



MODEL EXECUTIVE ORDER ON MUNICIPAL LEADERSHIP ON FOOD WASTE REDUCTION

*With Commentaries**

* For a clean version without commentaries: *Model Executive Order on Municipal Leadership on Food Waste Reduction*.
For background information and supplemental resources: *Model Executive Order on Municipal Leadership on Food Waste Reduction Background Memorandum*.

EXECUTIVE ORDER¹ NO. ____

SUBJECT: MUNICIPAL LEADERSHIP ON FOOD WASTE REDUCTION

OUTLINE

- 1.0 Findings
- 2.0 Purpose
- 3.0 Definitions
- 4.0 Food Waste Reduction Target
- 5.0 Municipal Food Waste Reduction Measures
- 6.0 Municipal Department Strategies
- 7.0 Semiautonomous and Quasi-Governmental Entity Strategies

I, [Mayor Name], [Mayor Title], by virtue of the power and authority vested in me, do hereby find, direct, and order as follows:

1.0 Findings:²

- 1.1 WHEREAS, it is estimated that as much as 40 percent of the food supply in the United States goes uneaten and more than two-thirds of wasted food is sent to landfills and incinerators, where it typically represents the largest component of disposed waste; and
- 1.2 WHEREAS, food waste disposed of in landfills emits methane, a potent greenhouse gas that contributes to climate change; and

1 Depending on applicable state and local governance structures and forms, as well as strategic considerations, a municipality may opt to use a vehicle other than an executive order, such as a policy or ordinance. Note too that the Model refers to “municipalities,” which are typically defined to include cities and towns, but the Model can also be used by other types of local governments, such as counties.

2 Section 1 statistics and benefits are drawn primarily from the following three sources: ReFED, accessed April 26, 2023, <https://refed.org/food-waste/the-problem/>; U.S. Environmental Protection Agency (hereinafter EPA), “National Overview: Facts and Figures About Materials, Wastes and Recycling,” last updated April 4, 2023, <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/food-material-specific-data>; and 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>.

- 1.3 WHEREAS, the natural resources used to produce food, such as water, also are wasted when food is wasted; and
- 1.4 WHEREAS, more than [percentage] of adults and children in [Municipality] are food insecure, lacking a reliable source of food to support a healthy and active lifestyle; and
- 1.5 WHEREAS, the amount of food wasted in the United States is worth approximately \$444 billion per year; and
- 1.6 WHEREAS, reducing food waste and diverting it from landfills mitigates climate change, conserves natural resources, provides food to individuals experiencing food insecurity, saves money, extends the useful life of landfills, and produces beneficial products such as soil amendment, the [Municipal Government] hereby adopts the following measures.

2.0 Purpose: It is intended that this Executive Order No. ____ will:

- 2.1 Reduce the amount of food wasted throughout [Municipality's] municipal operations,
- 2.2 Highlight to businesses, residents, and other community members in [Municipality] the importance of reducing food waste, and
- 2.3 Demonstrate food waste reduction measures that businesses and other entities may voluntarily replicate.

3.0 Definitions:³

- 3.1 **Compost:** A product that results from controlled aerobic, biological decomposition of biodegradable materials, including food waste, and is typically used as a soil amendment.
- 3.2 **Food:** Any raw, cooked, processed, or prepared substance, beverage, or ingredient used or intended for human consumption.
- 3.3 **Food scraps:** A subcategory of food waste, referring specifically to discarded food that is best suited for recycling (through means such as composting and feeding animals) and is ideally composed only of inedible or non-donatable food components.
- 3.4 **Food waste:** Uneaten food and inedible parts, excluding packaging, that are landfilled, incinerated, disposed of down the drain/sewer, dumped, spread onto land, anaerobically digested, composted, or used for animal feed.
- 3.5 **Food waste generation:** The amount of all discarded food waste regardless of its destination, including food waste that is later recycled, landfilled, or incinerated.
- 3.6 **Quasi-governmental entities:** Organizations that have both a public and a private component, such as convention centers that are municipally owned but privately operated.
- 3.7 **Semiautonomous entities:** Local government units that have a degree of independence from the municipality or other form of central or general-purpose government, such as K-12 public schools.
- 3.8 **Shall:** An imperative that indicates actions are mandatory.
- 3.9 **Surplus food:** Food (including inedible parts) that is not sold or used for its initially intended purpose and that is suitable for donation.

