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ACHIEVING ZERO FOOD WASTE

A State Policy Toolkit

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ZERO FOOD WASTE COALITION

This is a product of the Zero Food Waste Coalition. ZFWC brings consumers, businesses, and government together to build momentum and alignment on food waste policy.

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About the Harvard Law School Food Law and Policy Clinic FLPC serves partner organizations and communities in the United States and around the world by providing guidance on cutting-edge food system issues, while engaging law students in the practice of food law and policy. FLPC is committed to advancing a cross-sector, multi-disciplinary and inclusive approach to its work, building partnerships with academic institutions, government agencies, non-profit organizations, private sector actors, and civil society with expertise in public health, the environment, and the economy. FLPC's work focuses on increasing access to healthy foods, supporting sustainable and equitable food production, reducing waste of healthy, wholesome food, and promoting community-led food system change. For more information, visit www.chlpi.org/FLPC.

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About ReFED ReFED is a national nonprofit working to end food loss and waste across the food system by advancing data-driven solutions to the problem. We leverage data and insights to highlight supply chain inefficiencies and economic opportunities; mobilize and connect supporters to take targeted action; and catalyze capital to spur innovation and scale high-impact initiatives. Our goal is a sustainable, resilient, and inclusive food system that optimizes environmental resources, minimizes climate impacts, and makes the best use of the food we grow. To learn more about solutions to reduce food waste, please visit www.refed.org.

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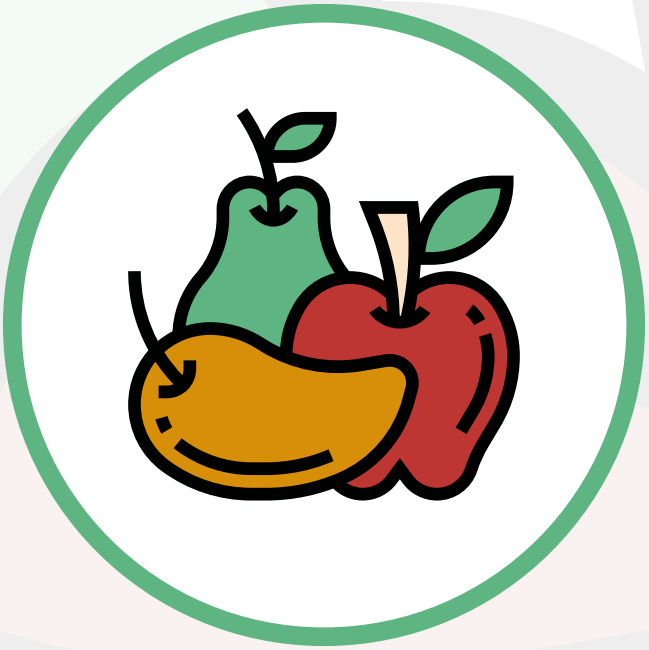


INTRODUCTION

Approximately 38% of food in the United States goes unsold or uneaten.[1] The mountain of wasted food totals 91 million tons annually,[2] which is equivalent to the weight of approximately 219 Empire State Buildings.[3] Most of this wasted food goes to landfills, incinerators, or sewers or is left on farm fields to rot.[4] Households, food producers, and other businesses in the United States spend $444 billion each year to grow, process, transport, and dispose of food that ultimately is never eaten.[5]

Food is wasted at all levels of the food system—in farms, grocery stores, restaurants, and homes—and this waste has serious environmental and societal consequences. Producing food that ends up uneaten consumes 22% of all freshwater, 19% of all fertilizer, and 16% of all cropland in the United States.[6] Food waste generates about 270 million metric tons of CO_2 equivalent greenhouse gas emissions each year, roughly equivalent to the annual emissions from 58 million passenger vehicles.[7] But the negative consequences of wasting food extend beyond the environmental impacts and loss of resources that could have been otherwise allocated. More than 1 in 10 Americans suffer from food insecurity despite the abundance produced by our farms and factories.[8]

With the Nation's goal of cutting food waste by 50% by the year 2030,[9] state leaders are at the vanguard of the movement, crafting policies to address food waste and reaping the environmental, social, and economic benefits. Further, though the federal government can take many vital steps to reduce food waste through regulations and funding, state governments, as the primary regulators of municipal solid waste, have at their disposal several unique policy options which would be difficult to implement under federal law.

State governments have sought to address food waste by banning organic waste from landfills, mandating or promoting surplus food donation, supporting food recovery and composting infrastructure, and re-evaluating how schools handle food waste. States that have implemented these policies have done so through processes of identifying local problems and rigorous experimentation to craft effective and innovative solutions. While the methods employed by states vary, they provide an array of experiences with food waste reduction upon which other states and the federal government can now draw.

CONTENTS OF THE TOOLKIT

State leaders are advancing efforts to tackle food waste across the United States—responding to consumer demand, creating jobs and economic opportunities, ensuring food makes it to those experiencing food insecurity, and addressing environmental harms and climate change. This toolkit seeks to similarly embolden officials and advocates from across the country to learn from others' successes and accelerate their own leadership and impact. To do so, this toolkit contains a range of tried and tested policy opportunities that states can use to prevent food waste and keep food out of landfills and incinerators. The target audience for this toolkit is state policymakers and advocates—whether their interest stems from concerns around climate change and environmental sustainability, financial responsibility, increasing food rescue, or finding opportunities to support local farmers,

all of which can be achieved through policies described in this toolkit. While this toolkit was drafted with this audience in mind, it may also be helpful to a wide range of individuals and groups interested in enacting legislation to tackle food waste at the local, state, or federal level (see Federal Actions on Food Waste text box below for recent federal activity around food waste).

FEDERAL ACTIONS ON FOOD WASTE

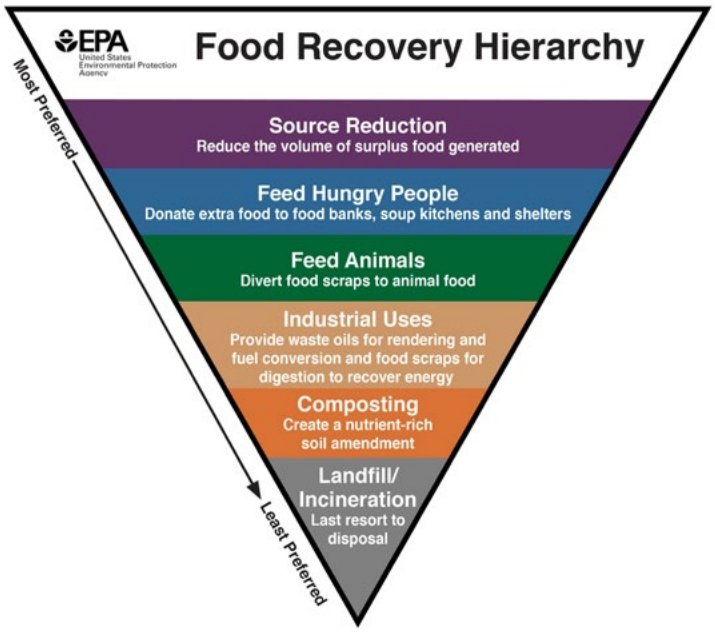
In addition to advocacy on the state and local level, the Harvard Law School Food Law & Policy Clinic (FLPC), NRDC (Natural Resources Defense Council), ReFED, and World Wildlife Fund (WWF) have done significant joint work on federal policies to prevent and reduce food waste. In April 2023, FLPC, NRDC, ReFED, and WWF formalized their partnership and created the Zero Food Waste Coalition.[10] The Coalition builds momentum and alignment on food waste policy. In April 2021, the four organizations, along with many private sector supporters, local government agencies, and non-profit organizations—published the U.S. Food Loss & Waste Policy Action Plan for Congress & the Administration (Action Plan).[11] The Action Plan calls upon Congress and the Biden administration to take ambitious action to achieve the goal of cutting U.S. food loss and waste in half by 2030. It recommends five key policy actions ranging from investing in infrastructure and programs that measure and prevent food waste to standardizing date labeling at the federal level. For more details, please see the U.S. Food Loss and Waste Action Plan for Congress & the Administration.[12]

In April 2022, FLPC, NRDC, ReFED, and WWF followed up on the Action Plan with Opportunities to Reduce Food Waste in the 2023 Farm Bill, a report which contains 22 detailed recommendations for how the 2023 Farm Bill can curb food waste, with a focus on opportunities to prevent food waste, recover surplus food, promote food waste recycling, and enhance coordination in food waste prevention efforts. The report includes legislative priorities such as standardizing date labels, creating a national education campaign around food waste, funding policies and programs to support organic waste recycling, and funding new positions to promote food waste prevention efforts at USDA and across government agencies. Many of the recommendations in the report are federal corollaries to state policies included in this toolkit; for example, improving federal tax incentives for food donation, and incentivizing compost application. Federal, state, and local governments must work together to tackle food waste. State and local governments can work together to serve as innovators, testing initiatives on small scales and tackling policies under their control. While the federal government can legislate in areas where uniform standards are essential, as with date labeling.

HOW TO USE THIS TOOLKIT

The toolkit introduces a wide range of policies that states can implement to address food waste. For each policy, it includes background on the issue, explains the need for the policy, describes any relevant federal legislation, outlines best practices for the state policy, and offers an example of existing or proposed state law that incorporates many of these best practices. The Appendix includes model legislative language for each featured policy that states can use as a starting point to develop and pass their own policies. Some models are completely finalized, whereas others include options and comments to help guide states to tailor the policy to fit their unique circumstances while still achieving the policy goals. In some instances, our organizations have drafted the legislation together, while in other instances we have included model legislation drafted by other organizations. This toolkit was designed to enable users to jump to the sections that will be most useful to them. The toolkit makes frequent use of cross-references to refer readers to other sections of the toolkit that cover related information.

The toolkit begins with the policies that are most effective at reducing food waste disposal—organic waste bans and related policies that restrict the disposal of food waste in landfills or incinerators. Organic waste disposal bans result in significant economic, social, and environmental benefits, including the reduction of food waste generation and increase in food donation, in addition to the expected increase in organic waste recycling.[13] While all the policies introduced in this toolkit are beneficial, policies that ban organic waste from going into landfills will likely be the most impactful at diverting food waste from disposal.



It also takes significant effort to get these policies passed and implemented, while also ensuring that compliance includes food waste prevention and food rescue and does not focus solely on organics recycling. For states that are not ready to pass organic waste bans, there are still significant steps they can take to move the needle on food waste, including promoting food donation, supporting composting infrastructure and compost end markets, and addressing food waste in schools.

While reading and using this toolkit, readers should keep the Environmental Protection Agency's (EPA) food recovery hierarchy in mind.[14] The hierarchy focuses on different management strategies for food waste, starting with a base built on food waste prevention. It then moves to feeding hungry people, feeding animals, diverting food waste to industrial uses, and lastly diverting food waste for composting. Readers should consider how the hierarchy aligns with various policies and how to shape policies according to the hierarchy to maximize impact.

Each policy will have different impacts on different aspects of the food system, including environmental and social aspects. The types of impacts and outcomes of the policy will change who the natural constituencies and advocates are for a particular policy as well as the strategies for coalition building to inform and support that policy. For example, tax incentives for food donations will increase food rescue, meaning that food recovery organizations, food banks, and anti-hunger advocates are likely to be natural allies, and it will also reduce the financial costs associated with disposing of surplus food, meaning that food businesses, such as retailers, restaurants, processors, and distributors, may also support the efforts. Wherever possible, states should involve potentially affected stakeholders in crafting legislation and amending policies.

This toolkit is composed of six sections that each contain a range of potential policy solutions that a state could pass and implement to address food waste. While each section deals with a specific category of policies, these policies do at times intersect, and the toolkit includes cross-references to other sections to highlight this overlap.

Section I: Building and Broadening Organic Waste Bans and Beyond

This section introduces policies to eliminate food waste from landfills. These policies include organic waste bans and mandatory organics recycling laws, food donation requirements, mandatory reporting laws that require entities to report on food waste generation to help develop data to support organic waste bans or planning for recycling infrastructure, and disposal surcharge fees that raise revenue for food waste diversion efforts like organic waste bans. This section includes:

- **Organic Waste Bans:** This subsection explores state laws that ban disposal of food scraps in landfills and incinerators, looking to Vermont as a model.
- **Food Donation Requirements:** This subsection explores state laws that ban disposal of food scraps in landfills and incinerators and require surplus food be donated as a way to reduce food waste. It looks specifically to the organic waste bans in California and New York as models.
- **Mandatory Reporting Laws:** This subsection outlines the potential for laws that require reporting by food waste generators, highlighting NRDC and the Environmental Law Institute's model legislation.
- **Disposal Surcharge Fees:** This subsection explores disposal surcharges that charge fees per ton of waste landfilled or incinerated to generate revenue for food waste diversion and other recycling efforts, relying on model legislation drafted by the Institute for Local Self-Reliance and using an introduced Maryland bill as a model.

Section II: Opportunities to Promote Food Donation

This section introduces policies that can promote and incentivize the donation of food (aside from donation requirements highlighted in Section 1), including tax incentives, liability protection, and food safety for food donation. This section includes:

- **Liability Protections for Food Donation:** This subsection describes the federal Bill Emerson Good Samaritan Food Donation Act,[15] as amended by the Food Donation Improvement Act,[16] which provides liability protections to food donors, and suggests methods for states to expand liability protection for food donations, using New Jersey's law as a model.
- **Tax Incentives for Food Donation:** This subsection presents current federal tax incentives for food donors and delves into opportunities for states to expand tax incentives as a mechanism to spur food donation, looking specifically at the tax incentives adopted in California as an example.
- **Food Safety Guidance for Food Donation:** This subsection explores the complexity of food safety regulations and the roles of federal and state governments in breaking down barriers to food donation presented by unclear food safety regulations, using Texas regulations as a model policy.

Section III: Supporting Organic Waste Processing Infrastructure

This section introduces a policy that can help states support and develop composting infrastructure to ensure there is sufficient capacity to recycle food scraps. This section includes:

- **Permitting and Zoning for Composting and Anaerobic Digestion Facilities:** This subsection explores opportunities for states to improve composting infrastructure by directing regulatory agencies to streamline permitting and zoning for composting facilities, using Maryland and Ohio EPA guidance as a model for some of the key components.
- **Recycling Food Scraps into Animal Feed:** This subsection briefly walks through the history of how this beneficial practice has become heavily regulated. This section suggests eliminating state laws that restrict or unnecessarily burden those who wish to develop businesses that repurpose food scraps into profitable animal feeds, and further recommends providing informational and monetary support to those businesses.

Section IV: Developing End Markets for Compost

This section introduces policies that can help states support end markets for finished compost products resulting from composting food scraps, to make the financial case for increased recycling of food scraps. This section includes:

- **Compost Procurement:** This subsection explores compost procurement policies where states commit to purchasing local compost for their needs in order to support the market for compost, using Washington State's compost procurement law and the NRDC and Environmental Law Institute's drafted model as examples.
- **Incentivize Compost Application:** This subsection highlights opportunities for states to incentivize the application of compost to improve soil health, sequester greenhouse gasses, and support compost end markets, using California's Healthy Soils Program as a model.

Section V: Preventing Food Waste Upstream

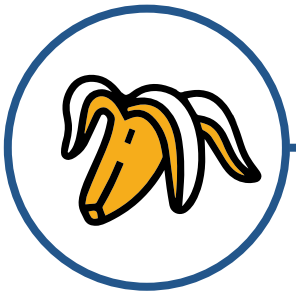
This section outlines policies to prevent food waste upstream, including reforming date labels to prevent safe, wholesome food from being thrown away due to confusion. This section includes:

- **Date Labeling:** This subsection explains what date labels mean and suggests how state governments can strengthen their date labeling laws to reduce consumer confusion and prevent food waste, using a bill introduced in Massachusetts as a model.

Section VI: Other Governmental Action to Address Food Waste

This section outlines other governmental policies and actions that states can take to reduce food waste, including food waste efforts in K-12 schools, climate and solid waste action plans, and government grants and support. This section includes:

- **Food Waste Reduction in K-12 Schools:** This subsection discusses the policies that states, municipalities, school districts, and schools can implement to decrease food waste, using Rhode Island's legislation related to food waste in K-12 schools to demonstrate legislative steps taken to enact such change.
- **Climate and Solid Waste Plans:** This subsection explores the potential to include food waste reduction targets and actions in climate action plans and solid waste management plans, using New Jersey's climate plan as a model.
- **Government Support for Food Waste Reduction:** This subsection explores federal and state government support for food waste reduction via funding and education.



SECTION I

BUILDING AND BROADENING ORGANIC WASTE BANS AND BEYOND

Policies that restrict sending food to landfill, and particularly organic waste bans (including both disposal bans and mandatory waste recycling laws) and related food donation requirements, are the most effective tool states have to keep food out of landfills and incinerators because, simply put, they ban food waste generators from disposing of food in landfills or incinerators or divert disposal by mandating that generators recycle or donate food.

