municipality's food waste goals and may be valuable members of a crossagency Coordinating Body.

Mandatory best practices for municipal buildings and properties. The Model requires in subsection 5.2 that the municipality develop and implement mandatory best practices for reducing food waste in all municipal buildings and properties. These practices may include but are not limited to providing organic waste collection at city buildings and properties, providing organic waste collection bins alongside trash bins in public spaces, and ensuring that future municipal construction projects include space for organics recycling collection bins on loading docks. Municipal organics recycling collection programs should be set up in coordination with local haulers and processors to ensure that materials are appropriately prepared for collection and that capacity and other circumstances allow those materials to actually be collected and processed. In addition, municipalities may require use of compost in land-disturbing activities; such a requirement may necessitate changes in procurement (see below). As is true for all Model provisions, a municipality may add, remove, or change requirements for municipal buildings and properties on the basis of stakeholder input, resource availability, and other local considerations. Note also that as best practices evolve, this language may be adjusted to provide flexibility in adopting or adapting actions over time.

Mandatory best practices for municipal departments that serve food. Subsection 5.3 applies to all municipal departments that regularly serve food, which may vary by municipality. Entities to which this section applies could include, but are not limited to, correctional facilities and public parks. The Model suggests, but does not limit municipalities to, the following practices: measuring/benchmarking food waste generation annually, donating surplus food, eliminating trays and buffets, implementing "offer versus serve" protocols, offering variously sized portions, and collecting food scraps for recycling. These and/or any other best practices developed and implemented pursuant to this section may serve as examples for private businesses that serve food, such as restaurants, hotels, and other businesses with cafeterias. Note also that as best practices evolve, this language may be adjusted to provide flexibility in adopting or adapting actions over time.

Special event permit application process. As addressed in subsection 5.4, the special event permitting application process provides an opportunity for the municipality to educate event hosts (and often event attendees, by extension) on food waste, zero waste, and organics recycling, as well as to require and/or incentivize food waste reduction measures before, during, and after the permitted event.²³ For example: In Austin, special events require a waste management plan, and the city offers a rebate for zero-waste events.²⁴ Boulder, Colorado's Universal Zero Waste Ordinance requires special events to provide recyclables and compostables collection, and the city provides financial incentives and educational materials to promote waste reduction at events.²⁵ Olympia, Washington, offers assistance and training for planning zero-waste events and loans recycling containers, signage, and other supplies to other jurisdictions and organizations free of charge. ²⁶ As part of these measures, the municipality may also require special event permittees to arrange for donation of surplus food after the event.²⁷

Procurement laws and policies. Subsection 5.5 of the Model suggests that municipalities implement existing municipal procurement law and policies, as well as adopt new policies, in support of reducing food and packaging waste.28 Municipalities would then make corresponding changes in future municipal contracts and in the standard language used in bid solicitation documents. Municipal procurement staff should be consulted both to ensure consistency with existing local and state law, regulations, and guidance, and also to confirm that an executive order (rather than, say, an ordinance enacted by the city council to amend the municipal procurement code) is the most appropriate mechanism for adopting the food and packaging waste reduction procurement policies.²⁹ Municipalities could also consider adopting the policies as part of a broader environmentally preferable purchasing policy.³⁰

Specific procurement strategies set out in the Model include: adopting a preference for outside contractors and vendors that employ food waste reduction measures; and procuring and using products that help reduce waste, such as food waste management software, compost, food items with minimal packaging, and compostable and/or recyclable foodware.³¹

Food waste prevention training in municipal education programs. Subsection 5.6 is intended to increase awareness of the problem of food waste and to provide training on methods to reduce it. The Model requires the municipality to educate its own employees on food waste prevention in the home and the workplace. While this includes all municipal employees, the Model calls for a particular focus on educating those whose professional roles relate to the generation and management of surplus food and food scraps, such as health inspectors and facility managers.³² The municipality's educational initiatives may also apply to broader audiences; for example, the Model suggests holding public events that demonstrate municipal food waste reduction efforts for individuals, businesses, and other private entities that may be interested in implementing similar practices.³³

Municipal employee benefits for food waste reduction measures. Subsection 5.7 addresses benefits that municipalities may provide to municipal employees who implement food waste reduction measures outside of the workplace. For example, a municipality may offer its employees rebates or discounts for backyard composting bins, food scrap collection services, and/or services delivering groceries that do not meet typical cosmetic standards or groceries that are surplus. Other options include free reusable food storage containers for municipal employees and free materials containing recipes that incorporate leftover food and/or lesser-used food items. In offering these and any other benefits, the municipality lowers the financial barriers that its employees may face in adopting practices to reduce food waste. It also positions them to "lead by example" before their families, friends, and neighbors.