4.0 Food Waste Reduction Target:⁴

- 4.1 The [Municipal Government] hereby adopts a goal of reducing food waste in [Municipality] by 50 percent by 2030, consistent with the federal goal set in 2015.⁵

³ For purposes of consistency, municipalities may instead prefer to use definitions from their existing ordinances, regulations, or policies.

⁴ Each municipality's food waste reduction goals, and the strategies employed to reach these goals, should be informed by community input. For information on ensuring meaningful public participation, see, e.g., Institute for Local Government, "Inclusive Public Engagement," accessed December 20, 2022, <https://www.ca-ilg.org/inclusive-public-engagement>.

⁵ A municipality may opt for a more ambitious target, replacing the federal goal with a specific and higher number. EPA, "United States 2030 Food Loss and Waste Reduction Goal," last updated April 4, 2023, <https://www.epa.gov/sustainable-management-food/united-states-2030-food-loss-and-waste-reduction-goal>. The United States Conference of Mayors passed a resolution in 2016 supporting the federal food loss and waste reduction goal. U.S. Conference of Mayors, "Resolution: In Support of Municipal Partnership to Reduce Food Waste by 50% by 2030 Through the Adoption of Priority Actions to Reduce Food Waste," accessed December 21, 2022, <https://www.usmayors.org/the-conference/resolutions/?category=a0F61000003rjrjEAA&meeting=84th%20Annual%20Meeting>.

- 4.2 The food waste reduction goal shall be met through food waste prevention measures including education; food rescue/donation efforts that redirect surplus food to people; and food scrap recycling, for example by composting.⁶
- 4.3 [Municipal Government] shall periodically report on progress toward achieving the food waste reduction goal.⁷

5.0 Municipal Food Waste Reduction Measures: [Municipal Government] shall conduct the following activities and programs to prevent food waste; rescue/donate surplus food; and recycle food scraps in municipal buildings, properties, and operations:

- 5.1 Create a central entity for coordinating municipal food waste efforts by hiring or designating a City Food Waste Reduction Coordinator (“Coordinator”) and/or convening a cross-agency working group (“Coordinating Body”).⁸
- 5.2 Develop and implement mandatory best practices for municipal buildings and properties. These practices shall include, but are not limited to, food scrap recycling practices such as:⁹
 - 5.2.1 Requiring organic waste collection at all municipal offices, buildings, and municipality-leased properties;
 - 5.2.2 Providing organics recycling collection bins alongside trash bins in public spaces;¹⁰ and
 - 5.2.3 Ensuring that future municipal construction projects, including municipally owned affordable housing, provide room for organics recycling bins in collection areas such as communal spaces and loading docks.¹¹
- 5.3 Develop and implement mandatory best practices for municipal departments that regularly serve food. These practices may include, but are not limited to:
 - 5.3.1 Measuring/benchmarking food waste generation;
 - 5.3.2 Donating surplus food;
 - 5.3.3 Eliminating trays and buffets;¹²
 - 5.3.4 Implementing “offer versus serve” protocols;¹³
 - 5.3.5 Offering variously sized portions;¹⁴ and

6 The EPA’s Food Recovery Hierarchy prioritizes source reduction as the most preferable means of reducing wasted food, followed by rescuing and redistributing surplus food, feeding animals, and recycling food scraps through strategies such as composting. Landfilling and incineration are least preferable. EPA, “Food Recovery Hierarchy,” last updated August 28, 2022, <https://www.epa.gov/sustainable-management-food/food-recovery-hierarchy/>.

7 Consistent and reliable measurements are necessary in order to meaningfully track progress. Given this, the municipality may use data received pursuant to sections 6.2 and 7.2 of the Model to inform their reports. Reports should be developed and released at regular intervals, such as annually, and should be publicly available through a variety of means, such as through the municipality’s website (see Palo Alto, which shares progress reports on the city’s overall zero waste goals on its website, and Austin, which shares Austin Resource Recovery’s annual reports online), email announcements (see New York, which provides a form stakeholders can fill out to receive email announcements about the state’s Food Donation and Food Scraps Recycling Law), social media, and/or other widely accessible platforms. City of Palo Alto, “Zero Waste: Progress Report,” accessed December 29, 2022, <https://www.cityofpaloalto.org/Departments/Public-Works/Zero-Waste/About-Us/Progress-Report>; City of Austin, “Austin Resource Recovery Releases 2021 Annual Report,” press release, August 18, 2022, <https://www.austintexas.gov/news/austin-resource-recovery-releases-2021-annual-report>; and New York State Department of Environmental Conservation, “Food Donation and Food Scraps Recycling Law—Keep Me Updated!” accessed December 29, 2022, <https://www.surveymonkey.com/r/FoodScrapsLawListserv>.