Organic waste bans and similar policies are spreading across the country.[17] Currently, nine states and ten localities have some form of an organic waste ban, waste recycling law, or donation requirement, and there is growing interest in the practice.[18] While these policies require infrastructure and effort on the state level with associated costs, they also have the potential to spur economic development. For example, a study of the impact of Massachusetts' organic waste ban found that the policy created over 500 jobs and stimulated $175 million in economic activity during its first two years.[19]

States have taken two general pathways towards preventing food disposal: (1) standard organic waste bans, which include both disposal bans that prohibit covered entities from sending organic waste to the landfill as well as mandatory organics recycling laws which require covered entities to subscribe to an organics collection service or send food waste to a compost or anaerobic digestion facility, and (2) organic waste bans with a donation requirement, which, in addition to the disposal ban in option (1), require the donation of all or some portion of edible surplus food. Because these pathways are somewhat distinct, this toolkit describes them as separate policies though there is significant overlap in terms of drafting, advocacy tactics, and outcomes.

Standard organic waste bans, such as Vermont's policy, focus primarily on restricting disposal of food in landfills and incinerators. In contrast, organic waste bans that include food donation requirements, such as California's and New York's policies, mandate that some generators donate surplus food to those in need. Each of these policies has strengths—standard organic waste bans can be the fastest and most straightforward policy to reduce disposed food, whereas donation requirements can ensure surplus food goes to its highest use according to the food recovery hierarchy: feeding people. The sections below describe the two policies in depth.

Because organic waste bans and food donation requirements are significant endeavors, there are steps that states can take along the way to help plan for and fund these policies. This section also includes details on two other steppingstones: (1) mandatory reporting laws, which require businesses and other organizations to report on

the amount of food waste they generate, and (2) disposal surcharges, which charge a per ton fee for solid waste disposal that can be used to fund diversion activities. Both are concrete steps to build the capacity necessary to implement an organic waste ban. There are other policies later in the toolkit that can similarly support organic waste bans or food donation requirements including Liability Protections for Food Donation, Tax Incentives for Food Donation, Permitting and Zoning for Composting and Anaerobic Digestion Facilities, and Section IV, Developing End Markets for Compost.

ORGANIC WASTE BANS

INTRODUCTION

As noted above, organic waste bans are a category of laws and regulatory requirements that restrict the amount of organic waste or food waste that can be disposed of in landfills or incinerators and/or require that food waste generators divert organic waste. Organic waste bans are one of the most effective tools policymakers have at their disposal to change the way businesses and consumers manage and value their organic waste. State government studies show that the benefits of waste bans include job creation and emissions reduction.[20]

The first pathway for organic waste bans simply restricts generators from disposing food waste in landfills but does not require excess food be donated. The strictest version of an organic waste ban was passed in Vermont. The Vermont law eliminated compliance thresholds based on business size or volume of waste (meaning the waste ban applies to all individuals in the state, not just the largest food waste generators), does not include exemptions based on distance or cost, and requires commercial composting.[21] In general, standard organic waste bans, like Vermont's, are more straightforward to develop, implement, and enforce than those that also include donation requirements. Donation requirements add another regulatory layer specifically dictating what happens to surplus food. Though standard organic waste bans do not mandate donation, they can still help encourage food businesses to keep food out of the waste stream and instead commit it to higher uses, like donation. For other policies that states can enact to encourage donation, see Section II: Opportunities to Promote Food Donation. Of the nine states that currently have organic waste bans, seven have standard organic waste bans that do not include donation requirements.

While the federal government can support these policies via funding, state and local governments regulate municipal solid waste and are responsible for passing and implementing organic waste bans and donation requirements (whereas the federal government sets standards for hazardous waste). The following section provides an overview of federal government support related to organic waste bans and then highlights best practices for standard organic waste bans, with a focus on Vermont as a model.

FEDERAL LAW

While organic waste bans and mandatory recycling laws are instituted at the state or local level, the federal government can support such laws through grant funding allocated to food waste

reduction. For example, communities may need to construct composting or anaerobic digestion facilities.[22] Federal funding sources include the U.S. Department of Agriculture's (USDA) Rural Energy for America Program, which allows agricultural producers and rural businesses to apply for funding to purchase or install renewable energy systems, including anaerobic digester systems.[23] Additionally, the 2018 Farm Bill included a new Community Compost and Food Waste Reduction pilot program, which provides up to $25 million in annual grant funding to localities in at least 10 states to develop and implement organic waste or food waste reduction projects.[24] The program also prioritizes returning compost to local farms to help develop more circular economies.[25]

MODEL STATE LAW

Organic waste bans are increasing in popularity, and currently nine states and ten localities have policies in place. Of these nine states, seven are implementing standard organic waste bans that do not include donation components. Connecticut, Massachusetts, New York, Rhode Island, New Jersey, Maryland, Vermont, Washington, and California have all adopted state organic waste bans in the past decade.[26] The waste bans in New York and California include donation components, and Washington's legislation includes a donation target, which has yet to be implemented through regulations.[27] However, the design of each law differs in ways that impact the reach and effect of the law on reducing food waste and promoting food donation. These laws often vary in terms of which entities are covered, how much organic waste an entity must produce to be covered, and whether exceptions or waivers exist (based on geographic, financial, or other considerations).[28] As a general rule, the more types of entities covered, the lower the baseline to be considered a covered entity, and the fewer waivers or exceptions granted, the stronger the policy will be.[29] However, stricter requirements may be more politically difficult to pass and harder to implement in practice. In general, a successful state organic waste ban should:

- **Apply a tiered and phased-in approach:** A phased-in approach, with different dates on which waste generators are subject to the law's provisions, allows generators and jurisdictions time to prepare and build the recycling infrastructure necessary to implement these laws. Often policies include thresholds for the amount of waste that entities must generate to be covered, and these thresholds reduce over time to cover more generators. For example, Maryland's organic waste ban covers generators that produce more than two tons of food waste per week starting January 1, 2023, and this threshold decreases to one ton of food waste per week in January 2024.[30] Other states may tie threshold decreases to the state's ability to meet overall waste diversion goals. For example, Massachusetts's Department of Environmental Protection passed regulations to reduce its organic waste ban threshold from one to half a ton per week of food waste to help meet overall waste reduction goals.[31] Lastly, policies could eliminate thresholds over time and cover all generators. For example, Vermont's organic waste ban created a process that gradually reduced its coverage threshold before eventually phasing in all generators that produce any amount of food waste, including residences, in 2020, effectively banning all food scraps from the landfill.[32] Vermont is the only state with an organic waste ban that goes down to the residential level. Additionally, Vermont's

law mandates a food scrap collection service at waste facilities and requires food scrap haulers to offer their services to non-residential customers and apartments of four units or more if no other hauler offers that service.[33]

- **Grant only limited waivers and exemptions, if at all:** Some organic waste bans include exemptions based on industry type (e.g., hospitals, schools), geographic proximity to processing facility, or cost, whereas others offer waivers if the requirements would cause "undue hardship." While many laws include these waivers and exemptions, laws that do not provide them or rarely provide them will be most effective at maximizing compliance and thus increasing the amount of food diverted from disposal. While Vermont's Universal Recycling Law initially included a geographic waiver to cover only generators located within 20 miles of a composting facility, in 2020 this exemption was phased out.[34] Additionally, rather than relying on a waiver, governments could consider additional incentives and support to increase compliance.
- **Delegate implementation, specify enforcement authority, and promote outreach to generators:** The law should designate enforcement and regulatory authority to implement the law to a state department, usually the department responsible for managing organic waste or environmental protection. To maintain consistency across the state, this authority should be delegated to a state department, as opposed to a county or municipal authority. When structuring the law's implementation and enforcement, the authorized state department should solicit input from local and regional business and government entities that will be impacted by relevant policies or regulations. States should provide outreach, sector-specific guidance, resources to build industry buy-in and support compliance, and education on organic waste bans, including who must comply and how to comply. Before resorting to traditional enforcement mechanisms, such as fines, states should encourage compliance through outreach and education. For example, in Massachusetts, RecyclingWorks MA offers sector-specific compliance tips for various industries, including food manufacturers and restaurants.[35] Massachusetts also provides a food waste estimation guide that offers guidance and methodology, broken down by industry, to determine whether entities are subject to the state's organic waste ban.[36] Alternatively, New York publishes a list of all the organizations subject to the state's organic waste ban.[37]
- **Provide grants for food waste reduction efforts:** States can offer grants to fund food waste prevention, food rescue, and projects to enhance the viability of organic waste bans, such as supporting the development of composting, anaerobic digestion, food rescue, or on-farm organics recycling infrastructure. For example, the Massachusetts Department of Environmental Protection administers a grant program to fund recycling and composting equipment, school recycling, and organics capacity development projects.[38] States can also provide food rescue infrastructure grants, such as grants for farmers and food recovery organizations to facilitate value-added processing for surplus foods that would otherwise be tilled under or left in the field. For example, the California Department of Resources Recycling and Recovery (CalRecycle) administers the Organics Grant program, which provides funding for composting infrastructure and food waste prevention and recovery.[39] CalRecycle also

administers the Edible Food Recovery Grant Program to fund food recovery and food waste prevention projects.[40]

Vermont's Universal Recycling Law, passed in 2012, can serve as a model for a standard organic waste ban, as it includes many of the best practices outlined above. The food scraps provisions of the Universal Recycling Law require covered waste generators to source separate food scraps and send them to facilities that manage them in an approved manner. The law includes the following elements:

- **Creating a disposal ban:** Though the law encourages management of food scraps in accordance with Vermont's food recovery hierarchy which outlines priority uses,[41] it does not require any specific sort of food recovery or recycling.
- **Covering all generators:** Unlike all other state organic waste bans, Vermont's food scrap ban was designed to eventually cover all individuals in addition to commercial food waste generators.[42] The law covers individuals, businesses, corporations, and public entities, and it phased in organizations at lower thresholds of food waste generation over time.
- **Taking a phased approach:** The law first took effect on July 1, 2014, at which time it covered only entities generating more than 104 tons per year of food scraps.[43] The threshold amount of waste dropped to 52 tons per year on July 1, 2015, 26 tons per year on July 1, 2016, and 18 tons per year on July 1, 2017.[44]
- **Eliminating distance exemptions:** Prior to 2020, businesses and households were exempt from the ban if they were located more than 20 miles from an organics processing facility that accepts food scraps.[45] As of July 1, 2020, the law covers all generators of food waste, regardless of the amount they generate or distance from an organics processing facility.[46]
- **Focusing on outreach and awareness for enforcement:** The law provides that violators can be fined up to $25,000 and face six months in prison.[47] However, the state has focused thus far on outreach, awareness, and voluntary compliance and has not issued any fines to date.[48] To support voluntary compliance, the law mandates a coordinated education and outreach plan.[49]

See Appendix A for model legislation for a standard organic waste ban.

FOOD DONATION REQUIREMENTS

INTRODUCTION

While most organic waste bans enacted to date follow the model of disposal bans or mandatory recycling laws, described in the previous section, newer policies in California and New York also include food donation requirements.[50] As the name suggests, food donation requirements mandate that certain generators of surplus food redirect safe food to people or other recovery and recycling pathways rather than disposal. Globally, a few countries like the Czech Republic,[51] Ecuador,[52] France,[53] Peru,[54] and Poland[55] have donation requirements, and though this policy is still novel, it is being adopted slowly across the United States. California and New York have recently begun implementing food donation requirements and goals alongside organic waste ban policies, and Washington's organic waste ban includes a food donation target,[56] though it is not yet clear how it will be implemented and whether there will be

a donation requirement to achieve this goal. It is important to note that these states include food donation as a component of a broader organic waste ban, compared to globally where countries have implemented donation requirements as standalone policies.

Food donation requirements are beneficial in that they ensure food is put to the highest and best use, but they also can be complicated. Mandating food donation is hugely impactful not only for diverting waste from disposal and incineration, but also for feeding people, supporting food rescue, and changing the culture around food waste. That said, donation requirements are complicated to implement and require significant effort and funding, particularly to build up food rescue capacity. Given the complexity, California engaged stakeholders for nearly four years to develop and finalize their regulations.[57] The California and New York models and regulations can serve as a foundation for other states and may help reduce the associated regulatory start-up costs, though there will still be significant implementation and enforcement activity required. The following section provides an overview of federal government support related to donation requirements and then highlights best practices, with a focus on California and New York as models.

FEDERAL LAW

As noted above, the federal government can support donation requirements and organic waste bans through grant funding for food waste diversion; for example, the Community Compost and Food Waste Reduction pilot program provides funding for local food waste and compost projects.[58] The federal government can also support these policies through infrastructure investments. For example, in June 2021, the USDA announced a one-time infrastructure investment of up to $100 million in food recovery infrastructure grants for food assistance organizations, particularly those that reach underserved areas.[59] The grants can be used for efforts such as developing storage and refrigeration capacity and paying staff, allowing these organizations to rescue more food and feed more people.[60] Additionally, the federal Bill Emerson Good Samaritan Food Donation Act[61] provides critical liability protection to food donors (for more details see Liability Protection for Food Donations), and donors can also take advantage of federal and state (if applicable) tax incentives for donated food (for more details see Tax Incentives for Food Donation).

MODEL STATE LAW

While growing globally, food donation requirements are still novel policies in the United States. Currently, both California and New York include donation requirements as part of their broader organic waste bans. The donation requirements in both states first went into effect January 1, 2022, so as of the date of this report there is limited implementation data to inform best practices. Additionally, Washington's HB1799, passed March 8, 2022, includes a donation target, though it is unclear how it will be implemented when the law goes into effect January 1, 2024, as regulations have not yet been released. Despite the newness of these policies, best practices are emerging, and future food donation requirements should:

- **Require donation of food that meets health and safety requirements and recycling of any remaining food scraps:** To ensure that

food goes to its highest use, human consumption,[62] surplus food that meets local health and safety requirements should be donated to food recovery organizations and ultimately people. To ensure the maximum amount of waste is diverted, a law should then require that any remaining food scraps, either those that are not fit for human consumption or that food recovery organizations reject (for reasons such as that the food is spoiled or is not nutritious or desirable), be sent to organics recycling. An example of a state with such a requirement is New York, where covered entities—businesses and institutions that generate an average of two tons of unused food per week—must first donate surplus food and then recycle all remaining food scraps.[63]

- **Apply a tiered and phased-in approach:** As with standard organic waste bans, a phased-in approach with different dates on which food waste generators are subject to the provisions of the law allows generators and jurisdictions time to build and fund the food recovery infrastructure necessary for implementation. A tiered approach also allows more time for education and outreach to generators in later tiers, which may consist of generators with less experience in recovering food and often include generators of prepared foods, recovery of which involves additional food handling requirements. California's approach with its food donation requirements provides an illustrative example.[64] As of January 2022, Tier One edible food generators—including supermarkets, grocery stores, food service providers, food distributors, and wholesale food vendors—are required to comply with California's food donation requirements.[65] By 2024, Tier Two edible food generators—including restaurants with over 250 seats, certain hotels, health facilities, large venues, large events, state agency cafeterias, and local agencies with on-site food facilities—must comply as well.[66]
- **Perform capacity planning and provide grants for food recovery organizations:** A donation requirement will benefit some food recovery organizations, but it may also burden food recovery organizations with more limited capacity. Many smaller food recovery organizations are independent from larger food banks and rely heavily on volunteers, and their costs have been rising due to increasing fuel and staffing costs. To ensure that the state has sufficient food recovery infrastructure, it should undergo capacity planning. For example, as part of its food donation requirement, California requires counties to estimate the amount of edible food currently disposed by generators as well as recovery capacity within that county based on information requested from their local food recovery organizations and services.[67] Additionally, states should offer grants to support the development of food rescue infrastructure to enhance the viability of food donation requirements. For example, CalRecycle administers the Edible Food Recovery Grant Program and Food Waste Prevention and Rescue Grant Program, and has awarded over $28.8 million to food rescue organizations.[68] These grants go exclusively to projects that reduce the amount of food in landfills.[69] Grants should be tailored to support small food recovery organizations with fewer resources, such as by providing consistent, accessible funding not only for the purchase of equipment and other infrastructure, but also to support on-going overhead costs such as staffing and warehouse space. Importantly, laws should not require food recovery organizations to accept donations that do not meet their internal require-

ments. In addition, California's regulations allow both for-profit food recovery services and nonprofit organizations to contract to recover food from excess food generators as long as the food is ultimately delivered to a charitable food distribution organization.[70]

- **Promote education and outreach:** Food donation requirements should include mandated outreach and education by the relevant state department, with sector-specific guidance and tools to assist with these requirements. This guidance should include specifics on who must comply, how to comply, and resources to build industry buy-in and support compliance. Guidance could clarify legal terms used in legislation. For example, if the legislation requires commercial food generators to separate and donate surplus food to the "maximum extent practicable," state guidance should clarify that this requirement will vary from organization to organization, depending on circumstances and resources. As an example of additional resources the state may provide, CalRecycle offers a number of educational and guidance tools including a list of local food recovery organizations and a model food recovery agreement.[71] CalRecycle also offers a capacity planning calculator to help jurisdictions estimate the amount of edible food that is disposed and the existing capacity available at food recovery organizations.[72] States should also work with municipalities to share educational resources, given the varying educational and resource needs between jurisdictions.
- **Coordinate policy execution with local jurisdictions:** States may wish to delegate certain aspects of implementation to local jurisdictions, such as mandating public education and analyzing donation capacity. However, states should avoid delegating full compliance monitoring and enforcement to municipal jurisdictions, which may make compliance overly burdensome for businesses and food recovery organizations that operate across multiple jurisdictions. Excessive local level regulation may also make innovative food recovery models, such as upcycling businesses, difficult to pursue.
- **Monitor and track outcomes:** Food donation requirements should include the authority to monitor and evaluate participating businesses, institutions, and food recovery organizations for compliance and outcomes through mandatory reporting and/or another enforcement mechanism (like inspection). For example, in California, food recovery organizations (only those food recovery organizations that contract with businesses subject to the food donation requirement regulations) are required to report the pounds of edible food recovered each year to their jurisdiction, which then reports total pounds of edible food recovered up to the state agency.[73] Food generators are required to maintain records of donated food and make those records available for inspection, but are not required by state regulations to report these records, although certain jurisdictions may require such reporting.[74] The model legislation in Appendix B follows California's model, but has food recovery organizations report to the state, as opposed to municipal jurisdictions, to make compliance feasible for food recovery organizations.[75] For more on reporting, see Mandatory Reporting.