Municipal employee or agency recognition programs. Subsection 5.8 of the Model requires the municipality to incentivize food waste reduction throughout its operations by recognizing the food waste prevention efforts of specific municipal employees or agencies. The municipality can thereby reward food waste reduction, increase awareness of the problem of wasted food and its many solutions, and demonstrate its dedication to preventing food waste. Additionally, municipal employees and agencies who see the steps their peers are taking to reduce food waste may be more inclined to implement such measures themselves.³⁴ For example, Denver annually hosts the "5281 Awards" to publicly recognize city employees who "go above and beyond expectations" in their roles in one of several categories, including sustainability.³⁵ Another approach is a friendly competition; one private sector example is the Food Waste Reduction Challenge held by grain manufacturer Bob's Red Mill.³⁶

Municipal department strategies. The Model requires in Section 6 that each municipal department or agency develop a strategy for reducing food waste. The Coordinator can play a helpful role in developing a template for the departments to use and in tailoring the template to each department's needs and circumstances. If a municipality does not have a designated Coordinator, the Coordinating Body or other expert staff and resources may be helpful in implementing the requirements of this section. (NRDC and ELI have also developed a template that municipal departments may modify and use for periodic reporting on progress.)37

IV. BENEFITS/EXAMPLES OF MUNICIPAL LEADERSHIP ON FOOD WASTE REDUCTION ORDERS

FOOD WASTE FACTS

Each year, up to 40 percent of all food in the United States goes uneaten, at enormous financial, environmental, and social cost.38 Annually, the tens of billions of meals' worth of food that gets wasted equates to roughly 2 percent of the entire national GDP and is responsible for 6 percent of all U.S. greenhouse gas (GHG) emissions.³⁹ What's more, when that food is wasted, all of the resources used to grow, harvest, transport, store, and prepare it are wasted as well—including 22 percent of the freshwater and 16 percent of the cropland in the United States.⁴⁰

At the same time, many American households face food insecurity, meaning they do not have, in the words of the U.S. Department of Agriculture, "access, at all times, to enough food for an active, healthy life for all household members." 41 In 2020, 10.5 percent of American households were food insecure; the percentage is even higher among households with children, particularly single-parent households, and among Black and Hispanic households. 42

BENEFITS OF REDUCING FOOD WASTE

When a municipality implements food waste reduction practices, it is also taking steps to reduce the financial, environmental, and social costs associated with wasted food. Food waste reduction provides a municipality with the opportunity to lower its GHG emissions, reduce food insecurity, and promote public health and environmental justice, among other co-benefits. 43

HOW THE LEAD-BY-EXAMPLE APPROACH WORKS IN CONCEPT AND PRACTICE

Leading by example on food waste allows a municipality to implement best practices for food waste reduction in its own operations before (or in addition to) requiring those practices in the private sector. The LBE approach offers many benefits. Focusing on the areas in which a government has the most control (i.e., internal government operations) can make adoption and implementation of food waste reduction measures easier both politically and logistically. Leading by example also sends a message to community members, highlighting the importance of reducing food waste and demonstrating the government's commitment to doing so. What's more, businesses and other private entities may voluntarily follow the local government's example, using practices implemented and lessons learned by the government to adopt their own food waste reduction measures. As such, leading by example can bring benefits beyond the reduction that directly results from the measures implemented by the government.