8 City Food Waste Reduction Coordinators can add significant capacity and facilitate cross-agency collaboration. See 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>. If necessary, municipalities may opt to issue the Model order and implement food waste reduction measures without hiring a designated Coordinator; new duties could be allocated among existing sustainability or facilities staff. For example, in Asheville, the city’s Sustainability Coordinator is responsible for food waste reduction efforts. City of Asheville, “Food Waste Reduction Initiative,” last updated April 17, 2020, <https://www.ashevilenc.gov/projects/food-waste-reduction-initiative/>.

9 The municipality must ensure that materials collected for organics recycling can be processed appropriately. Municipal organics 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.

10 See, e.g., Metropolitan Nashville and Davidson County’s Solid Waste Master Plan, which calls for “enhanced public space recycling” by “install[ing] or improv[ing] paired trash and recycling bins with restrictive lids and effective signage at parks and other public spaces.” Metropolitan Nashville and Davidson County, *Davidson County Long Term Solid Waste Master Plan: Achieving Zero Waste*, August 2019, 6-9, <https://www.nashville.gov/departments/water/zero-waste-nashville/zero-waste-master-plan>.

11 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/tackling-food-waste-cities-policy-and-program-toolkit>.

12 ReFED, “Solutions Database: Trayless,” accessed December 29, 2022, <https://insights-engine.refed.org/solution-database/trayless>; and Leanpath, *Preventing Food Waste at the Buffet: A Guide for Chefs and Managers*, 2019, https://www.leanpath.com/wp-content/uploads/2018/10/WP_BuffetFoodWaste_US_EN.pdf.

13 The “offer versus serve” concept, which has been implemented in public school districts around the country, can reduce food waste by allowing students (or others being served) more freedom to select the food items they intend to eat, rather than requiring them to take food they do not want. U.S. Department of Agriculture, “Offer vs. Serve Lunch Program Tip Sheet,” updated February 25, 2020, <https://www.fns.usda.gov/tn/offer-vs-serve-lunch-program-tip-sheet>. See also ReFED, “Solutions Database: K-12 Lunch Improvements,” accessed December 22, 2022, <https://insights-engine.refed.org/solution-database/k-12-lunch-improvements>.

14 ReFED, “Solutions Database: Portion Sizes,” accessed December 29, 2022, <https://insights-engine.refed.org/solution-database/portion-sizes>.

5.3.6 Collecting food scraps for recycling.

5.4 Provide training and require food waste reduction measures as part of the special event permit application process.¹⁵ These measures may include, but are not limited to:

5.4.1 Forecasting demand for food items to avoid over-ordering for the event;¹⁶

5.4.2 Providing organics recycling collection bins at the event;

5.4.3 Offering variously sized portions and flexible ordering options to attendees; and

5.4.4 Prearranging for donation of surplus food after the event.¹⁷

5.5 Where possible, implement existing municipal procurement laws and policies and adopt new policies to support reduction of food and packaging waste. Adopt corresponding modifications to prospective contracts and standard language contained in bid solicitation documents, including specifications, to the extent consistent with local and state law.¹⁸ Specific strategies may include, but are not limited to:

5.5.1 Preference for outside contractors and vendors that employ food waste reduction measures, such as those listed in sections 5.3 and 5.4 above;¹⁹

5.5.2 Procurement and use of food waste management software to reduce food waste;

5.5.3 Procurement and use of compost for earth-disturbing activities.²⁰

5.5.4 Procurement and use of food items with minimal packaging and waste, including procurement of food items in bulk and/or reusable containers rather than single-serving containers when possible;²¹ and

5.5.5 Procurement and use of compostable and/or recyclable foodware if reusable foodware is not available or practicable.²²

5.6 Provide food waste reduction training in municipal education programs.²³ This training could include, but is not limited to:

5.6.1 Education for municipal employees on best practices for food waste reduction in their offices;

5.6.2 Education for municipal employees on best practices for food waste reduction in their own households;

5.6.3 Targeted education for health inspectors, facility managers, and others whose roles relate to surplus food or food scrap generation, or engagement with those who generate surplus food or food scraps;²⁴ and

15 To help special event permit applicants reduce waste at their events, municipalities should provide guidance and, if possible, hands-on training and assistance opportunities. For example, ZeroWasteNEO, a working group in Cuyahoga County, Ohio, provides a “Zero-Waste Event Planning Guide” and hosts free Zero Waste Event Workshops, among other resources. See Sustainable Cleveland, “ZeroWasteNEO,” accessed December 22, 2022, <https://www.sustainablecleveland.org/zwnéo>. Other approaches may include, for example, requiring a waste management plan for events, providing financial incentives for zero waste events, and offering free recycling services for events. See, e.g., Rockefeller Foundation, “Toolkit for Food Waste-Free Events,” accessed January 11, 2023, <https://www.rockefellerfoundation.org/report/toolkit-food-waste-free-events/>.