Both California and New York state laws are model donation requirement policies that include many of the best practices noted above. These laws can be used as examples for other states looking to implement similar requirements.

California's law, Senate Bill 1383 (SB 1383) passed in 2016 and the implementing regulations[76] drafted by CalRecycle contain many best practices, including:

- **Setting a food recovery target:** The law sets an ambitious state-wide target of recovering 20% of all edible food that would otherwise be sent to disposal to feed people in need by 2025.[77] Though the goal is 20% statewide, certain commercial food generators are required to donate the maximum amount of their excess edible food. The baseline is based off of the overall waste stream, which includes other generators (like households) that do not have edible food recovery requirements often for health, safety, and other practical reasons. This statewide target provided the authority for CalRecycle to implement the food donation requirements via legislation.[78]
- **Phasing in donation requirements:** The regulations take a phased approach, requiring the largest entities which tend to be most experienced with food recovery and donation practices (Tier One) to comply with the donation requirements as of January 1, 2022 and Tier Two Entities to comply as of January 1, 2024.[79]
- **Requiring organics recycling:** The law also requires jurisdictions to provide mandatory organic waste collection for all generators and have the capacity to recycle those organics, with some limited exceptions.[80] Activities that constitute recycling include composting, anaerobic digestion, and animal feed/rendering, among others. Further, it mandates jurisdictions implement residential food scraps collection and composting programs so households can also recycle food waste.[81]
- **Including grants:** CalRecycle offers grants for food recovery practices. It has funded over 100 projects with $28.8 million in total funding through the Edible Food Recovery Grant Program (started in 2021) and Food Waste Prevention and Rescue Grant Program (started in 2017).
- **Delegating educational authority to local jurisdictions:** While it is a statewide law, SB 1383 requires local jurisdictions, including cities and counties, to implement the donation requirement, including educating generators about the requirement and facilitating connections between generators and food recovery organizations.[82]

In New York, the Food Donation and Food Scraps Recycling Law, effective January 1, 2022, and its implementing regulations[83] also incorporate many best practices, including:

- **Mandating donation:** The law requires that designated food scraps generators separate excess edible food for donation to food relief organizations to the "maximum extent practicable."[84] Food scraps that cannot be donated must be recycled.[85]
- **Covering a broad range of entities:** The law defines food scraps generators as businesses and entities that generate an average of two tons of unused food per week[86] (with some notable exceptions),[87] except supermarkets, which are covered regardless of the amount of food waste generated.[88]
- **Requiring outreach and education:** Finally, it directs the New York Department of Environmental Conservation to develop educational materials to assist food waste generators as well as materials on food waste minimization for municipalities to distribute.[89]

See Appendix B for model legislation for a food donation requirement.

MANDATORY REPORTING

INTRODUCTION

Measurement is necessary for management, and food loss and waste is currently under-measured. This impacts states' ability to understand and address the issue through policies like organic waste bans or donation requirements. A statewide mandatory reporting law would require large businesses and organizations to report the amount of surplus food and food waste that they generate.[90] The data collected from mandatory reporting can help states establish a baseline of how much surplus food and food waste is generated within their state and which generators are most responsible. This data can then create the foundation for targeted waste diversion requirements.[91] Additionally, measuring and tracking food waste through a mandatory reporting law would increase both organizational and public awareness of food waste as a major environmental and social issue.[92] This increased awareness of food waste can build general support for waste diversion requirements, as well as motivate individuals and businesses to implement their own waste reduction efforts due to reputational concerns.[93] For example, the year that Sodexo at Good Samaritan Medical Center in Lafayette, Colorado started using food-tracking technology, the company reduced its food waste by 25%, or 6,290 pounds.[94] Similarly, IKEA has started using food waste-tracking technology through the vendors LeanPath and Winnow Solutions and saved over four million meals in just over two years.[95]

Currently, no states or localities have standalone mandatory reporting laws around food waste, though several states' organic waste ban laws include reporting components. Internationally, the Courtauld Commitment in the United Kingdom is a voluntary agreement around food waste that provides guidance and protocols on food waste reporting and encourages participants to track and report on their food waste.[96] The following section highlights best practices for mandatory reporting, with a focus on model legislation drafted by NRDC and the Environmental Law Institute (ELI).

FEDERAL LAW

There are no federal laws that address mandatory reporting of food waste.

MODEL STATE LAW

While there are currently no standalone local- or state-level food waste mandatory reporting laws, when considering best practices for such laws, states can look at reporting requirements associated with existing organic waste bans and donation requirements[97] as well as reporting requirements for other substances (e.g., California's regulations around hazardous waste),[98] and international models. For example, starting in 2023, New York's food donation regulations require businesses to report annually on the pounds of food donated and recycled, including details on types of food donated and challenges associated with food donation and recycling.[99] Similarly, California SB 1383 regulations require covered food waste generators to keep records on the quantity of food donated, the list of food recovery organizations donated to, and the schedules of food donation deliveries or collections.[100] A successful mandatory reporting law should incorporate the following best practices:

- **Limiting covered entities:** To minimize impact on small businesses and organizations and to prioritize the largest generators, states should require reporting only from the largest businesses, nonprofit organizations, and public sector entities that handle food.[101] States may also choose to limit covered entities by type (e.g., by exempting a given industry), by entity size, or by the quantity of food waste.[102] For example, New York's organic waste ban only covers entities that generate more than two tons of food waste per week and categorically excludes certain organizations, such as hospitals.[103] States may also want to include a waiver process for businesses that might experience undue hardship due to the requirement.[104]
- **Requiring sufficient detail to meet needs:** States should require covered entities to report on food waste with sufficient detail to meet states' strategic and planning needs. For example, a state may request data on total amount of food waste generated, amount donated to food rescue organizations, amount recycled through various methods (such as composting, anaerobic digestion, and animal feed), and amount disposed of in landfills or incinerators, and it may request this data based on food type.[105] Alternatively, some states may choose to collect less data or may add a qualitative component. For example, New York regulations require food waste generators to comment on donation and recycling challenges and any other issues that they would like to communicate to the department.[106] Similarly, California's Code of Regulations requires hazardous waste generators to describe their efforts to reduce the volume and toxicity of the waste that they generated, as well as changes in hazardous waste and volume compared to previous years.[107]
- **Giving flexible methods for quantification and offer support:** States should allow businesses and organizations to select the best quantification method that works for them.[108] This includes direct measurement methods, such as measuring food weight, and approximation methods, such as counting the number of food items in the waste stream, assessing the volume of space occupied by food waste, or utilizing warehouse record books.[109] For example, to help businesses estimate the amount of food waste generated as required under New York State's organic waste ban, the Department of Environmental Conservation provides a link to a Food Waste Estimator Calculator.[110]
- **Educating covered entities and provide compliance assistance:** To ensure that businesses and organizations understand the law and have the necessary resources to comply, states should educate covered entities and provide technical assistance around compliance before the law goes into effect and on an ongoing basis.[111] To prioritize equity, states should focus their outreach on underserved communities, like businesses owned by people of color or immigrants, and should ensure that all outreach material is culturally and linguistically appropriate.[112]

While, as noted above, there are no standalone mandatory reporting laws, NRDC, in conjunction with the Environmental Law Institute, recently published model mandatory reporting legislation for local jurisdictions which can serve as a model for a statewide law. This model legislation was developed after extensive research and stakeholder interviews. The legislation:

- **Requires an annual report:** The model legislation requires covered entities to submit

an annual report to their local municipal department detailing the amounts of surplus food and food waste generated, including the amount of surplus food donated to nonprofit organizations, the amount of food scraps recycled, and the amount of food scraps and surplus food disposed.[113] The amounts, reported in tons or pounds, may either be measured directly or estimated through counting, volume, or record-keeping.[114] In addition to reporting food quantities, the model legislation requires covered entities to provide a qualitative description of any uncertainties surrounding the reported food waste generation, as well as major challenges surrounding food donation and recycling.[115]

- **Mandates technical assistance:** The legislation requires municipalities to provide educational materials and compliance assistance to eligible entities, including translated educational materials to business owners who speak non-English languages.[116]
- **Includes potential for waivers:** The legislation allows covered entities to apply for a waiver from the reporting requirements in any year. Waivers may be granted on a case-by-case basis upon a written finding of undue hardship.

See Appendix C for model legislation for a mandatory reporting requirement.

DISPOSAL SURCHARGE FEES

INTRODUCTION

Used in many states for decades, disposal surcharge fees (sometimes referred to as landfill taxes) are a per-ton fee added by the government to the tipping fees charged at waste disposal sites, such as landfills and incinerators.[117] States implement disposal surcharges to defray general solid waste costs or support waste diversion projects such as composting, recycling, and food recovery.[118] Surcharges, which make it more expensive to throw things away, can incentivize transitioning from disposing of food waste to diversion through prevention, donation, and composting while also mobilizing funding for waste diversion programs. It is often the case that throwing food into landfill is the most financially sound option for food businesses. By increasing the cost of waste disposal, surcharges change that financial balance and push businesses to reconsider their waste processes to waste less food and find alternative pathways for excess food, such as donation or composting. Because surcharges are a self-funding mechanism, they are a crucial tool when new organic waste program funding is a nonstarter or funding gaps impede efforts to increase food waste diversion and recycling.[119]

By charging per ton fees, disposal surcharges help states generate revenue and reduce the amount of food and other waste in landfills.[120] In most states, either private or local government waste haulers pay the surcharge, ranging from $0.50 to $13 per ton, at the disposal site,[121] and waste haulers typically have discretion over whether and how to pass the fee down to consumers (though the New Jersey law requires waste haulers to explicitly list the surcharge as a separate fee in their consumer bills).[122] Increased disposal costs, including those for food waste, can spur generators to change their practices and reduce the amount of waste they send to disposal. At the same time, disposal surcharges generate annual fees for food waste diversion ranging from $4.8 million to over $100

million depending on the size of the state and the amount of the charge—money that can then be invested in efforts to prevent food waste and facilitate diversion by increasing food recovery and composting.[123]

While funding from disposal surcharge fees can be used to fund a wide variety of programs, several states (from a range of political environments) use them specifically to fund waste diversion. Currently eight states—Indiana, Iowa, Minnesota, New Jersey, North Carolina, Ohio, Pennsylvania, and Wisconsin—have disposal surcharges that fund waste diversion efforts.[124] In these states, revenue from disposal surcharge fees is typically housed in a specialized fund, often administered by the state's environmental agency,[125] and funding flows to diversion projects via local governments or grant projects. This funding can then spur economic development. For example, in Indiana, disposal surcharges funded $1.8 million in grant projects to increase recycling infrastructure and expand curbside recycling programs, resulting in 47 new jobs and 85,000 additional tons of recycling.[126] Funding generated from disposal surcharge fees can help support further diversion policies such as Organic Waste Bans, Food Donation Requirements, or organic waste infrastructure (such as that needed for composting, food rescue, and anaerobic digestors). The following section provides an overview of state disposal surcharge fees and highlights best practices for state laws with a focus on a bill introduced in Maryland. The information in this chapter is adapted from research and analysis done by Sophia Jones at the Institute for Local Self-Reliance (ILSR).

FEDERAL LAW

Because disposal surcharges are levied at a state or local level, there are no relevant federal laws.

MODEL STATE LAW

Currently eight states have disposal surcharges that fund waste diversion efforts.[127] Each state law varies in terms of the surcharge fee levied, the structure of the disposal surcharge (e.g., where it is levied), and how the funds can be used. States with less staff capacity may prefer a detailed listing of the types of grant projects funds may be used for, whereas states with more capacity and sophistication may prefer flexibility to allow for more experimentation. While each disposal surcharge and its impact on food waste diversion will necessarily vary depending on a state's needs, best practices include:

- **Committing funds to food waste prevention and diversion efforts:** While many states have disposal surcharge fees, a smaller subset designates this funding for diversion efforts.[128] States should clearly commit these fees to funding food waste prevention, food scrap recycling, and other waste diversion efforts. For example, Alameda County in California uses revenue from its disposal surcharge for projects including comprehensive school and community engagement campaigns on food waste prevention, composting, and healthy soils; implementing carbon farm planning; and food waste reduction initiatives.[129] States can make this commitment legislatively by outlining how the funds should be used and where they should be stored and potentially restricting future funding reallocations.[130]
- **Investing money back into local communities:** Funding generated through disposal

surcharges should be equitably invested back into communities, taking into consideration local priorities and needs. To ensure equity, states should redistribute funds based on county population, publicize and ensure grant program applications are accessible, prioritize local community concerns, and prioritize grant funding for communities impacted by waste pollution. For example, many stakeholders fear that disposal surcharges will increase illegal dumping, so Ohio created a separate grant program,[131] the Recycling and Litter Prevention Grant Program, to combat illegal dumping through litter collection, educational programming, and proper disposal of scrap tires.[132] The grant program is partially funded by the state's disposal surcharge.

- **Revisiting fees periodically:** States should build in flexibility to respond to influences like inflation and changes in waste disposal practices. For example, Maryland's 2022 Solid Waste Disposal and Diversion and On-Farm Composting and Compost Use Bill (HB 1070) (described in greater detail below) requires the state to revisit the fee every five years, at which time it is adjusted in accordance with changes to the consumer price index and evaluated to determine whether any other changes are necessary.[133]

ILSR has drafted a model legislation template for Funding Waste Diversion and On-Farm Composting via a Disposal Surcharge which includes the best practices suggested above.[134] First introduced in February 2022, with the support of ILSR, Maryland Solid Waste Disposal and Diversion and On-Farm Composting and Compost Use House Bill 1139 exemplifies many of the best practices outlined above. The bill, which did not advance in the 2022 session but was reintroduced in February of 2023, would:

- **Create a dedicated fund for food waste diversion:** The bill sets a $2 per ton disposal surcharge and would establish the Waste Reduction Grants Fund.[135] Grants from this fund would be awarded for both the implementation of and education on waste reduction strategies, edible food rescue, on-farm composting and compost use, and minimization of illegal dumping.[136]
- **Include equity in structure of grant program:** Waste diversion county grants would be awarded to local governments and competitive waste diversion grants would be available to covered businesses, farmers and ranchers, schools, and nonprofits.[137] The legislation considers equity in creating the grant program by prioritizing funding for low-income, socially disadvantaged, female, or veteran farmers as well as projects that serve low-income and socially disadvantaged communities.[138]

See Appendix D for model legislation for a disposal surcharge fee.

SECTION II

OPPORTUNITIES TO PROMOTE FOOD DONATION

While organic waste bans and food donation requirements are the strongest steps states can take to keep food out of landfills and incinerators, there are many other less intensive policies that states can enact to promote food rescue and food donation to ensure that surplus food goes to people and not to landfills. These policies include creating tax incentives to help financially support businesses that choose to donate food, enacting liability protections to shield businesses who donate food from potential lawsuits, and clarifying food safety guidelines to ensure that food safety rules do not serve as a barrier to food donation and that businesses better understand what food safety rules apply to food donations.

Liability protections, tax incentives, and guidance around food safety for food donations are well established, strong policy options for states, and they have all been implemented successfully in various regions of the country. All 50 states have some form of liability protection, and as of the time of this toolkit, 11 states have tax incentives for food donation, and 12 states have some sort of guidance around food safety for food donation, though much state guidance is quite narrow.[139] Each of these policies can operate independently or concurrently, and aside from tax incentives, all are essentially no-cost to the government. These policies can also serve as steppingstones, as liability protection and food safety for food donations are necessary components to Food Donation Requirements.