The LBE concept has been deployed by states and cities in a range of sustainability contexts. In some cases, such as Massachusetts's Executive Order No. 594: Leading by Example and Maine's Executive Order 13: An Order for State Agencies to Lead by Example Through Energy Efficiency, Renewable Energy and Sustainability Measures, the initiatives are specifically packaged as LBE initiatives.⁴⁴ In many other states and cities, LBE measures do not stand alone but are embedded in initiatives such as Cupertino, California's 2018 Zero Waste Policy. 45

Research did not identify any state or local LBE initiatives focused specifically on food waste reduction. The Model is intended to fill this gap by facilitating municipal adoption of such initiatives. Research did identify many strategies to reduce municipal food waste in city plans and other nonbinding documents. 46 Examples include Nashville's Solid Waste Master Plan (which calls for each Metro department to develop an action plan "that encourage[s] waste reduction, recycling and composting"), Detroit's Climate Action Plan (which includes a provision for the city to "communicate the importance of waste reduction... to staff/ administrators and City Council members"), and Dallas's Comprehensive Environmental and Climate Action Plan (which recommends that the city "adopt a special events ordinance that encourages ... recycling of waste generated and compost bins at special events").47 Additional research would be required to determine the extent to which these plans have been implemented to date, but the Model is intended to help facilitate implementation of existing plans as well as to more generally build on the momentum that currently exists around the country to conserve resources and reduce waste in both the municipal and the private sectors.

V. METHODOLOGY

ELI's methodology for developing the Model included the following steps.

Policy and literature review. ELI reviewed relevant state laws and municipal ordinances as well as nonbinding resources, such as plans and reports, to glean best practices and language that could analogously or directly apply to a municipal food waste leadby-example order. ELI's review does not purport to be exhaustive, particularly in light of the rapid uptake of policies to reduce food waste around the country. Nevertheless, the laws and ordinances used to inform the Model come from a diverse array of jurisdictions, ranging broadly in size, geographic location, and political climate.

Best practices identification. On the basis of its review of existing ordinances and plans and its literature review, ELI identified, in consultation with NRDC, the best practices that would inform the Model's language. The version of the Model with commentaries provides alternative approaches to key provisions that may better suit a given municipality while maintaining the integrity of the Model. As discussed above, many of the practices that informed the Model were sourced from city plans and other nonbinding documents and/or are in early stages of enactment and implementation.

Model language and commentaries. ELI drafted the model language and accompanying commentaries on the basis of its research and identification of best practices as well as a review of language from analogous orders.

Expert review. Several experts in food waste reduction and municipal government operations reviewed and provided feedback on the model language and commentaries. In some cases, changes were made to reflect this expert input.