16 ReFED, “Solutions Database: Enhanced Demand Planning,” accessed December 29, 2022, <https://insights-engine.refed.org/solution-database/enhanced-demand-planning>.

17 Mugica, Hoover, and Rose, *Tackling Food Waste in Cities*.

18 Municipal procurement codes, including the methods of procuring goods and services, may vary. William J. Sheiderich, ed., *Municipal Law Deskbook* (Chicago: American Bar Association, 2015), 344–45. Accordingly, municipal procurement staff should be consulted about whether adopting the Model requires changes to the municipal procurement code or any associated regulations, policies, or guidance, and if so, the appropriate process for making those changes. Furthermore, procurement policies adopted pursuant to the Model could be part of a broader environmentally preferable purchasing policy. See, e.g., City of Cupertino, “Zero Waste Policy, Resolution No. 17-2249,” 2017, <https://www.cupertino.org/home/showpublisheddocument/19101/636505857999300000>; and Minnesota Pollution Control Agency, “Developing a Sustainable Purchasing Policy,” accessed December 22, 2022, <https://www.pea.state.mn.us/business-with-us/developing-a-sustainable-purchasing-policy>.

19 Mugica, Hoover, and Rose, *Tackling Food Waste in Cities*; City of Los Angeles, *L.A.’s Green New Deal: Sustainable City pLAn*, 2019, <https://plan.lamayor.org/>; and Chancery Lane Project, “Reducing Supply Chain Food Waste,” last updated June 18, 2022, <https://chancerylaneproject.org/climate-clauses/reducing-supply-chain-food-waste-new/>.

20 Linda Breggin and Darby Hoover, “Model Compost Procurement Policy: With and Without Commentaries,” NRDC and Environmental Law Institute (ELI), July 2021, <https://www.nrdc.org/resources/model-compost-procurement-policy-and-without-commentaries>.

21 See, e.g., EPA, “Reducing Wasted Food & Packaging: A Guide for Food Services and Restaurants,” accessed May 24, 2023, https://www.epa.gov/sites/default/files/2015-08/documents/reducing_wasted_food_pkg_tool.pdf.

22 Mugica, Hoover, and Rose, *Tackling Food Waste in Cities*. See also Upstream, “Model Single-Use Foodware & Litter Reduction Ordinance,” accessed January 25, 2023, https://static1.squarespace.com/static/5f218f677f1fdb38f06cebcb/t/5fd39666f1546547d77fc79e/1607702127304/UPSTREAM_Model+Single+Use+Litter+Reduction+Ordinance.pdf.

23 See, e.g., Emmett McKinney, JoAnne Berkenkamp, and Linda Breggin, *Nashville Food Rescue Landscape Analysis*, Nashville Food Waste Initiative, October 2017, <https://www.eli.org/sites/default/files/docs/foodwaste/Nashville%20Food%20Rescue%20Landscape%20Analysis%20-%20Final.pdf>; and City of Los Angeles, *L.A.’s Green New Deal*.

24 NRDC, “Engaging Health Departments: Overview Guide,” December 15, 2021, <https://www.nrdc.org/resources/engaging-health-departments-overview-guide>.

5.6.4 Food waste awareness community events sponsored by the Office of the Mayor to highlight municipal government practices that could be applied more widely, such as compost demonstration sites.²⁵

5.7 Offer municipal employee benefits that foster food waste reduction measures. These benefits may include, but are not limited to:

5.7.1 Rebates or discounted pricing for, or free provision of, kitchen food scrap bins and/or home composting bins;

5.7.2 Rebates or discounted pricing for food scrap recycling collection services;

5.7.3 Rebates or discounted pricing for subscriptions to services delivering groceries that do not meet typical cosmetic standards or are surplus;²⁶

5.7.4 Free reusable food storage containers; and

5.7.5 Free e-books or other materials containing recipes that incorporate leftover food and/or lesser-used food items.²⁷

5.8 Incentivize food waste reduction through a municipal employee or agency recognition program.²⁸

6.0 Municipal Department Strategies: [List municipal departments or agencies] shall:

6.1 Develop a strategy for preventing food waste, rescuing/donating surplus food, and recycling food scraps by [date] using a template developed in partnership with [the Coordinator, Coordinating Body, and/or other expert municipal staff]; and