LIABILITY PROTECTIONS FOR FOOD DONATION

INTRODUCTION

As discussed in the Food Donation Requirement section, donating safe, surplus food can significantly reduce the amount of food sent to disposal while simultaneously supporting food security goals. Despite the many benefits of food donation, potential donors cite fear of liability as a major deterrent to donating food. For example, a 2016 survey conducted by the Food Waste Reduction Alliance, a joint industry task force comprised of leading companies and trade associations in the food industry, found that 25% of retailers and wholesalers, 39% of restaurants, and 50% of food manufacturers cite liability concerns as one of the main barriers to food donation.[140]

Although fear of liability is common, there has been no known litigation related to food donation liability, and both federal and state law provide robust liability protections for food donors. A 2013 survey of filings and reported decisions, conducted by the Food Recovery Project at the University of Arkansas School of Law, found no cases or pending litigation involving food donation liability.[141] Even if there was litigation, on the national level, the federal Bill Emerson Good Samaritan Food Donation Act (the "Emerson Act") provides comprehensive civil and criminal liability

protections to food donors and recipient nonprofit organizations.[142] On the state level, all 50 states offer food donor liability protection laws. While states cannot offer anything less than the liability protections provided under the Emerson Act (any existing laws that provide less protection are likely preempted and void[143]), they can provide stronger protections than those guaranteed by federal law. Additionally, states should at least amend their laws to be up to par with the protections offered by the Emerson Act so that protections are clear to potential donors. This section of the toolkit provides an overview of federal liability protections for food donors and then highlights best practices for state liability protection laws with a focus on New Jersey's law as a model.

FEDERAL LAW

The Emerson Act, originally passed in 1996 and amended by the Food Donation Improvement Act (FDIA)[144] in 2022 (hereinafter collectively referred to as "the Emerson Act"), provides comprehensive civil and criminal liability protection against federal and state claims to encourage food donation to individuals experiencing food insecurity.[145] The Emerson Act covers both donors and intermediaries that distribute food, including all individuals (including home and community gardeners), government entities, schools,[146] businesses (including retailers, restaurants, farmers, and wholesalers), nonprofit organizations, the officers of businesses and nonprofit organizations, and gleaners (individuals that harvest donated agricultural crops for a nonprofit organization that distributes the food to individuals[147]).[148]

To receive protection under the Emerson Act, the donation must comply with the following conditions:

1. **Qualifying foods and grocery products:** The donor must donate "apparently wholesome food" or an "apparently fit grocery product" that meets food safety standards imposed by federal, state, and local laws and regulations, even if they contain flaws that make them unmarketable (for example, food products that contain aesthetic flaws or are the wrong size or grade).[149]
2. **Direct Donations or Donations Through Non-Profits:** Unless the donor is a "qualified direct donor," all donations must be made through a nonprofit organization, such as a food bank or food recovery organization,[150] to needy individuals. A "qualified direct donor" may donate through a nonprofit organization or directly to needy individuals. Organizations that qualify as direct donors are retail grocers; wholesalers; agricultural producers, processors, and distributors; restaurants; caterers; school food authorities; and higher educational institutions.[151]
3. **Free or Good Samaritan Reduced Price:** When donors donate food or grocery products to nonprofit organizations, such as food banks and other food recovery organizations, liability protections will apply where the nonprofit offers the product to end recipients for free or at a "Good Samaritan Reduced Price,"[152] which is a price not greater than the cost of handling and distributing the food.[153] When a "qualified direct donor" donates directly to individuals, liability protections will apply only if donations are made free of charge.[154]
4. **Good faith:** Protection extends to donations made in good faith and does not extend to liability arising from "gross negligence or intentional misconduct."[155]

If the above requirements are met, both the food donor and the nonprofit food recovery organization will be shielded from both civil and criminal liability related to the donated food.

Despite its protections, the Emerson Act has several important limitations, including:

- **Compliance with labeling standards:** Food must comply with all federal, state, and local quality and labeling standards,[156] including those standards which are not linked to safety (e.g., net weight). Although food recovery organizations can recondition food to comply with labeling requirements,[157] this additional step may discourage potential donors.
- **Past-date foods:** The Emerson Act does not explicitly permit donations of past-date foods. However, the original House Committee report attached to the Emerson Act indicated that the donation of near or past-date food would not automatically constitute "gross negligence,"[158] and both the U.S. Food and Drug Administration (FDA) and the U.S. Department of Agriculture (USDA) acknowledge that date labels are usually intended as a measure of quality rather than safety.[159] As such, ideally donors would be protected when donating safe, wholesome foods even past the quality date.

Lastly, while it is not a shortcoming of the legislation itself, many food businesses are not aware of the Emerson Act. This is in part because no federal agency is directly responsible for its implementation or oversight, and thus there are no regulations or detailed guidance explaining it.[160]

MODEL STATE LAW

While the Emerson Act serves as a nationwide floor for liability protection, states can and do provide additional liability protections to food donors. All 50 states offer food donor liability protection laws, and some of these go beyond the federal protections.[161] Liability protections vary substantially across states, but ideally, a state food donor liability protection law would offer the following protections to build on the federal protections:

- **Including past date foods:** The law would expressly protect the donation of past date foods. For example, the New Jersey law expressly permits the donation of perishable or prepared foods "which [are] not readily marketable due to…passage of the 'best by' or other open date."[162] Similarly, Washington's law covers "perishable food that is fit for human consumption, but that has exceeded the labeled shelf-life date recommended by the manufacturer."[163]
- **Permitting donation regardless of non-safety labeling:** It would not require donated food to comply with labeling requirements other than those linked to food safety (see Food Safety for Food Donations for more detail), as the need to comply with labeling requirements can increase donation costs and reduce food donation. Thus, food should only need to meet labeling requirements that are needed for safety. For example, Oregon protects donors "regardless of compliance with any laws, rules or ordinances regulating the packaging or labeling of food."[164]
- **Requiring guidance on protection offered:** Lastly, the law would mandate that the relevant state agency publish guidance about food donation liability protections, both to express

government's support for food donation and to clarify any ambiguities, including the fact that federal protection also applies to state-law claims. Guidance should list any limitations on liability protection. For example, in Massachusetts, the Department of Environmental Protection and its RecyclingWorks program developed guidance and best practices around food donation, including FAQs and flowcharts.[165]

New Jersey's law is an example of a successful state liability protection policy, as it includes many best practices outlined above. The law:

- **Extends protection to past-date food:** The law extends liability protection to the donation of past-date food by extending protection to perishable and nonperishable foods' best-by or other open dates.[166]
- **Permits donation regardless of non-safety labeling:** The law's protections apply "regardless of compliance with any laws, rules, regulations, or ordinances regulating the quality or labeling of food."[167]

See Appendix E for a model liability protection law.

TAX INCENTIVES FOR FOOD DONATION

INTRODUCTION

Because it is often cheaper to dump food than donate it, cost is a main reason that businesses fail to donate excess food. Donation costs include the time and money associated with sorting, packaging, storing, and transporting surplus food. In the United States, manufacturers, retailers, and restaurants often cite such logistical costs as the main barriers to food donation.[168] To offset these financial barriers, governments can implement specific tax incentives for food donation and related expenses.[169] In doing so, tax incentives can increase food donation by supporting businesses, like farms, to recover some of their production costs by donating wholesome but unsellable food. Furthermore, tax incentives are a cost-effective policy because the government only pays them out after food is donated.

In the United States, there are two main types of tax incentives: tax deductions and tax credits. A tax deduction reduces the taxpayer's taxable income, which is then used to calculate the amount of taxes owed.[170] By contrast, a tax credit is a direct reduction in the amount of taxes owed.[171]

Tax Deduction	Tax Credit
Taxes = (Income – Tax Deduction) × Tax Rate	Taxes = (Income × Tax Rate) – Tax Credit

The federal government and several states offer tax incentives for food donation. The federal deduction can be a strong incentive; however, its structure as a deduction may not sufficiently serve some food producers, like farmers and small businesses. This is because tax deductions primarily benefit taxpayers in higher income brackets, while many food producers operate in lower income brackets. Alternatively, tax credits are relatively more generous to low-income businesses. Some states target these entities with tax credits to fill in the gaps and further spur food donation. Currently, 11 states—Arizona, California, Iowa, Maryland, Mississippi, Missouri, New York, Pennsylvania, Oregon, South Carolina, and West Virginia—offer tax incentives specifically targeted to increase food donation.[172] The following section

provides an overview of federal tax incentives for food donation and then highlights best practices for state tax incentives with a focus on California's laws as a model.

FEDERAL LAW

Section 170 of the federal tax code lays out two types of tax deductions for food donations: the general deduction for all types of in-kind donations[173] and the enhanced deduction which is specifically for food.[174] The general deduction allows a donor to deduct the basis value of the donated food,[175] which is a business' cost of producing or acquiring the donated food. The enhanced deduction is more generous, allowing a donor to deduct as much as double the basis value of the food,[176] but it also imposes additional requirements on the donor.[177]

To qualify for the general tax deduction, the donation must be given to a qualified nonprofit organization and used for charitable purposes.[178] In contrast, to qualify for the enhanced deduction, a donation must satisfy four additional requirements. It must (1) be used to care for the ill, needy, or infants;[179] (2) be provided at no charge;[180] (3) be accompanied by a written statement confirming requirements are met;[181] and (4) comply with the Food, Drug, and Cosmetic Act.[182] If the donation does not meet all of these requirements, a donor cannot claim the enhanced deduction but may use the general deduction instead.[183]

Federal tax incentives have been successful in motivating food donation. For example, in the wake of Hurricane Katrina in 2005 when the enhanced deduction for food donations was temporarily expanded by the Katrina Emergency Tax Relief Act to cover more donor businesses, food donations across the country rose by 137% the following year.[184] The success of the 2005 expansion led Congress to make the enhanced deduction permanent for all businesses in December 2015.[185] Despite this positive development, opportunities remain to enact complementary state tax laws to further curb food waste.

MODEL STATE LAW

Though the federal tax deduction is strong, it does not and cannot reach all potential food donors. States can improve the reach of tax incentives by tailoring them to the needs of local businesses and farmers. 11 states have tax incentives that go beyond the federal tax deductions. While these laws vary widely, best practices include:

- **Structuring as a tax credit (versus a deduction):** Most states structure their tax incentives for food donation as tax credits rather than deductions.[186] As described above, a tax credit is a dollar-for-dollar reduction in tax burden, regardless of tax bracket. In contrast, tax deductions reduce taxable income, providing little or no benefit to low-margin businesses, which have less income and fall into lower tax brackets. Because many farms and food businesses operate with low margins, tax credits can be more effective at spurring donation than tax deductions.[187] By using tax credits, states can target businesses that would not benefit from the federal tax deduction, supporting a wider community of donors.
- **Tailoring the tax incentive to meet the state's needs:** State tax incentives vary significantly in terms of the types of foods covered and the types of entities eligible to claim the incentives. In designing tax incentives, states should

identify which taxpayers are most in need of additional incentives to donate—for example, entities like farms that may struggle to benefit from the federal enhanced tax deduction.[188] States should also consider what food items the state would like to see donated.[189] California (discussed in more detail below) offers two separate tax incentives, one for the donation of food and one for transportation costs associated with donated food.[190]

- **Placing only reasonable limits on the amount of tax incentive each year:** States limit the size of their tax incentives by setting a percentage of the value of the donated food that can be claimed (ranging from 10% to 75%), setting caps on the annual amount that can be claimed by a business (ranging from $1,000 to no cap), and limiting the total state-wide value of credits offered in a year.[191] While larger benefits will better incentivize donations, states must also consider their fiscal situation when creating tax incentives. If a state chooses to cap the amount a given taxpayer can claim or the overall amount annually for the credit, these limits should be reasonable, as should the percentage value of the donated food that can be claimed. For example, Mississippi's tax credit is capped at 50% of the taxpayer's total tax liability, and the total amount of tax credits that can be allocated among taxpayers by the Department of Revenue is capped at one million dollars.[192]
- **Basing credit value on fair market value:** Basing the value of the donated food on its fair market value rather than basis value is better for businesses, as it is both more generous (the market value will almost always exceed its cost) and less cumbersome to calculate (costs can be more difficult to track and calculate).[193] New York's incentive is structured this way and provides a tax credit for 25% of the fair market value of the donation.[194]
- **Permitting tax incentives when end recipients pay for food:** Some food banks and other non-profit organizations charge end users nominal fees to cover food handling costs. States should structure tax incentives to cover donations even when end recipients pay a fee. For example, Virginia's law (which expired in 2022) permitted tax incentives even when food banks or nonprofit organizations charged for the food, stating that donated food may be given away for free or "sold to the needy, other nonprofit food banks, or organizations that intend to use the food crops to provide food to the needy."[195]
- **Offering an additional tax credit for transportation and processing costs:** Beyond the costs of producing or acquiring the food, costs associated with transporting food can be a particularly significant barrier to food donation. To be most effective, state tax credit should specifically target transportation costs in addition to covering the value of the food.

California's two tax incentive laws[196] are good models for state efforts to increase food donation by supplementing federal tax incentives as they include many best practices outlined above. For example, the laws:

- **Provide multiple tailored credits, covering a broad range of entities:** California has a broad donated food tax credit[197] and a more specific food donation transportation tax credit.[198] The food donation credit, passed in 2011, initially covered only farmers and fresh produce but was updated and expanded in 2016 and 2019 to include additional donors, such as processors, and additional agricultural products,

such as meat and processed foods.[199] The law allows donors to claim a tax credit worth 15% of the wholesale market price of food donated to California food banks.[200] There is no cap on the amount of credits a taxpayer can claim.[201] In 2021, the legislature extended the sunset date of the food donation tax credit to 2026.[202]

- **Target transportation costs:** California's transportation-specific tax credit is also generous, allowing a taxpayer in "the business of processing, distributing, or selling agricultural products"[203] to claim a tax credit equal to 50% of the transportation costs associated with donating an "agricultural product" to a nonprofit organization.[204] As with the food donation tax credit, there is no cap.[205]

Data shows that food donors are benefiting from these tax credits, and their numbers are increasing over time: 66 taxpayers claimed the food donation tax credit in tax year 2017,[206] and three years later this number had nearly doubled.[207]

See Appendix F for model state legislation around tax incentives for food donations.

FOOD SAFETY GUIDANCE FOR FOOD DONATION

INTRODUCTION

Lack of clear food safety guidance poses a challenge to potential food donors. The food safety laws that apply to food establishments—like restaurants, cafeterias, and retail stores—vary by state and locality. Food donors and food recovery organizations often have trouble determining which food safety regulations apply to the food they wish to donate or distribute, particularly if they operate in multiple locations. Meanwhile, health inspectors, who serve as the liaison between food establishments and food safety regulations, are typically unable to answer questions due to their own lack of awareness and training on food donation.[208] When they do answer questions, they may be risk-averse and discourage donations entirely. Uncertainty related to food safety coupled with lack of guidance means potential donors are unwilling to donate. As a result, safe and wholesome food is dumped instead of donated. Though it is crucial that donated food be safe, there are no known examples of recipients becoming ill due to donated food (see Liability Protection, for more information).

While the federal Food and Drug Administration (FDA) Food Code, which states can use as the basis for their statewide food codes, now includes a provision related to the legality of food donation,[209] there are several actions that state legislators and regulators can take to remove the barriers to food donation erected by food safety regulations. States can modify their food safety regulations to be more donation-friendly, develop guidance to support potential food donors, and train health inspectors to support food donations. The following section provides an overview of the federal FDA Food Code and then highlights best practices for state food safety policies for food donation with a focus on Texas's regulations as a model.