ENDNOTES

- Darby Hoover, Linda Breggin, and Jessica Sugarman, "Model Executive Order on Municipal Leadership On Food Waste Reduction," NRDC and Environmental Law Institute, $May\ 2023, https://www.nrdc.org/resources/model-executive-order-municipal-leadership-food-waste-reduction-and-without-commentaries.\ See\ also, e.g.,\ Darby\ Hoover, and the sum of the$ Linda Breggin, and Jessica Sugarman, "Model Ordinance on Mandatory Reporting for Large Food Waste Generators, With and Without Commentaries," NRDC and Environmental Law Institute, July 2022, https://www.nrdc.org/resources/model-ordinance-mandatory-reporting-large-food-waste-generators-and-without-commentaries. See also Linda Breggin and Darby Hoover, "Model Compost Procurement Policy: With and Without Commentaries," NRDC and Environmental Law Institute, July 2021, https://www.nrdc.org/resources/model-compost-procurement-policy-and-without-commentaries.
- New York City Mayor's Office of Food Policy, "NYC Good Food Purchasing: Citywide Goals & Strategy for the Implementation of Good Food Purchasing," September 2021, https://www1.nyc.gov/assets/foodpolicy/downloads/pdf/GFP-Citywide-Goals-Strategy.pdf; City of New York, "Find a Job in New York City government," accessed March 13, accessed March 132023, https://www.nyc.gov/jobs/index.page; and City of New York, ``List of NYC Agencies,'' accessed March 13, 2023, https://www.nyc.gov/nyc-resources/agencies.page (City of New York) and City of New York, '`List of NYC Agencies,'' accessed March 13, 2023, https://www.nyc.gov/nyc-resources/agencies.page (City of New York) and City of New York, '`List of NYC Agencies,'' accessed March 13, 2023, https://www.nyc.gov/nyc-resources/agencies.page (City of New York) and City of New York, '`List of NYC Agencies,'' accessed March 13, 2023, https://www.nyc.gov/nyc-resources/agencies.page (City of New York) and City of New York, '`List of NYC Agencies,'' accessed March 13, 2023, https://www.nyc.gov/nyc-resources/agencies.page (City of New York) and City of New York, '`List of NYC Agencies,'' accessed March 13, 2023, https://www.nyc.gov/nyc-resources/agencies.page (City of New York) and City of New York, '`List of NYC Agencies,'' accessed March 13, 2023, https://www.nyc.gov/nyc-resources/agencies.page (City of New York) and City of New York, '`List of NYC Agencies,'' accessed March 13, 2023, https://www.nyc.gov/nyc-resources/agencies.page (City of New York) and City of New York, '`List of NYC Agencies,'' accessed March 13, 2023, https://www.nyc.gov/nyc-resources/agencies.page (City of New York) and City of New York, '`List of NYC Agencies,'' accessed March 13, 2023, https://www.nyc.gov/nyc-resources/agencies.page (City of New York) and City of New York, '`List of New York,
- David J. McCarthy Jr. and Laurie Reynolds, Local Government Law in a Nutshell, 5th ed. (St. Paul, Minn.: West Publishing, 2003), 142; See also, e.g., Municipal Research and Services Center, "Roles and Responsibilities of Local Government Leaders," accessed January 12, 2023, https://mrsc.org/explore-topics/governance/officials/roles-and $responsibilities \# questions \ (discussing the \ respective \ roles \ of \ legislative \ and \ executive \ branches \ of \ government \ in \ Washington \ State).$
- Osborne M. Reynolds, Local Government Law, 5th ed. (St. Paul, MN: West Publishing, 2019), 150.
- 5 National League of Cities, "Cities 101—Charters," accessed January 23, 2023, https://www.nlc.org/resource/cities-101-charters.
- National League of Cities, "Cities 101," accessed January 12, 2023, https://www.nlc.org/cities-101/ ("There are many ways cities are created, and there exists considerable 6 variation in their power and authority.").
- Barbara Bavis and Robert Brammer, "Municipal Codes: A Beginner's Guide," Library of Congress, last updated December 16, 2022, https://guides.loc.gov/municipal-codes (noting that ordinances, bylaws and measures are terms used to describe municipal laws).