6.2 Report annually to the Office of the Mayor on activities that address food waste in a report format developed in partnership with [the Coordinator, Coordinating Body, and/or other expert municipal staff],²⁹ which shall include:

6.2.1 A qualitative description of food waste prevention measures employed;

6.2.2 A qualitative description of surplus food rescue/donation measures employed;

6.2.3 A qualitative description of food scrap recycling measures employed;

6.2.4 An estimate of amounts of food waste and surplus food diverted from disposal through prevention, rescue/donation, and recycling, by weight;³⁰

6.2.5 A description of methodology used to generate the diversion estimate; and

6.2.6 Any challenges associated with implementing the activities developed under section 6.1 above that had to be overcome since the last report or are ongoing.

25 For example, Ulster County, New York, runs a Home Composting Demonstration Garden through the county's Resource Recovery Agency. Ulster County Resource Recovery Agency, "Recycling Outreach Team," accessed March 9, 2023, <https://ucrra.org/events-classes/recycling-outreach-team/>. For a list of compost facilities in and around New York State, including those that provide demonstrations, see Cornell Waste Management Institute, "NYS Compost Facilities Map (and Surrounding States)," accessed March 9, 2023, https://compost.css.cornell.edu/maps.html#Holds_Demos=Yes.

26 See, e.g., Andrew Krososky, "4 of the Best Ugly Produce Companies, Who Are All Helping Avoid Food Waste," *Greenmatters*, December 23, 2022, <https://www.greenmatters.com/p/ugly-produce-companies>.

27 See, e.g., King County Library System, "13 Books to Minimize Food Waste," accessed April 5, 2023, <https://kcls.bibliocommons.com/list/share/308506797/1338905049>.

28 See, e.g., Denver's 5281 Awards, which annually recognize city employees who "go above and beyond expectations" in their roles. There are several categories of awards, including a sustainability category "that recognizes actions to promote the city's sustainability goals." City of Denver, "5281 Awards," accessed March 9, 2023, <https://www.denvergov.org/Government/Agencies-Departments-Offices/Agencies-Departments-Offices-Directory/Office-of-Human-Resources/programs-and-policies/employee-recognition/5281>.

29 A Coordinator and/or Coordinating Body may play a helpful role in ensuring that the reporting template is appropriate for, and used by, all relevant municipal departments. The municipality may choose to base its reporting form on the template provided by NRDC and the Environmental Law Institute (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>), adapting it as necessary to best fit local circumstances and needs. See also, e.g., New York's 2022 annual reporting form for designated food scraps generators under the state's Food Donation and Food Scraps Recycling Law. New York State Department of Environmental Conservation, "2022 Designated Food Scraps Generator Annual Report," accessed May 24, 2023, <https://survey123.arcgis.com/share/7db8b78cb97d44bc580739a77e75661a4>.

30 For additional guidance on measuring and reporting food waste and surplus food generated and/or diverted, see NRDC and ELI's "Model Ordinance on Mandatory Reporting for Large Food Waste Generators." Section 5.0, Reporting Requirements, provides additional detail about the type of information to include in such a report. Linda Breggin, Darby Hoover, 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>.

7.0 Semiautonomous and Quasi-Governmental Entity Strategies: Semiautonomous and quasi-governmental entities are strongly encouraged to:

- 7.1 Develop a strategy for preventing food waste, rescuing/donating surplus food, and recycling food scraps by [date] using a template developed in partnership with [the Coordinator, Coordinating Body, and/or other expert municipal staff]; and
- 7.2 Report annually to the Office of the Mayor on activities that reduce food waste in a report format developed in partnership with [the Coordinator, Coordinating Body, and/or other expert municipal staff]. Items in the report may include, but are not limited to:
 - 7.2.1 A qualitative description of food waste prevention measures employed;
 - 7.2.2 A qualitative description of surplus food rescue/donation measures employed;
 - 7.2.3 A qualitative description of food scrap recycling measures employed;
 - 7.2.4 An estimate of amounts of food waste and surplus food diverted from disposal through prevention, rescue/donation, and recycling, by weight;
 - 7.2.5 A description of methodology used to generate the diversion estimate; and
 - 7.2.6 Any challenges associated with implementing the activities developed under section 7.1 above that had to be overcome since the last report or are ongoing.

ORDERED, EFFECTIVE and ISSUED:

[Mayor Name]

[Mayor Title]

[Date]