FEDERAL LAW

The FDA inspects food manufacturing facilities but leaves regulation and inspection of food establishments, such as restaurants, institutional kitchens, and retail food stores, to states.[210] However, the FDA drafts and publishes the FDA Food Code, which serves as a model that many

states and localities use in writing their own food safety regulations.[211] The FDA Food Code has a brief section specific to donations explaining that food that complies with the Food Code can be donated.[212] The Code's reference section then points to federal law, detailed guidance from the Conference for Food Protection (CFP), and a Food Safety and Inspection Service guidance document about donating meat and poultry products.[213] CFP's guidance covers topics such as which foods are and are not safe for donation and how foods past their quality-based dates may be safely donated.[214]

MODEL STATE LAW

Individual states are responsible for regulating the safety of food establishments and food donation from such entities. Many states and localities model their food safety requirements on the FDA Food Code. Because the FDA Food Code did not include information specific to food safety for food donations until 2023 and because the information therein is still limited, few states have legislation or regulations that address the issue. Texas is the only state with a comprehensive section in its regulations addressing all types of donated food, which includes topics such as temperature, packaging, labeling, and shelf life.[215] One nationwide survey found that only 12 states had legislation or regulations around food safety for donations, and many of these are quite narrow, for example, mentioning only food safety for share tables at schools or donating hunted game meat.[216]

To minimize confusion and increase food donation, states should incorporate a uniform, specific food donation section into their food safety legislation or regulations and this section should outline requirements in explicit terms to provide clarity to potential food donors and food recovery organizations. For maximum impact, relevant agencies should also train health inspectors on food safety for donations and disseminate guidance to potential food donors. Successful state legislation or regulation on food safety for food donations would:

- **Create a specific section on food donation:** For ease of use, states should create a specific section around food donation in their food safety requirements. Having one designated area where all the relevant food safety rules are compiled sends a powerful message that the state government supports food donation, removes the burden from the donor to hunt down the relevant regulations, and provides a roadmap to health inspectors about how to address food donations.[217]
- **Provide clarity over which foods may be donated:** The law should outline which foods may be donated, with different requirements based on the safety risk posed by the type of food. In order to avoid confusion about which foods may or may not be donated, the law should list which foods cannot be donated and state clearly that all other foods not listed may be donated. States should also explicitly permit the donation of food past quality indicator date labels. States should also allow the donation of food with certain labeling flaws, such as food without the name of the food product; foods lacking proper statement of identity claims; a food product that does not have a country-of-origin label; in juices, a product that does not mention the percentage of juice; food products with incorrect net quantity information; food products missing or with flaws in the Nutrition Facts panel; and food products

with flawed health claims that do not raise safety risks. Often foods with labeling flaws go to waste because they cannot be sold but are still safe to donate. Food safety guidance can clarify that only labeling necessary for safety reasons is required on donated food.

- **Outline which foods may not be donated:** The law should also explicitly state which foods may not be donated. Again, the Texas food code serves as a strong model, as it prohibits the donation of several items including unpackaged temperature controlled for safety (TCS) foods previously served to a consumer, damaged foods (such as heavily dented cans), foods without labels, and distressed foods.[218] States can also consider prohibiting donation of food past a safety-based date label, further solidifying the distinction between safety-based and quality-based date labels to promote donation of foods beyond their quality-based date.
- **Require training for health inspectors:** As noted above, health inspectors can play a crucial role in educating food donors and promoting food donation. The law should require that health inspectors receive training on food donation to educate them about food donation and give them agency to guide food establishments.
- **Circulate additional guidance documents:** Guidance documents can disseminate best practices, encourage potential food donors, and express government's support for food donation.[219] State law can also require that state or local health departments publish guidance documents explaining food safety for food donation. For example, in Washington DC, the Department of Health works in conjunction with the Office of Waste Diversion within the Department of Public Works to provide such guidance to food donors.[220]

FOOD SAFETY FOR SHARE TABLES

"Share tables" are school programs that allow students to leave uneaten school lunch components, such as unpeeled fruits or unopened snacks, at a communal "share table" for other students to consume. Of the 12 states with verified guidance on food safety for donation, six have developed guidance only related to food safety at share tables.[221] This guidance is crucial as share tables can be a key element to reducing school food waste. However, it is only applicable in the school food context and not helpful to other institutions. State guidance around food safety for food donation must address broader food safety concerns across a variety of food businesses. For more information on tackling school food waste, see Food Waste Reduction in K-12 Schools.

Texas state regulations[222] provide an example of a comprehensive policy regarding food safety for food donation because they include some of the best practices outlined above:

- **Outlining which foods may not be donated:** The regulations outline which foods may not be donated, including damaged food and food previously served to consumers. Publishing a list of foods that cannot be donated may ease potential donors' fears that they are or are not allowed to donate certain foods.
- **Requiring limited labeling:** Lastly, the regulations require that donated foods must have a label with the name of the food, the source of the food, and the food's preparation date.[223] These labeling requirements for prepared food are relatively limited, which can increase food donation because full labeling requirements can serve as a barrier.

See Appendix G for model state legislation around food safety for food donations.

SECTION III

SUPPORTING ORGANIC WASTE PROCESSING INFRASTRUCTURE

In the Environmental Protection Agency's Food Recovery Hierarchy, the agency prioritizes how to process food scraps that are no longer appropriate for human consumption by feeding food scraps to animals where possible and ensuring all remaining organic waste is diverted to composting and anaerobic digestion.

Feeding food scraps to animals is an efficient way to prevent methane generation caused by the disposal of food waste. However, safety scares in the 1980's led to a decrease in the practice of using food scraps as animal feed and an increase in federal and state regulation.[224] Since federal rules and regulations are now sufficient to protect animals and consumers from any harm or concerns that arose in the past, reducing state regulations around animal feed, utilizing state legislation to promote the practice, and providing resources and other guidance on how to use food scraps for animal feed is key to seizing this opportunity to reduce food waste.[225]

Composting is a widely recognized, successful approach for diverting food scraps from disposal and reducing greenhouse gas emissions; however, it requires significant infrastructure. Composting is the process of transforming organic material, such as food scraps, into humus, a key component of healthy soil.[226] Composting, the controlled aerobic, biological decomposition of biodegradable materials,[227] takes raw materials like food scraps, reduces their volume and mass through the presence of microorganisms and oxygen, and turns them into compost. There are several different types of raw materials (feedstocks) that can be used for composting, including materials source-separated from the municipal solid waste stream (e.g., food scraps, wood chips, and yard trimmings), livestock manure, and biosolids (nutrient-dense, semi-solid material from wastewater treatment plants, otherwise known as sludge).[228] Anaerobic digestion (AD) is another recycling process that can turn biodegradable materials, such as food scraps, animal manure, fats, and oils, into usable solid and liquid digestate, while also generating energy, through a series of biological processes.

Turning food waste into compost has both environmental and economic benefits. Composting food waste rather than disposing of it can prevent some methane generation and create a useful product—organic matter content in compost improves the chemical, biological, and physical properties of soil, reducing the need for chemical fertilizers.[229] In addition to environmental benefits, composting activity can help create jobs and business opportunities for local recycling/garbage collection companies and composting facilities. A study in Maryland found that small-scale composting facilities employ six times as many employees per ton as landfills and 11 times as many employees as incinerators.[230]

While composting is a key component to solving food waste and creating a circular food system by recycling nutrients into plants, it requires collection and processing infrastructure. While figures vary, one source notes that in 2017, there were 4,713 composting facilities in the United States, though only 869 of those accepted food scraps.[231] A key obstacle to developing more composting infrastructure and increasing overall capacity is the permitting and zoning process for composting facilities. The following section provides details on why permitting and zoning can pose barriers to building new composting facilities and how state policies can reduce these barriers and support growth. For other opportunities for states to support the composting industry, see Section IV: Developing End Markets for Compost. Following a discussion of permitting and zoning, this section will discuss the opportunity to support feeding food scraps to livestock.

PERMITTING AND ZONING COMPOSTING AND ANAEROBIC DIGESTION FACILITIES

INTRODUCTION

One primary challenge for composting and AD facilities is zoning and permitting—finding sites that are zoned to allow for composting (especially if the feedstock includes food scraps) and then securing necessary permits to collect and recycle organics on-site. Composting facilities typically need zoning approval from the local government and often need a solid waste facility permit or a source separated organics composting permit to accept food waste, both of which can pose barriers. Because composting is a scalable activity, occurring in backyards as well as large-scale, industrial facilities, it is essential that the permitting and zoning be similarly flexible and tiered. States can support the development of composting facilities by making it easier to create new recycling facilities through streamlined permitting processes and favorable local zoning rules. The following section provides an overview of federal laws governing composting facilities and then highlights best practices for permitting and zoning composting facilities with a focus on Maryland's permitting requirements and Ohio EPA's zoning guidance.

FEDERAL LAW

Several federal environmental laws, like the Clean Air Act and the Clean Water Act, potentially apply to the permitting and operation of composting facilities. The Clean Air Act may regulate composting and AD facilities as point sources of air pollution due to their potential to emit Volatile Organic Compounds (VOCs) and particulate matter.[232] Section 503 of the Clean Water Act covers land application, surface disposal, and combustion of biosolids (sewage sludge) as well as biosolids composting,[233] and these regulations establish pathogen and vector attraction reduction requirements and pollutant limits for biosolids recycling.[234] While these requirements do not technically apply to food scraps composting facilities, many states incorporate such federal requirements into their own regulations, including their regulations for facilities composting food scraps.[235] Both Clean Air Act and Clean Water Act permitting is typically delegated to the state, which means that facilities will work with state agencies to determine applicable requirements and apply for necessary permits.

MODEL STATE LAW

In addition to administering the above federal laws, each state typically implements its own requirements or regulations around composting, given the potential for composting to result in nuisances such as dust, odors, pests, or harmful stormwater runoff. Generally, a state's composting regulations require that a composting facility above a certain threshold register or obtain a permit or license prior to operating (typically a solid waste permit or a source-separated organics[236] composting permit).[237] Most often, composting permitting is managed by a state's environmental protection or natural resources agency.[238] Registration, permitting, or licensing requirements vary by state, and some states have more streamlined processes which makes it easier for composting facilities to open and operate.

In addition to obtaining a permit, composting and AD facilities must first locate a site that complies with zoning and siting requirements, which are managed at the local level.[239] Many jurisdictions do not treat composting facilities as a separate category and instead include them in solid waste land uses, which results in more burdensome requirements.[240] While zoning is managed at the local level, states can help facilitate favorable local zoning rules and provide assistance to localities that wish to update their zoning rules to allow more composting and AD facilities.

As states encourage more food scraps recycling or pass laws to prohibit landfilling food waste, there are crucial steps they can take to support composting and AD infrastructure through permitting and zoning processes. These best practices include:

- **Creating separate regulatory pathways for food scraps composting or AD:** States should have separate regulations and permitting pathways for food scraps composting and AD with clear language describing what is allowed. Regulations should streamline the process for composting source-separated organics, such as food scraps, and should be less onerous than regulations for the composting of riskier materials like mixed solid waste. This permitting pathway should treat AD of food waste similarly to the composting of source-separated organics including food waste. For example, Ohio has separate permitting tiers for source-separated organics as well as simplified permitting for facilities accepting food scraps.[241] North Carolina has a clear, separate permitting process for AD of food scraps.[242]
- **Implementing a tiered system for permitting and operational requirements**: Composting and anaerobic digestion facilities vary widely by their location, size, type of material composted or digested, and process used. It is crucial that states take these differences into account when developing a permitting process and use a tiered or graduated approach rather than a one-size fits all approach. For example, Idaho has three tiers of composting facilities depending on risk and the size of the facility.[243] In addition to the permitting process, operational requirements should vary by size and become more stringent as facilities get larger. For example, in North Carolina larger facilities have stricter requirements regarding depth and type of liner pad.[244]
- **Exempting small-scale and on-site facilities from permitting requirements:** To facilitate local composting efforts, states should exempt small-scale composting facilities, such as those located at community gardens or on smaller farms processing their own organics. For example, Ohio exempts from permitting re-

quirements any composting of yard trimmings or food scraps that is under 500 square feet.[245] Similarly, Iowa regulations allow facilities to accept two tons of food scraps and yard waste per week from off-site generators without a solid waste permit (though they still must comply with site and operational requirements).[246]

- **Facilitating favorable local zoning:** As noted above, many jurisdictions do not have separate zoning definitions for composting facilities. This significantly limits where they can be sited and increases the costs of opening a facility. However, localities are increasingly making composting-friendly zoning changes. For example, composting facilities are allowed in Cleveland's General Industry Districts if certain requirements are met.[247] While zoning is controlled at the local level, states can support more favorable zoning and siting for composting facilities by providing technical assistance. For example, the Ohio EPA published model zoning codes that local jurisdictions within the state can use to promote urban agriculture and composting.[248] States could also share model zoning ordinances, such as those from the U.S. Composting Council, and provide guidance to localities wishing to update their zoning policies for composting and AD facilities.[249] Lastly, states can use planning processes to promote development of composting infrastructure. Washington State's recently passed organic waste ban requires that counties develop and update their comprehensive solid waste management plans to identify priority areas within the county for composting or AD facilities.[250]

Maryland's system serves as a strong model for composting facilities permitting, as it incorporates many best practices listed above, including:

- **Creating separate permit and tiered requirements based on risk:** The Maryland Department of Environment updated its composting regulations in 2015, using the U.S. Composting Council's Model Compost Rule Template as a guide.[251] The Maryland regulations create a separate permit for source-separated organics composting, including food waste. There are three tiers of composting facilities depending on the pathogen risk of materials being composted (e.g., green waste, source-separated organics, biosolids), the amount of compost produced,[252] and siting and design criteria, such as compost pad requirements, which become increasingly restrictive from Tier One to Tier Three.[253]
- **Exempting small-scale operations:** The regulations also exempt small-scale composting operations, such as small-scale on-farm composting and sites under 5,000 square feet that accept yard waste and food scraps, from permitting.[254]

Because zoning is controlled on a local level, no state has legislation that directly addresses zoning issues associated with composting infrastructure. However, as noted above, states can provide guidance and technical assistance to localities to support the development of composting infrastructure, from small community sites to more industrial facilities. For model zoning codes and guidance, states can look to the Ohio EPA's guide to "Urban Agriculture, Composting and Zoning" which was developed after a thorough review of cities' current zoning ordinances as well as interviews with expert stakeholders.[255]

See Appendix H for model legislation around permitting composting facilities.

RECYCLING FOOD SCRAPS INTO ANIMAL FEED

INTRODUCTION

For centuries, using food scraps as animal feed has been common worldwide.[256] This practice has several environmental and economic benefits. Environmentally, diverting food scraps to animal feed is an extremely efficient method of recycling food waste and reducing methane emissions, so much so that it is the third rung on the EPA's food recovery hierarchy.[257] Economically, using food scraps for animal feed can result in lower costs for local and regional farmers as well reduced hauling and garbage disposal costs for participating households and food businesses.

Unfortunately, the practice of using food scraps as animal feed declined in the 1980s after federal and state laws regulating the practice were enacted to prevent diseases linked to animal feed, such as foot-and-mouth disease in swine and mad cow disease in cattle.[258] Today, federal regulations function as a regulatory floor, laying out minimum animal feed standards necessary to protect human and animal health. Many state requirements, however, go beyond this floor, and some are overly restrictive, needlessly banning the use of all food scraps as animal feed. Inconsistency among state laws also imposes conflicting requirements for interstate businesses, further adding to the challenge. These restrictive and conflicting state laws have contributed to a decline in the use of food scraps as animal feed.

Recently, there has been rising interest in the practice of using food that would otherwise go to waste as animal feed, as businesses increasingly view food scraps as an asset.[259] For example, Do Good Foods recycles food from grocery stores by taking surplus food that might otherwise be thrown away and processing it into high-quality feed for animals.[260] Similarly, Mill recycles household food scraps into animal feed by providing households a kitchen bin that dehydrates and compacts food scraps that Mill then processes into chicken feed.[261] The Do Good Foods and Mill models show that food by-products and food scraps unsuitable for human consumption can be used to develop new waste-to-feed solutions. Notably, in addition to reducing food in landfills, waste-to-feed solutions have the potential to reduce demand for traditional feed sources, such as corn and soy, which are a large driver of land conversion in key ecosystems including forests and grasslands.[262] When scaled, recycling food scraps into animal feed has the potential to reduce emissions associated with livestock production and financially benefit livestock producers who can increase their market advantage by using food scrap-derived animal feed.

To build on this renewed interest, state governments can modify their laws to encourage the practice on a wider scale. In addition, states can promote food scrap animal feed by providing educational resources and support to interested businesses, households, and farmers. Practical laws and regulations, accompanied by clear guidance, can help make feeding food scraps to animals a safe and common practice once again. The following section provides an overview of the federal law and regulation around feeding food scraps to animals and then highlights best practices for state laws.