- See, e.g., Barbara J. Parker, "City of Oakland, Office of the City Attorney, Legal Opinion," October 20, 2015, https://www.oaklandcityattorney.org/PDFS/Legal%20Opinions/ OPINION%20Does%20the%20Mayor%20Have%20Hee%20Authority%20to%20Issue%20Executive%20Orders%2010%2020%2015.pdf (addressing the question: Does the mayor open and the property of the property ofhave the authority to issue executive orders?).
- Reynolds, Local Government Law, 199.
- 10 U.S. Census Bureau, "Government Units Survey Methodology, Population of Interest," accessed January 24, 2023, https://www.census.gov/programs-surveys/gus/technicaldocumentation/methodology/population-of-interest1.html.
- 11 See, e.g., Reynolds, Local Government Law, 27-33. Semiautonomous entities are also referred to as "quasi-governmental" entities in some jurisdictions even though they do not have a private component. See also Cindy Upton, Lora Littleton, and Jean Ann Myatt, Transparency and Accountability of Quasi-Governmental Entities, Legislative $Research\ Commission, January\ 13,\ 2011,\ https://apps.legislature.ky.gov/lrc/publications/ResearchReports/RR403.pdf.$
- See, e.g., World Wildlife Fund, Food Waste Warriors: A Deep Dive Into Food Waste in U.S. Schools, 2019, https://www.worldwildlife.org/stories/food-waste-warriors; and 12 $Chloe\ Nordquist, "Airports\ Creating\ Partnerships\ to\ Reduce\ Food\ Waste\ in\ Airplanes, Terminals,"\ Denver\ 7,\ February\ 11,\ 2020,\ https://www.denver\ 7.com/news/national/partnerships\ to\ Reduce\ Food\ Waste\ in\ Airplanes,\ Terminals,"\ Denver\ 7,\ February\ 11,\ 2020,\ https://www.denver\ 7.com/news/national/partnerships\ to\ Reduce\ Food\ Waste\ in\ Airplanes,\ Terminals,"\ Denver\ 7,\ February\ 11,\ 2020,\ https://www.denver\ 7.com/news/national/partnerships\ to\ Reduce\ Food\ Waste\ in\ Airplanes,\ Terminals,\ T$ airports-creating-partnerships-to-reduce-food-waste-in-airplanes-terminals.
- $National\ League\ of\ Cities, "Cities\ 101-Types\ of\ Local\ US\ Governments," accessed\ January\ 24,\ 2023,\ https://www.nlc.org/resource/cities-101-types-of-local-governments.$ 13
- Lawrence Martin, Public-Private Partnerships: What Local Government Managers Need to Know, International City/County Management Association, December 20, 2017, 14 $https://icma.org/sites/default/files/18-109\%20 Public-Private\%20 Partnerships-P3s\%20 White\%20 Paper_web\%20 FINAL.pdf.$
- Parker, "City of Oakland, Office of the City Attorney, Legal Opinion," at 4. 15
- National League of Cities, Cities 101—Budgets, accessed April 26, 2023, https://www.nlc.org/resource/cities-101-budgets/. 16
- U.S. Environmental Protection Agency (hereinafter EPA), "Funding Opportunities and EPA Programs Related to Food Systems," last updated April 12, 2023, https://www.epa. 17 gov/sustainable-management-food/funding-opportunities-and-epa-programs-related-food-system#otherfed; and Nina Sevilla, "Inflation Reduction Act Can Fund Food Waste Solutions," NRDC, Expert Blog, August 24, 2022, https://www.nrdc.org/experts/nina-sevilla/inflation-reduction-act-can-fund-food-waste-solutions.
- See, e.g., Resilient Cities Network, "Our Story," accessed April 26, 2023, https://resilientcitiesnetwork.org/our-story/ (noting that the Rockefeller Foundation funds municipal 18 chief resilience officers).
- 19 loss-and-waste-reduction-goal.
- 20 Sustainable DC, "Sustainable DC 2.0 Plan," accessed March 1, 2023, https://sustainable.dc.gov/sdc2.
- Madeline Keating, "Guide for Hiring a City Food Waste Coordinator," NRDC, February 28, 2020, https://www.nrdc.org/resources/guide-hiring-city-food-waste-coordinator. 21
- City of Asheville, "Food Waste Reduction Initiative," last updated April 17, 2020, https://www.ashevillenc.gov/projects/food-waste-reduction-initiative/. The properties of the properties of22
- 23 $See \ Yerina \ Mugica, Darby \ Hoover, and \ Terra \ Rose, \ Tackling \ Food \ Waste \ in \ Cities: A \ Policy \ and \ Program \ Toolkit, \ NRDC, \ February \ 2019, \ https://www.nrdc.org/resources/policy/february \ 2019$ $tackling\hbox{-}food\hbox{-}waste-cities\hbox{-}policy\hbox{-}and\hbox{-}program\hbox{-}toolkit.$
- Austin Resource Recovery, "Reducing Waste at Events," City of Austin, accessed January 10, 2023, https://www.austintexas.gov/zwevents. 24
- 25 City of Boulder, "Universal Zero Waste Ordinance," accessed January 10, 2023, https://bouldercolorado.gov/services/universal-zero-waste-ordinance,
- $Kim\ Johnson, "Zero\ Waste\ Events," City\ of\ Olympia,\ accessed\ January\ 10,\ 2023,\ https://www.olympiawa.gov/services/garbage__recycling/zero_waste_events.php;\ and\ property of\ Colored France of the colored Fran$ 26 $Olympia\ Public\ Works, "Zero\ Waste\ Events: Container\ and\ Material\ Loan\ Program,"\ accessed\ January\ 10,\ 2023,\ https://www.olympiawa.gov/Document_center/Services/S$ Garbage % 20 & % 20 Recycling / Zero % 20 Waste % 20 Events / Event % 20 Loaner % 20 Program.pdf.
- For more information on promoting surplus food donation, see Mugica, Hoover, and Rose, Tackling Food Waste in Cities. 27
- Municipalities commonly use their procurement processes to advance public policy goals (referred to as "collateral policies"). Danielle M. Conway, "Sustainable Procurement 28 Policies and Practices at the State and Local Government Level," in Greening Local Government, Keith H. Hirokawa and Patricia E. Salkin, eds., at 44-45 (Chicago: American Bar Association, 2012).
- Compare Atlanta's ordinance prohibiting purchase of non-compostable single-use serviceware with Philadelphia's executive order on nutrition standards for municipal food 29 $purchases.\ City\ of\ Atlanta,\ Ordinance\ 19-0-1418,\ December\ 2,\ 2019,\ https://atlantacityga.iqm2.com/Citizens/Detail_LegiFile.aspx?Frame=SplitView\&MeetingID=3020\&M$ ediaPosition=&ID=18901&CssClass=; and City of Philadelphia, Executive Order No. 4-14, "Establishing Nutrition Standards for Food and Beverages Purchased, Prepared, or Served by City Agencies," June 11, 2014, https://www.phila.gov/media/20210602144636/executive-order-2014-04.pdf, See also William J. Sheiderich, ed., Municipal Law Deskbook (Chicago: American Bar Association, 2015), 344-45 (noting that municipal procurement codes may vary, including the methods of procuring goods and services).
- Environmentally preferable purchasing (EPP) policies have become commonplace in municipalities and counties. See, e.g., Minnesota Pollution Control Agency, "Developing a Sustainable Purchasing Policy," accessed April 26, 2023, https://www.pca.state.mn.us/business-with-us/developing-a-sustainable-purchasing-policy.
- $See \ Conway, "Sustainable \ Procurement \ Policies \ and \ Practices"; \ Mugica, \ Hoover, \ and \ Rose, \ \textit{Tackling Food Waste in Cities}, \ at 28, \ https://www.nrdc.org/resources/tackling-nrdcorg/resourc$ $food-waste-cities-policy-and-program-toolkit; City of Los Angeles, \textit{L.A.'s Green New Deal: Sustainable City pLAn}, 2019, 144, \\ \text{https://plan.lamayor.org/; and Chancery Lane Los Control of Contr$ Project, "Reducing Supply Chain Food Waste," last updated June 18, 2022, https://chancerylaneproject.org/climate-clauses/reducing-supply-chain-food-waste-new/.
- Training provided to those whose professional roles relate to the generation and management of surplus food and food scraps should go beyond health and safety concerns to include topics such as liability protections and tax incentives for food donation. For additional information and resources, see NRDC, "Engaging Health Departments: Overview Guide," December 15, 2021, https://www.nrdc.org/resources/engaging-health-departments-overview-guide.
- In its public events and outreach efforts, the municipality should consider developing localized messaging that is accessible and culturally appropriate for different 33 neighborhoods.
- See, e.g., Arizona State University, W.P. Carey School of Business, "The Gentle Science of Persuasion, Part Three: Social Proof," W.P. Carey News, January 3, 2007, https://news.wpcarey.asu.edu/20070103-gentle-science-persuasion-part-three-social-proof (discussing how "human beings often make choices about what to think, and what to do, based on the thoughts and actions of others"); Jon M. Jachimowicz et al., "Research: People Use Less Energy When They Think Their Neighbors Care About the Environment," Harvard Business Review, January 28, 2019, https://hbr.org/2019/01/research-people-use-less-energy-when-they-think-their-neighbors-care-about-theenvironment (presenting research suggesting that the belief that one's neighbors care deeply about the environment is an important motivator for, and predictor of, one's own energy conservation efforts); and Nicole Sintov et al., "What Goes On Behind Closed Doors? How College Dormitory Residents Change to Save Energy During a Competition-Based Energy Reduction Intervention," U.S. Department of Energy, Office of Scientific and Technical Information, July 4, 2016, https://www.osti.gov/servlets/purl/1290133 (finding that a friendly competition with near-real-time feedback significantly reduced energy consumption in a college dormitory).
- City of Denver, "5281 Awards," accessed March 9, 2023, https://www.denvergov.org/Government/Agencies-Departments-Offices/Agencies-Departments-Offices-Directory/Properties (Computational Computational ComputatioOffice-of-Human-Resources/programs-and-policies/employee-recognition/5281.