FEDERAL LAW

Under federal law, food scraps can generally be fed to animals, with two notable restrictions. First, food scraps containing animal-derived byproducts must be heat-treated by a licensed facility before being fed to swine. Second, animal-derived byproducts cannot be fed to ruminants. The following federal statutes and regulations govern the feeding of food scraps to animals:

- **Swine Health Protection Act:** The Swine Health Protection Act (SHPA) aims to protect human and swine health by ensuring that food scraps fed to swine are free of diseases.[263] SHPA requires that food scraps containing animal meat or animal byproducts be heat-treated to 212° F for 30 minutes to kill disease-causing bacteria.[264] SHPA also includes licensing[265] and storage requirements for food scrap animal feed.[266]
- **The FDA's Bovine Spongiform Encephalopathy (BSE)/Ruminant Feed Ban Rule:** The Ruminant Feed Ban Rule prohibits the use of mammalian protein[267] in animal feed fed to ruminant animals, such as cows, sheep, goats, deer, elk, and antelopes.[268] The rule aims to reduce transmissible spongiform encephalopathy (TSE), a group of fatal neurological diseases that includes BSE.[269] The rule also creates compliance requirements for the processing, inspection, labeling, and record-tracking of animal feed products.[270]
- **The Food Safety Modernization Act Preventive Controls for Animal Food:** The 2011 Food Safety Modernization Act (FSMA) comprehensively reformed U.S. food safety laws, including those pertaining to animal feed.[271] The FSMA Preventive Controls for Animal Food Rule specifically focuses on feeding food scraps to animals.[272] The rule requires animal food processing facilities to implement necessary food safety controls.[273] FSMA includes exemptions for some facilities that hold and distribute human food byproducts for use as animal feed[274] and for farms and small or very small businesses.[275]
- **Regulations Regarding Labeling and Adulteration:** The Federal Food, Drug, and Cosmetic Act applies to animal feed as well as human food.[276] It prohibits animal feed that is misbranded,[277] adulterated (meaning filthy or decomposed), or packaged or held in unsanitary conditions.[278]

In sum, federal law requires people feeding food scraps to animals to:

- Heat treat food scraps containing any animal-derived products;
- Be licensed to heat treat animal-derived food scraps;
- Ensure mammalian protein is not fed to ruminant animals, and label all mammalian protein as unfit for consumption by ruminant animals;
- Properly record and track the processing and delivery of food scraps;
- Implement food safety controls in industrial food processing facilities of a certain scale; and
- Not feed adulterated food to animals.

MODEL STATE LAW

The federal laws and rules outlined above are sufficient to ensure livestock and human safety;[279] however, many state laws currently include more stringent requirements for recycling food scraps into animal feed, some of which predate the existing science-based federal scheme. Rather than

promulgate new laws to promote this practice, states typically need to amend and loosen their existing policies. Legislators should review their laws and regulations, remove overly restrictive requirements, and provide support and education to create a regime that encourages innovative models that safely recycle food scraps into animal feed, while still protecting animal and human health. Specifically, states should:

- **Eliminate any laws that ban the feeding of food scraps to animals:** If food scraps are properly handled according to applicable federal food safety laws and regulations, even animal-derived food scraps can become safe and beneficial feed for swine.[280] Because federal law already imposes safety requirements on food scraps recycled into animal feed, additional state regulations or bans are unnecessary. Alaska, for example, does not have any additional rules regulating the feeding of food scraps to animals, and neither does Utah since it repealed its ban on feeding food scraps to animals.[281]
- **Encourage state agencies to re-evaluate existing authority to support the development of facilities recycling food scraps into animal feed:** In addition to removing laws that openly prohibit organizations from turning food scraps into animal feed, the state should also remove legal barriers that make establishing food scrap animal feed facilities within the state excessively burdensome. Because the recent revival of recycling food scraps into animal feed is a new and innovative space, states may inadvertently impose regulatory requirements on food scrap animal feed facilities due to the lack of clarity in the law. For example, an organization that collects household food scraps and processes that organic material into animal feed might be classified as a waste facility under state law. However, because that organization is also classified as an animal feed facility, the organization may be subject to redundant regulation that makes the food scraps to animal feed model prohibitively expensive without any additional safety benefits. In this example, the state should exempt food scrap animal feed facilities from the waste facility requirements, so long as they satisfy the requirements imposed on animal feed facilities. States should encourage their agencies to reduce regulatory redundancies and support food scraps to animal feed models.
- **Eliminate requirements for heat-treating non-animal-derived scraps:** Several states require the heat treatment of non-animal derived food scraps; yet most non-animal derived food scraps are generally safe for use as feed without such treatment.[282] Requiring heat-treatment may discourage farms from feeding food scraps to animals, due to the associated costs. States should eliminate this requirement. For example, Connecticut law requires heat treatment for scraps containing meat or animal by-products but not non-animal derived scraps.[283] It also exempts household scraps fed to swine raised for personal use from heat treatment requirements.[284]
- **Replace the pejorative name "garbage" with a more neutral term such as "food scraps":** Both state and federal laws denote animal feed made with food scraps as "garbage feeding." This pejorative term implies the practice is dirty and unsafe and may discourage its adoption. States should use more positive terms such as "food scraps" or "food residuals" in legislation and guidance to refer to this safe and beneficial process.

- **Provide guidance and education on laws and regulations:** In addition to improving overly restrictive state laws, states can further encourage the feeding of food scraps to animals by providing educational resources and support to interested businesses and farmers. For example, California publishes a fact sheet in English and Spanish summarizing the requirements and benefits of feeding food scraps to swine.[285]
- **Encourage partnerships with local farms:** State governments can help facilitate food scrap animal feed partnerships by reaching out to local businesses and farmers to assess interest and by creating a centralized online repository for this information.
- **Provide funding to support recycling food scraps into animal feed:** State governments can provide funding for households and businesses that convert their food scraps into animal feed. For example, Massachusetts provided a grant to a brew pub and restaurant, Gardner Ale House, to better recycle their food waste, including diverting spent barley malt to a local pig farm.[286] This is part of the Massachusetts Department of Environmental Protection's efforts to curb food waste through its waste and recycling grants and assistance.[287] Additionally, New York adopted a food scraps hierarchy with tier three being repurposing food to feed animals along with an Environmental Protection Fund that gives grants to municipalities and generators to curb food waste.[288]

See Appendix I for model legislation around recycling food scraps into animal feed.

SECTION IV

DEVELOPING END MARKETS FOR COMPOST

While states can scale up composting by supporting new facilities (see Section III: Supporting Organic Waste Processing Infrastructure), on the other side of the equation, states can encourage increased composting by developing the end market for finished compost products resulting from composting food scraps and other organics. Growing the compost market benefits entities all along the food supply chain. In particular, creating end markets may result in better profit margins and reduced tipping fees for compost processing which would in turn attract more food waste generators to composting rather than disposal; in other words, supporting these end markets makes composting a more viable and less expensive option than throwing organic waste materials into a landfill or incinerator. Farmers can also benefit from compost end markets as they can use the soil amendment products derived from composting or anaerobic digestion (compost products) to improve soil quality.[289] Beyond diverting food waste from disposal, applying compost to soil has many other environmental benefits, such as reducing the need for fertilizer, increasing agricultural yields and soil water retention, and sequestering carbon (see Environmental Benefits of Compost Application text box below for more information).

ENVIRONMENTAL BENEFITS OF COMPOST APPLICATION

The environmental benefits of compost stem not only from diverting food waste from disposal, but also from treating soil with compost, which leads to higher agricultural yields, increases soil water and nutrient retention, and increases carbon sequestration.[290] Compost can serve as an alternative to traditional chemical fertilizers, reducing and in some case eliminating the need for artificial fertilizers.[291] Reducing chemical fertilizer use decreases costs for farmers as well as environmental harms related to fertilizer runoff such as algal blooms and the significant carbon pollution associated with fertilizer production.[292] Additionally, compost application can improve overall soil health and quality, which can aid in habitat restoration and increase crop yields, much like the process of irrigation.[293] Lastly, applying compost to farmland not only benefits soil, but can also have crucial carbon sequestration effects, mitigating the effects of greenhouse gas emissions.[294]

In general, creating more end markets for compost will encourage the development of more composting facilities and make policies like organic waste bans more realistic and affordable (see Section I: Building and Broadening Organic Waste Bans and Beyond). To realize the social and environmental benefits of composting, states can support the development of compost end markets, which will help make the financial case for increased recycling of food scraps. This section introduces two policies states can use to develop compost end markets: (1) compost procurement, where the government itself purchases the compost, and (2) incentivizing compost application, where the government pays farmers to apply compost to their land.

COMPOST PROCUREMENT

INTRODUCTION

A primary way to develop an end market for compost is to use the government's purchasing power to support local composting facilities by requiring the government to procure compost or prioritizing the purchasing of compost over other soil amendment products. Procurement policy is a powerful tool for aligning public spending with government policy objectives and promoting beneficial practices in private industry. Incorporating values-driven procurement principles into acquisition policy helps to ensure that public institutions spend taxpayer dollars in a manner that promotes the public interest. State government can mandate that state and local governments and their contractors procure compost (with a preference for compost produced within the state) for use in earth-disturbing activities such as landscaping, construction, roads, low-impact development, and green infrastructure projects.

Aside from enhancing the market for compost, utilizing local compost has other added environmental and social benefits: it creates local demand for sustainable products, generating jobs and economic activity; helps spur the development or expansion of local organics recycling; and helps promote diversion of food scraps from disposal. The following section outlines best practices for state compost procurement, highlighting a bill introduced in Washington in 2020.

FEDERAL LAW

President Biden's Executive Order 14057, published in December 2021, calls on all federal agencies to support markets for recycled products,[295] though as of early 2023 there are no federal laws or requirements specific to compost procurement.

MODEL STATE LAW

Currently, California and Washington have statewide compost procurement policies, and Illinois had a pilot program that was repealed January 2022.[296] Local jurisdictions such as King County, WA; Sacramento, CA; Berkeley, CA; and Denver, CO all have some form of local compost procurement policy as well, and NRDC and ELI used these policies as a guide for their model local compost procurement legislation.[297] While compost procurement policies are relatively new, the existing local and state examples incorporate the following best practices:

- **Covering the maximum number of government agencies:** State procurement policies should cover the maximum number of state

government agencies and local governments and, if possible, should also cover their contractors. For example, California's regulations implementing SB1383 require all cities and counties (except rural ones) to procure compost.[298]

- **Setting targets for amount of compost to purchase:** To spur purchasing, policies can require jurisdictions to hit a specific target for compost procurement. This target could be reflected in tons per capita annually. California's regulations implementing SB1383 set a target amount of compost for local jurisdictions to purchase based on their population.[299] Model legislation should also include a provision accounting for cost concerns, such as carve outs for cost prohibitive compost purchases.
- **Using an established standard for compost quality:** To ensure the quality and safety of compost procured and ultimately applied, the state should use an established test method protocol. A protocol to consider is the U.S. Composting Council's Seal of Testing Assurance Program,[300] which uses the Test Methods for the Examination of Compost and Composting.[301]
- **Prioritizing local compost:** Prioritizing the purchase of local compost will support the local economy and local food scraps recycling efforts, and model policies should mandate or at least prioritize that governments purchase local compost. For example, Washington's law requires that localities give priority to locally produced compost.[302] The policy can also specify the desired compost composition. For example, Washington's law also encourages governments to purchase compost with at least 8% of its contents derived from food scraps.[303]
- **Outlining uses for compost:** To underscore the value of composting across a wide array of projects, the policy can outline potential usages for compost in construction, landscaping, roads and highways, and green infrastructure. For example, NRDC and ELI's model compost procurement policy lists a variety of usages for compost across an array of industries.
- **Requiring recordkeeping and reporting:** To ensure that mandates or targets are met, the law should require covered entities, such as local jurisdictions and state agencies, to keep records and report on their compost use, including volume purchased, source, and how it was used.

Washington State's 2020 House Bill 2713 is an example of a model compost procurement policy as it incorporates many of the best practices outlined above, including:

- **Covering state and local governments:** The law requires state and local governments to consider whether compost products can be used in government funded projects when planning, soliciting, or reviewing bids for such projects.[304] If compost products can be used, the state or local agency must procure local compost unless certain exemptions exist (e.g., compost products are not available within a reasonable amount of time).[305]
- **Prioritizes local compost made of food scraps**: Additionally, the law encourages agencies to prioritize local compost when procuring compost products and recommends that local governments with residential composting programs to enter into purchasing agreements with its compost processor to purchase back compost produced from its food waste.[306] As noted above, the law encourages government to purchase compost made from at least 8% of food scraps.[307]

- **Incentivizing farmers to use compost:** The law also creates a three-year compost reimbursement pilot program for eligible farmers to reimburse them for purchasing and utilizing compost.[308]

See Appendix J for model legislation for compost procurement.

INCENTIVIZE COMPOST APPLICATION

INTRODUCTION

In addition to all the economic and environmental benefits of composting food waste discussed in Section II: Supporting Composting Infrastructure, application of compost on farmland has significant environmental and carbon sequestration benefits. Applying compost helps improve overall soil health, increasing soil organic matter, its biodiversity, and its capacity to absorb water and nutrients, and reducing the need for expensive and resource-intensive chemical fertilizers.[309] Applying compost to farmland not only benefits soil, but can also have carbon sequestration effects, mitigating the impacts of greenhouse gas emissions.[310] Lastly, programs incentivizing compost application can help create an end market for local compost products and thus support the development and growth of food scraps recycling infrastructure. Because of these benefits, several states and localities, including California and Hawaii, have passed policies or created programs to incentivize farmers to apply compost to improve soil health and serve as a tool for carbon sequestration. The following section provides an overview of federal laws around compost application and then outlines best practices for these policies, highlighting California's Healthy Soils Program as a model.

FEDERAL LAW

As noted above, a December 2021 Executive Order calls on all federal agencies to support markets for recycled products.[311] The USDA is also increasingly recognizing the importance of developing and incentivizing climate-smart farming practices. Pursuant to Executive Order 14008 on Tackling the Climate Crisis at Home and Abroad,[312] in 2021, the USDA engaged in an outreach and planning process to create a strategy and recommendations on how best to develop and implement climate-smart agriculture and forestry practices.[313] In February 2022, the USDA announced the program Partnerships for Climate-Smart Commodities, which will provide funding for specified entities to develop pilot projects likely to generate greenhouse gas benefits and increase soil carbon sequestration.[314] The program announcement specifically lists adding soil amendments (which includes compost) as a qualifying practice.[315]

MODEL STATE LAW

A few states have begun to incentivize compost application. For example, California and Hawaii both have such programs, and New York's soil health legislation was signed into law December 2021. Though the practice is just emerging, these examples have highlighted opportunities and challenges of such programs. A state interested in implementing a similar program should consider the following best practices:

- **Allocating funding:** These programs are strongest when they offer funding to incentiv-

ize farmers to apply compost. Successful programs are backed by secure and stable sources of funding. For example, in California, the Healthy Soils Program is funded by proceeds from the state's cap and trade program, which limits aggregate greenhouse gas emissions from major emitters in California, provides allowances for emissions, and then allows entities to buy and sell emissions allowances in the marketplace.[316]

- **Ensuring application accessibility:** To best reach producers, the funding application should be as accessible and simple as possible, and the state should offer technical assistance for those who require it. Technical assistance to farmers has been an incredibly valuable component of the healthy soils program in California, with 59% of applicants utilizing technical assistance.[317] This support is especially crucial for those with language barriers. Additionally, California streamlined the application, eliminating most essay questions and reducing the attachments required.
- **Prioritizing marginalized producers:** Lastly, to ensure equity, these programs should specifically target marginalized producers, including socially disadvantaged farmers, farmers of color, women farmers, and small- and mid-scale farmers. Due to historical and ongoing systemic discrimination, marginalized farmers have fewer resources and less access to financial and social capital and may face more significant burdens to applying for grant funding. California currently designates 25% of total funding for its Healthy Soils Program to socially disadvantaged farmers and ranchers[318] but recommends stronger actions including prioritizing all funding for small- and mid-sized farmers, farmers of color, and women farmers.[319]
- **Utilizing an established standard for compost quality:** To ensure the quality and safety of compost procured and ultimately applied, the state should use an established test method protocol. A protocol to consider is the U.S. Composting Council's Seal of Testing Assurance Program,[320] which uses the Test Methods for the Examination of Compost and Composting.[321]
- **Prioritizing application of compost made with food scraps:** To help support the end market for compost, compost application programs can prioritize the application of compost that is made from food scraps. While no programs currently include such a requirement, Washington's compost procurement law encourages governments to purchase compost with at least 8% of its contents derived from food scraps,[322] and a compost application program could include a similar provision. To prevent contamination, anyone applying food-derived compost should ensure compost safety testing (see above). Further, a qualified state agency should develop a comprehensive education and outreach plan to ensure those applying compost do not contaminate feedstocks.

California's Healthy Soils Program, established in 2017 by Senate Bill 859, includes many best practices outlined above, including:

- **Incentivizing compost application:** The law provides incentives including "loans, grants, research and technical assistance, and educational materials and outreach, to farmers whose management practices contribute to healthy soils."[323] The Healthy Soils Program includes an Incentives Program, which provides incentives for farmers and ranchers to adopt best management practices around soil health,

including compost application, as well as a Demonstration Projects Program, which funds on-farm research and demonstration projects around soil health.[324]

- **Allocating funding:** The Healthy Soils Program is funded from the California Climate Investments fund, which holds proceeds from California's cap-and-trade program (money secured via the market for allowances discussed in greater detail above), and is administered by the California Department of Food and Agriculture (CDFA). As of May 2022, CDFA has awarded 688 projects, totaling more than $45.11 million in grant funds.[325]

A December 2020 progress report found that compost application was the most popular practice funded through the Healthy Soils Program with 72% of projects implementing compost application.[326] CDFA estimates the program is responsible for sequestering an estimated 134,000 metric tons of CO2 each year.[327]

See Appendix K for model legislation for compost application.