- 36 Pacific Coast Food Waste Commitment, "Institutionalizing a Waste Reduction Culture in Food Manufacturing," Fall 2022, https://paccoastcollab.wpenginepowered.com/wp-content/uploads/2022/12/PCFWC-Case-Study_Bobs-Red-Mill-Final.pdf.
- 37 For an example of cross-agency sustainability strategies at the federal level and across numerous issue areas, see The White House, "Executive Order on Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability," December 8, 2021, https://www.whitehouse.gov/briefing-room/presidential-actions/2021/12/08/executive-order-on-catalyzing-clean-energy-industries-and-jobs-through-federal-sustainability/. For reporting template, see Darby Hoover, Linda Breggin, and Jessica Sugarman, "Municipal Leadership on Food Waste Reduction Reporting Template," NRDC and Environmental Law Institute, May 2023, https://www.nrdc.org/sites/default/files/2023-05/municipal-leadership-food-waste-reduction-reporting-template.pdf.
- 38 Dana Gunders and Jonathan Bloom, Wasted: How America Is Losing Up to 40 Percent of Its Food From Farm to Fork to Landfill, NRDC, August 2017, https://www.nrdc.org/resources/wasted-how-america-losing-40-percent-its-food-farm-fork-landfill.
- 39 ReFED, accessed April 26, 2023, https://refed.org/food-waste/the-problem/.
- 40 Ibid.
- 41 U.S. Department of Agriculture, "Food Security in the U.S: Key Statistics & Graphics," last updated October 17, 2022, https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/key-statistics-graphics/.
- 42 Ibid.
- 43 Linda Breggin, Akielly Hu, and Sam Koenig, A Toolkit for Incorporating Food Waste in Municipal Climate Action Plans, Environmental Law Institute, July 2021, https://www.eli.org/research-report/toolkit-incorporating-food-waste-municipal-climate-action-plans.
- 44 Commonwealth of Massachusetts, "Exec. Order No. 594: Leading by Example: Decarbonizing and Minimizing Environmental Impacts of State Government," Mass. Register No. 1443, April 22, 2021, https://www.mass.gov/executive-orders/no-594-leading-by-example-decarbonizing-and-minimizing-environmental-impacts-of-state-government; and State of Maine, Office of the Governor, "An Order for State Agencies to Lead by Example Through Energy Efficiency, Renewable Energy and Sustainability Measures," November 26, 2021, https://www.maine.gov/governor/mills/sites/maine.gov.governor.mills/files/inline-files/Executive%20Order%2013_0.pdf.
- 45 City of Cupertino, "Resolution No. 17-122: Resolution of the City Council of Cupertino Adopting a Zero Waste Policy for the City of Cupertino," Cupertino City Council Resolutions, 2017, https://records.cupertino.org/WebLink/DocView.aspx?id=634727&dbid=0&repo=CityofCupertino (stating the city's policy of "lead[ing] by example, implementing zero waste goals for all City buildings," and briefly listing three strategies to do so).
- 46 Note that these documents may or may not refer to the relevant food waste reduction practices as part of an explicit lead-by-example strategy.
- 47 Metropolitan Nashville and Davidson County, Solid Waste Master Plan: Achieving Zero Waste, August 2019, 6-9, https://www.nashville.gov/departments/water/zero-waste-nashville/zero-waste-master-plan; Detroiters Working for Environmental Justice, Detroit Climate Action Plan, 2017, p.G-6, https://detroitenvironmentaljustice.org/wp-content/uploads/2017/11/CAP_WEB.pdf#page=26; and City of Dallas, Comprehensive Environmental and Climate Action Plan, April 2020, 165, https://www.dallasclimateaction.com/climate-change-in-dallas.