SECTION V

PREVENTING FOOD WASTE UPSTREAM

The strongest policies to address food waste will reduce food waste upstream and prevent food waste from ever being generated, as opposed to diverting it from disposal once it has already been created. A major driver of food waste is confusion over date labels. Food product manufacturers face an array of unstandardized labels on their food products, and many people throw away food once the date passes because they mistakenly think the date is an indicator of safety.[328] However, for most foods, the date is a manufacturer's best guess as to how long the product will be at its peak quality. When consumers misinterpret indicators of quality and freshness for indicators of a food's safety, the amount of food that is unnecessarily wasted increases. Poor date labeling laws can also unnecessarily prevent food donation by prohibiting donation of safe, wholesome food because it is past-date (for more details, see Food Donation Requirements). The following section details how date labeling laws lead to food waste and explains how reforming state date labeling policies can improve consumer understanding of date labels and prevent food waste upstream.

DATE LABELING

INTRODUCTION

Date labels are found on most food products in the United States. Typically, the date is preceded by one of several phrases including, but not limited to, "sell by," "best before," "use by," and "freeze by."[329] Despite what many consumers may think, these dates are not regulated by the federal government[330] (with the exception of infant formula, which is regulated by the FDA to maintain nutritional standards), and are generally intended as indicators of quality rather than safety.[331]

Although these dates generally do not reflect food safety, research shows that consumers rely on date labels when deciding whether to throw away food. According to a survey published by the Harvard Law School Food Law and Policy Clinic, the National Consumers League, and the Johns Hopkins Center for a Livable Future, 37% of consumers said that they "always or usually" discard food when "it is close to or past the date that appears on the package," and 84% said they did so at least occasionally.[332]

The uncertainty surrounding date labels contributes to wasteful behaviors, missed opportunities for donation, and overflowing landfills. According to ReFED, federal standardization of date labels could divert 582,000 tons of food from disposal and generate $2.41 billion in net financial benefit annually.[333] Even without federal legislation, there are opportunities for states to reduce date label confusion and prevent unnecessary waste. States can make date labels more comprehensible to consumers and avoid unnecessary waste by

passing legislation that standardizes date labels on products sold within the state and clearly differentiates between safety and quality date labels. Currently, no state laws mandate these best practices. The following section provides an overview of federal date labeling laws and then outlines best practices for state date labeling laws, highlighting a bill introduced in Massachusetts.

FEDERAL LAW

Date labels are almost entirely unregulated under federal law. The FDA and the USDA are the two main federal agencies that regulate food safety and labeling, with the FDA's jurisdiction covering the vast majority of the food supply. With the exception of infant formula,[334] which must bear a "use by" date indicating when the nutrient content may begin to decline, the FDA does not mandate the use of any date labels.[335] The USDA, which regulates meat, poultry, and certain types of eggs,[336] also does not require date labels on products under its purview, with several exceptions such as a required "pack date" for poultry products,[337] certain labeling requirements for USDA-certified egg products,[338] and technical requirements for manufacturers whose products do feature date labels.[339]

While neither agency mandates the use of date labels, aside from the exceptions noted above, both the USDA and the FDA have released voluntary guidelines in support of using the phrase "best if used by" to indicate product quality.[340] The FDA has also applauded the Grocery Manufacturers Association (now known as the Consumer Brands Association (CBA)), and the Food Marketing Institute (FMI) for their efforts to standardize date labeling through the Product Dating Code Initiative.[341] Like the USDA and the FDA, this initiative suggests using the term "BEST If Used By" to reflect product quality. However, the CBA and FMI standards also recommend using the term "USE By" when labeling "perishable products that should be consumed by the date on the package and discarded after that date."[342] There is also bi-partisan Congressional support for standardizing date labels at the federal level, as seen by the Food Date Labeling Act.[343]

MODEL STATE LAW

As discussed above, federal law generally does not mandate the use of date labels, nor does it require the standardization of date labels when they are applied to food products. In the absence of federal legislation, 41 states and the District of Columbia have enacted their own date labeling laws.[344] These state date labeling laws differ significantly from one another, resulting in a confusing and inconsistent regime that is hard to understand and comply with.

While state action cannot eradicate date label inconsistences,[345] state legislation can minimize problems associated with the current date labeling system to fight unnecessary food waste. A successful state date labeling law would:

- **Differentiate between quality and safety labels:** It would create one term to refer to product quality and another term to refer to product safety. If a food product bears a date label, it must be either the quality label or the safety label. The law should also define those terms, for example noting that the quality date is the manufacturer's best estimate of how long

a food product will maintain peak quality and that food may still safely be consumed past its quality date.

- **Standardize language:** It would standardize language and mandate the use of "BEST if Used By" for all quality labels and "USE By" for all safety labels. These terms conform with voluntary USDA, FDA, and industry guidelines as well as the proposed federal Food Date Labeling Act.[346] Standardizing this terminology will decrease customer confusion that results from manufacturers using a range of phrases such as "expires on," "sell by," and "best before."
- **Consider mandating safety labeling:** While the use of a quality date label can be voluntary (so long as the proper label language is used), it is generally a best practice to mandate safety labels for certain perishable foods that pose a food safety risk if consumed past-date. However, this mandate requires significant effort on the part of the implementing agency which must evaluate which foods require these labels, given the wide variation in food ingredients, additives, and packaging. Given the practical realities, making safety labeling voluntary is also an acceptable practice; however, businesses should be required to use the proper language if they choose to apply a date label.
- **Explicitly permit donation and sale of food past the quality date:** The legislation should explicitly permit the sale and donation of food that is past its quality date. Such a provision would provide retailers and donors with the flexibility to sell and donate safe, wholesome food which happens to be past its quality date while maintaining necessary safety protocols.
- **Provide consumer education:** Decreasing consumer confusion regarding the meaning of various date labels is an important step in fighting unnecessary food waste, and consumer education is a key component of reforming date labels. Consumer education should explain the differences between a safety-based and quality-based date and reiterate to consumers that food labeled with a quality-based date can safely be consumed past that date.

A Massachusetts bill introduced in the 2023-2024 session is a good example of a strong state date labeling policy, as it includes many best practices such as:[347]

- **Differentiating between safety and quality with set language:** The bill differentiates between safety and quality labels, mandates safety labeling where necessary, and standardizes labeling language with "best if used by," for quality and "expires on" [348] for safety labels.[349]
- **Permitting donation of past-date food:** The bill permits the sale and donation of food past the quality date and states that "only safety-based restrictions" may be imposed on the sale, donation, or use of food after the quality date has passed.[350]
- **Mandating education:** The bill requires education and outreach to increase consumer awareness on the meaning of quality and safety date labels.[351]

See Appendix L for model state legislation around date labeling.

SECTION VI

OTHER GOVERNMENTAL ACTION TO ADDRESS FOOD WASTE

The final section of the toolkit outlines a range of governmental policies and actions that states can take to prevent and reduce food waste. Some of these actions require legislation, whereas others are more programmatic and may not. This section covers opportunities to address food waste in K-12 schools, add food waste diversion targets and activities to climate and solid waste action plans, and support food waste reduction activities through grants and outreach campaigns. Lastly, a text box highlights opportunities for governments to lead by example, capitalizing on the fact that governments themselves are large organizations with significant purchasing power and a stake in the food system.

FOOD WASTE REDUCTION IN K-12 SCHOOLS

INTRODUCTION

Many factors can contribute to food waste in schools, including the timing of lunch, school serving patterns, need for more robust infrastructure, lack of appetizing foods in cafeterias, and apprehension about donation. While schools generally waste food at the same rate as consumers at large, they are key targets for food waste reduction given the potential to conserve public funds as well as the opportunity to educate the next generation and frame how students think about food and food waste. Some amount of waste is inevitable, as schools may try to expose children to new healthy foods and it sometimes takes multiple exposures for kids to eat new foods. That being said, there are many opportunities to reduce school food waste—requiring measuring and tracking of food waste via waste audits, promoting donation of surplus food in schools via share tables and in the community via food donation, and composting food scraps.[352] States have the ability to incentivize, encourage, fund, or mandate such practices via state-level legislation. The following section provides an overview of the federal laws and guidance around food waste and school food and then highlights best practices for state laws to reduce school food waste with a focus on Rhode Island's and Maryland's laws as models.

FEDERAL LAW

While the federal government does not regulate or enforce school food waste policy, it plays an active role in regulating school foods procured using funds under the National School Lunch Program (NSLP)[353] and the School Breakfast Program (SBP),[354] which provide school children lunch and breakfast during the school day. Because these programs use federal money to procure food, schools must follow federal rules regarding nutrition and the use of the food. While neither the

NSLP or SBP directly addresses food waste, the federal government has provided guidance and support for various food waste reduction and donation measures in schools. For example, the EPA in collaboration with the USDA created a resource for schools on conducting school food waste audits.[355] The USDA also provides guidance documents to support schools who wish to implement Offer versus Serve, a provision in NSLP and SBP that allows students to decline some food offered (the provision is mandatory at the high school level),[356] share tables, where children may return whole food and beverage items they do not want for others to take,[357] the Food Donation Program in Child Nutrition Programs,[358] and Reimbursement of Recycled Milk.[359]

MODEL STATE LAW

While the federal government funds the school food programs and sets a regulatory floor, there is still ample opportunity for states to act to address school food waste, given their role and authority. For example, states may set stricter requirements than those mandated by the federal government around school food, and they oversee food safety, including food safety rules around share tables (more details in Food Safety for Food Donations). The lack of specific federal policy to reduce school food waste means that state legislation and state action can play an important role in spurring schools to tackle food waste. While some states, school districts, and individual schools have ad hoc projects and policies around food waste, Rhode Island is the only state with a comprehensive law addressing school food waste.[360] A successful school food waste law would:

- **Specify which school foods can be donated and how:** To spur schools to donate excess food, state law can explicitly state which school foods can be donated and what requirements must be followed. For example, Oklahoma state law permits the donation of "surplus food from breakfast, lunch, snack and dinner meals," specifically mentioning items such as whole uncut produce and packaged/unpackaged unserved food.[361] The law further outlines procedures related to food donation, noting that food may be distributed on site and school employees may assist nonprofits as volunteers.[362]
- **Include liability protections for food donations**: As outlined above in Liability Protections for Food Donation, concerns about liability are a major barrier to food donations. While all states currently have state-wide liability protections for food donations, and the federal government protects direct donations to individuals, states can provide guidance to school districts explaining that the schools are protected from liability while donating school food both through nonprofit intermediaries and directly to students and their families, and that schools are protected even if food has passed its quality date.
- **Mandate share tables in K-12 schools:** State law can mandate that schools permit donation of food and drink items that are still whole and/or unopened for other students to take and eat. State law can also outline which foods can and cannot be left on share tables and other food safety practices schools must follow in operating share tables. For example, Illinois introduced legislation to require the State Board of Education to develop and implement a share table program.[363] Whether or not a state chooses to mandate share tables, they should promulgate guidance around share tables to support the practice and create a statewide share table standard operating procedure.

- **Mandate that schools donate surplus food and/or compost food scraps**: States should require schools to donate or compost any unserved food. Many schools rely on outside vendors for their school meals programs, and the donation or composting of unserved food is in the purview of these outside vendors. Therefore, states can also require that schools consider vendors' waste practices as part of the procurement process, prioritizing vendors that donate surplus food or compost food scraps.
- **Fund education programming and equipment upgrades:** States can also support school food waste prevention by funding educational programming and curriculum around food waste (such as engaging students to partake in food waste audits or taste tests of foods) and upgraded infrastructure that reduces food waste (such as water fountains and bulk milk dispensers).[364]
- **Require or support food waste audits:** A school food waste audit identifies what types and how much food waste end up in a school's waste stream to understand the magnitude of food waste and identify potential solutions to prevent or reduce food waste.[365] States can direct relevant agencies to conduct periodic audits within time frames of their choosing. For example, Rhode Island's law requires schools to perform waste audits every three years, which are provided for free by the state's solid waste agency.[366] States can decide to audit more frequently if it is feasible for them to do so. USDA, EPA, and the University of Arkansas made a Guide to Conducting Student Food Waste Audits that is a helpful resource.[367]

Rhode Island has a comprehensive law surrounding preventing and addressing school food waste. It includes many of the best practices outlined above, including:

- **Requiring and funding food waste audits:** The law requires schools to perform regular waste audits (provided for free by the Rhode Island Resource Recovery Corporation) and address recommendations that emerge from these audits.[368]
- **Requiring food donation by vendors:** It also requires that schools procure food from vendors that will "donate any unserved non-perishable or unspoiled perishable food" to food banks and provides liability protection for these donations.[369]
- **Mandating food scrap recycling:** Lastly, pursuant to Rhode Island's organic waste recycling law, certain schools must recycle food waste if they generate at least 52 tons per year (reduced to 30 tons on January 1, 2023) and are located within 15 miles of an authorized recycling facility with capacity to process the organic waste unless a cost-based waiver is granted.[370]

Maryland's law establishes a grant program to reduce food waste and to establish composting in schools.[371] The program:

- **Funds school food waste initiatives:** Beginning as early as 2023, local public-school systems across the state can receive annual grant funding of up to $195,000 per grant.[372] Funding can go to education projects, infrastructure support, training, and implementing specific food waste reduction activities, such as incorporating an Offer Versus Serve model in cafeterias, redistributing surplus food through share tables, and on- and off-site compost.[373]

See Appendix M for model legislation for school food waste reduction legislation.

CLIMATE AND SOLID WASTE PLANS

INTRODUCTION

States can use planning tools like climate action plans and solid waste management plans to create goals and strategies to tackle food waste, including incorporating other policies discussed in the Toolkit.

A climate action plan sets clear targets for addressing climate change and establishes clear pathways to meet those targets. There are two policy vehicles to carry out climate action plans: legislation or executive orders. Legislation can be more effective and permanent because it demonstrates a statewide commitment to climate action, whereas executive orders can be revoked by later administrations. A climate action plan can incorporate food waste goals or targets to hit broader climate aims. Even in the absence of such explicit goals, carbon reduction targets can be leveraged to justify and drive food waste reduction activities, and plans can incorporate the contribution that food waste reduction makes toward decreasing emissions while providing economic benefits.[374]

Similarly, solid waste management plans set targets and a framework for achieving overall materials management and waste diversion goals. While many solid waste plans are detailed with waste targets and strategies to meet them, these plans can be updated to explicitly include food waste diversion in order to demonstrate that a state actively considers the impact of food waste on materials management infrastructure. It is crucial for plans involving food waste to include metrics that measure the progress of food diversion rates. States use different strategies to set goals and measure progress on food waste diversion, including analysis of recycling rates, waste reduction rates, or waste generation rates either overall or per capita.[375] To support implementation of the action plans and achievement of these goals, states should consider unique and innovative ways of using available grant funding programs run by USDA Rural Development, including the Solid Waste Management Grant Program which provides funding for technical assistance to improve the planning and management of solid waste sites.[376] The Water and Waste Disposal Loan and Grant Program provides funding for clean and reliable drinking water systems, sanitary sewage disposal, sanitary solid waste disposal, and storm water drainage and may also be a source of support.[377]

FEDERAL LAW

While climate action plans and solid waste management plans are created and implemented at the state level, the federal government can support such laws through grant funding. Though no specific food waste reduction grant programs exist currently, the Inflation Reduction Act passed in August 2022 includes $250 million to states for Greenhouse Gas Air Pollution Plans and Implementation grants.[378] These grants can be used for food waste reduction as food waste reduction projects can reduce greenhouse gas emissions.[379] Additionally, the Solid Waste Infrastructure for Recycling Grant Program (SWIFR) provides states with funding to plan for and begin implementing solid waste management plans.[380]

MODEL STATE LAW

States can use climate action plans and solid waste management plans to address food waste by including food waste targets and strategies to meet those targets. For example, Michigan's Health Climate Plan addresses food waste directly with a goal to cut food waste by 50% by 2030.[381] These plans can best impact food waste when they:

- **Feature specific targets and goals around food waste:** The plans should concretely outline targets for greenhouse gas emissions reductions and waste diversion and include food waste goals as part of the broader targets. In addition to including specific goals, the plans should include recommendations for emissions reductions and diversion opportunities for food waste.
- **Stay current and updated:** Though these plans can be used for long-term planning and can set targets for decades ahead, they should be considered works in progress that are updated when targets are met (or missed), overall strategies or activities change, or new climate action legislation is passed.
- **Outline concrete recommendations:** These plans should task specific departments with actionable next steps for moving forward policies around food waste diversion. Such steps could include activities around an organic waste ban, school food waste diversion, residential and business waste reduction, raising public awareness, increasing donation, or supporting the expansion of compost-collection infrastructure.

One model that incorporates many of these best practices is New Jersey's Global Warming Response Act (GWRA) legislation[382] and the state's resulting climate action plan, which exemplifies best practices including:

- **Mandating the plan via legislation:** The GWRA directed the New Jersey Department of Environmental Protection to develop a report that presented recommendations for reducing emissions by 80% below 2006 levels by 2050 (this report was published on October 15, 2020).[383]
- **Featuring specific targets and goals around food waste:** The 80x50 Report specifically includes food waste targets and outlines a goal to reduce food waste by 50% in 2030.[384]
- **Outlining concrete actions:** The report outlines actions to reduce food waste including siting food waste recycling facilities close to large food waste generators, creating guidelines for siting and permitting new composting facilities, and encouraging community programs for composting. Implementing these reform actions alone are estimated to reduce emissions from food waste by 30%.[385] To create accountability, the report assigns New Jersey Department of Environmental Protection DEP as the leading agency for food waste reduction initiatives.

Additionally, Massachusetts law requires ongoing solid waste management planning which exemplifies many of the best practices outlined above including:

- **Setting concrete targets:** Massachusetts' solid waste planning process set a target to reduce waste disposal by 30% by 2030 and 90% by 2050.[386] The latest plan also includes concrete targets around food waste, aiming to reduce disposal of food and other organic materials by an additional 500,000 tons annually by 2030 based off a 2018 baseline.[387]

- **Outlining action items:** The action plan identifies concrete policy actions as well as owners for those actions to help the state achieve its solid waste goals. In fact, Massachusetts' organic waste ban first emerged as part of its solid waste planning process and implementing regulations.[388] The latest iteration of Massachusetts' solid waste plan tasks Massachusetts Department of Environmental Protection with updating its solid waste regulations to reduce the threshold for the state's organic waste ban to cover entities that generate over half a ton of organic waste per week.[389]
- **Requiring periodic updates:** Massachusetts law requires that the Massachusetts Department of Environmental Protection update the plan every ten years.[390]

Local level climate action plans are also a great opportunity for policymakers to incorporate food waste reduction plans.[391] While this toolkit focuses on state level policies, the Environmental Law Institute has created a great toolkit that describes various municipal climate-action plans that incorporate food waste.[392] The toolkit provides municipalities and stakeholders with model provisions that will make it easier to incorporate food waste measures into municipal climate action plans.

Further, states can join collaborations to work towards food waste reduction goals. Regional collaborations can be a form of climate action plans that allow states to work across borders to reduce emissions. For example, California, Oregon, and Washington, along with many cities and private actors, have formed the Pacific Coast Collaborative to work together towards the common goal of reducing greenhouse gas emissions.[393] These states have committed to a series of specific, ambitious goals to reduce greenhouse gas emissions. One of the commitments includes reducing food waste 50% by 2030 across the region.[394]

See Appendix N for model legislation for climate action plans.

GOVERNMENT SUPPORT FOR FOOD WASTE REDUCTION

INTRODUCTION

Beyond legislative action, there are a variety of ways in which state governments can support food waste reduction. State governments can fund programs and infrastructure supporting surplus food recovery, organics recycling, upcycling food into human food products, or recycling food scraps into animal feed. Upcycled foods are foods that "use ingredients that otherwise would not have gone to human consumption, are procured and produced using verifiable supply chains, and have a positive impact on the environment."[395] For example, an apple that would otherwise go to waste that is dehydrated and sold as apple chips would be upcycled.

Governments can support recycling efforts by, for example, helping to expand composting capacity and anaerobic digestion collection and processing capacity and assisting food recovery organizations with equipment needs. Governments can support upcycling food into human food products and recycling food into animal feed by providing funding for infrastructure, research, and development of new technologies. Grant and incentive programs are strongest when there is a sustainable source of funds, the programs are explicitly aimed at food waste reduction, they are well-advertised and

accessible, and technical assistance is available for applicants and recipients.[396]

In addition to funding, states can also support food waste reduction via technical assistance and education for food waste generators and the public as a whole. Several states provide technical assistance to businesses to help them understand their current food waste practices and implement reduction strategies.[397] States can also increase food waste reduction through educational campaigns, which raise overall awareness and can spur individual and industry-wide action. To raise awareness, states can use their websites, educational seminars and conferences, training sessions, and media campaigns.

FEDERAL LAW

The federal government offers funding for food waste reduction work. As noted above, the 2018 Farm Bill included up to $25 million per year for localities to conduct compost or food waste reduction projects.[398] In June 2021, the USDA announced an investment of up to $100 million in food recovery infrastructure grants for food assistance organizations, particularly those that reach underserved areas. The grants can be used for efforts such as developing storage and refrigeration capacity, which helps organizations rescue more food.[399] In February 2023, the USDA announced an additional $10 million in funding for Composting and Food Waste Reduction Pilot Projects.[400] The EPA also runs the Food Recovery Challenge, which is a voluntary incentive program that generators like universities, businesses, and others can join to reduce their food waste. Participants are required to set baseline goals and annually report the amount of diverted food waste.[401]

MODEL STATE LAW

There is significant space for states to create funding opportunities and provide technical assistance. Best practices for government support include:

- **Creating grants for infrastructure and overhead costs associated with food recovery efforts:** Rather than lump food waste reduction into other environmental efforts, states should create a grant program dedicated to preventing food waste and recovering surplus food. To be most effective, this grant program should have a sustainable source of funding. For example, CalRecycle administers the Food Waste Prevention and Rescue Grant Program to reduce the amount of food going to disposal and overall greenhouse gas emissions.[402] The program is funded via money collected through the greenhouse gas cap-and-trade program, and awarded $2.85 million in grants during fiscal year 2021.[403] Similarly, Maryland recently passed SB 124, which creates a grant program to fund food waste initiatives in schools.[404] As part of this grant funding, states should tailor funding to the needs of small food recovery organizations with less resources, such as by providing consistent, accessible funding not only for the purchase of equipment and other infrastructure, but also to cover on-going overhead costs such as staffing and warehouse space. Continuous financial support to cover overhead costs, as opposed to one-off funding opportunities, is rarely provided but often needed by food recovery organizations.
- **Creating grants for infrastructure, product development, and market development costs associated with recycling and upcycling food:** States should provide funding for

actors that are upcycling surplus food into new human food products and recycling food scraps into animal feed, taking advantage of food that would otherwise go to waste. For example, states could offer funding for the same types of activities offered in the USDA's Agriculture Innovation Center Program.[405] Though that program provides funding for value-added agricultural products, which would not necessarily fund recycling or upcycling projects, the types of activities it funds includes business and market development, product development, and value chain coordination.[406] Providing similar funding for recycling and upcycling organizations and businesses would support innovate food waste technologies. To strengthen this funding opportunity even further, grant funding should also be available for upfront infrastructure costs and research and development.

- **Providing free technical assistance around food waste:** In addition to funding a grant or incentive program, states should also offer free one-one-one technical assistance to support

LEAD BY EXAMPLE

In addition to passing policies that incentivize or mandate food system actors to target their food waste, governments can tackle their own food waste issues. Leading by example, states can incorporate programs that address food waste within their own buildings and operations (and contractors' operations) and thereby demonstrate the feasibility and benefits of food waste reduction for the broader food system. For example, in 2010, the Los Angeles City Council passed an ordinance advising city departments and contractors to donate surplus food.[407] Recognizing the building momentum behind food waste reduction efforts and the need for additional guidance, in 2018, the council required Los Angeles Sanitation & Environment and the City Attorney to promulgate guidelines for city departments and contractors.[408] States could follow Los Angeles and similarly lead by example by implementing some or all of the following practices:

- Procure compost for relevant projects (see Compost Procurement);
- Measure food waste generated by government agencies and contractors;
- Require that agencies and contractors donate surplus food;
- Require that agencies and contractors recycle food scraps, including providing organics collection bins in government offices and cafeterias; and
- Incorporate food waste measurement requirements and food waste reduction practices into the food vendor procurement process, to create a values-based procurement process that prioritizes vendors proactively tackling food waste.

businesses and other food waste generators who are interested in addressing food waste. For example, Tennessee's Get Food Smart Program provides free technical assistance to food waste generators including educational workshops, food waste audit planning, food waste reduction strategy assistance, on-site composting training, and more.[409] Additionally, the Massachusetts Department of Environmental Protection and the Center for EcoTechnology collaborate to operate RecyclingWorks MA, which provides guidance on state laws around food waste and technical assistance to businesses aiming to reduce food waste.[410]

- **Recognizing businesses for their efforts:** In addition to providing funding and technical assistance, states can support efforts to reduce food loss and waste through challenges, certifications, recognition, and encouragement. For example, the Get Food Smart TN Recognition Program acknowledges participants taking voluntary waste-conscious actions in their operations. The goal of the program is to highlight and encourage replication of best practices.[411]
- **Raising awareness via campaigns:** Lastly, states can raise awareness through broad outreach and educational campaigns. For example, the South Carolina Department of Health and Environmental Control collaborates with the public and private sectors to conduct a "Don't Waste Food S.C." outreach campaign.[412] The campaign aims to educate consumers, businesses, and communities about food waste.[413] Baltimore's "Make Food Matter" campaign uses culturally appropriate resources to increase awareness about food waste in the city.[414]

CONCLUSION

The problems that lead to endemic food waste are complex and entrenched. They can be difficult to solve because they involve established interests, multifaceted systems that are resistant to change, and long-standing business practices and personal habits. However, states are well-positioned to identify local needs, create innovative policies and programs, and ultimately support regional success and build national momentum around food waste. State governments can increase the amount of food diverted from landfills and incinerators by passing policies that encourage food waste reduction, providing funding for food recovery programs and food scrap recycling infrastructure, and educating the public and private sectors about food waste. States are at the cutting edge of this work, using a combination of policy, funding, encouragement, and education to build a supportive landscape and entice consumers, businesses, and local governments to reduce food waste. In order for the United States to reach its ambitious goal of cutting food waste in half by 2030, states must play a crucial role in implementing food waste reduction policies such as those discussed in this toolkit.

APPENDICES

MODEL STATE LEGISLATION

Note on definitions: throughout this document we use different definitions based on the models we pulled from and the implications of different words in different contexts. Of course, it is within the discretion of states using this toolkit to opt for different definitions or more standardized definitions as they see fit.

APPENDIX A: ORGANIC WASTE BANS

Section 1. Purpose

Over one-third of food in the United States is wasted, resulting in significant environmental and social harms. Ninety-five percent of food waste is disposed of in landfills or incinerated, and food is typically the largest component by weight of landfill waste, making up 24% on average. Diverting food waste from disposal can help municipalities achieve waste reduction and climate mitigation goals; reduce emissions of methane, a potent greenhouse gas that contributes to climate change and that is emitted from food waste as it decays in landfills; extend the useful life of municipal landfills; and foster economic development through increased compost supplier and processor jobs. Therefore, it is the intent of the legislature to support policies that reduce the amount of food waste going to disposal and support food waste prevention, food recovery, and food scrap recycling efforts.

Section 2. Definitions

a. "Department" means [*Define this as needed for your state and include the state agency responsible for the organic waste ban in your state*].

b. "Food scraps," for purposes of this section, means inedible food, trimmings from the preparation of food, surplus food that is not donated, and food processing waste. "Food scraps" does not include used cooking oil, yellow grease, or any food that is subject to a recall or seizure due to the presence of pathogens.

c. "Surplus food," for the purpose of this section, means food that is not sold or used by a commercial food generator and is still safe to be consumed but would otherwise be disposed of by the generator. Surplus food shall not include unpackaged fresh meat, fish or poultry; food damaged by pests, mold, bacteria or other contamination; or food subject to governmental or producer recall due to food safety.

d. "Person" means any individual, partnership, company, corporation, association, unincorporated association, joint venture, trust, state agency or department, federal agency, or any other legal or commercial entity.

e. "Source separated" or "source separation" means the separation of organic materials from non-organic materials at the point of generation.

Section 3. Priority Uses

a. It is the policy of the state that surplus food and food scraps collected under the requirements of this chapter shall be managed according to the following order of priority uses:

   1. Reduction of the amount generated at the source;
   2. Diversion for food consumption by humans;
   3. Diversion for agricultural use, including consumption by animals; and
   4. Composting and anaerobic digestion.

Section 4. Food Waste Recycling Requirement

A person who produces more than an amount identified under subsection (c) of this section in combined surplus food and food scraps shall:

a. Separate surplus food and food scraps from other solid waste, provided that a de minimis amount of such food may be disposed of in solid waste when a person has established a program to separate surplus food and food scraps and the program includes a component for the education of program users regarding the need to separate such food; and

b. Arrange for the transfer of surplus food or food scraps to location(s) that manage surplus food or food scraps in a manner consistent with the priority uses established under section 3(a)(i)-(iv) or manage food scraps on site.*

**While some state legislation (e.g., CT and RI) includes distance-based exemptions for food scraps generators that are not located within a given distance of an authorized composting or anaerobic digestion facility, we do not advise including such a provision.*

c. The following persons shall be subject to the requirements of subsections (a)-(b) of this section [*You will need to determine what threshold you want to use and end with, as well as the cadence to reach that threshold**]:

   1. Beginning [*2 years from enactment*], a person whose acts or processes produce more than 104 tons per year of combined surplus food and food scraps;

   1. Beginning [*3 years from enactment*], a person whose acts or processes produce more than 52 tons per year of combined surplus food and food scraps;

1. Beginning [*4 years from enactment*], a person whose acts or processes produce more than 26 tons per year of combined surplus food and food scraps;

1. Beginning [*5 years from enactment*], a person whose acts or processes produce more than 18 tons per year of combined surplus food and food scraps; and

1. Beginning [*8 years from enactment*], any person who generates any amount of combined surplus food and food scraps.

**Another strategy to determine thresholds is by grouping food scraps generators into tiers. For an example of this look to the model legislation for a Food Donation Requirement.*

d. A person who produces more than an amount identified under section 4(c) in combined surplus food and food scraps shall comply with the requirements of this section unless the generator demonstrates the existence of extraordinary circumstances beyond its control that make such compliance impracticable. For the purposes of this section, extraordinary circumstances include earthquakes, wildfires, flooding, and other emergencies and natural disasters.

Section 5. Waiver Process

a. A person who produces more than an amount identified under section 4(c) in combined surplus food and food scraps may petition the Department for a temporary waiver from some or all the requirements of section 4. The Department may grant temporary waivers upon receipt of proof that compliance with the requirements of section 4 would cause undue economic hardship. A waiver shall be no longer than one year in duration; however, the Department may renew such waiver.

b. The Department shall adopt rules to specify the type of information that a waiver applicant must submit to the Department and to specify the Department's process for reviewing and approving waiver applications.

Section 6. Outreach and Grants

a. The Department shall perform outreach and education as necessary to inform relevant persons of the requirements associated with section 4.

b. Subject to appropriation [*You may need to adjust for how your state addresses funding in legislative language*], the Department shall create and administer a grant program to support compliance with the requirements of this section with [*E.g., $1,000,000, you will need to decide how large you want this grant program to be*] in funds annually.

Section 7. Rulemaking

The Department is authorized to promulgate rules and regulations required to implement sections 2 through 6 and issue compliance orders as necessary to effectuate the purposes of this chapter and enforce the same by all appropriate administrative and judicial proceedings.

States may want to include enforcement and reporting requirements rather than designate that these requirements be implemented through regulations. Below are two model Sections on Recordkeeping Requirements and Enforcement that states could include.

Section 8. Recordkeeping Requirements

All persons subject to the requirements in Section 4 shall submit an annual recordkeeping report to the Department. This record shall include the total amount of food donated, the total amount of food recycled, the organics recycler or recyclers and associated transporters used, and any other information required by regulations.

Section 9: Enforcement

a. The Department may issue a warning to a person who violates the requirements of Section 4 or any rule or regulation adopted under Section 7.

b. If a person subsequently violates Section 4 or any rule or regulation adopted under Section 7 after receiving a warning under Section 9(a), the Department may subject that person to a civil penalty, to be collected in a civil action brought by the Department, of:

    1. $250 for the second violation;

    2. $500 for the third violation; and

    3. $1,000 for the fourth and each subsequent violation.

c. Each day a violation occurs is a separate violation under this section.

d. Penalties collected under this subsection shall be distributed to a special fund, to be used only to finance incentives that encourage food waste reduction and composting in the state.

APPENDIX B: FOOD DONATION REQUIREMENTS

It is possible to pass this donation requirement as a standalone law, but all states with food donation requirements have incorporated them as part of an overall organic waste ban. This section is a food donation-specific requirement, but it can easily be merged with the above organic waste ban.

Section 1. Purpose

Over one-third of food in the United States is wasted, resulting in significant environmental and social harms. Meanwhile, over 10% of households in America experience food insecurity. [*Insert state specific food insecurity figures*]. Food donation is a logical solution to redirect safe, surplus food destined for disposal to individuals experiencing food insecurity. Recognizing the harm of food waste and the need to divert surplus food, the state sets a goal of recovering surplus food to reduce food insecurity and food waste.

Section 2. Definitions

a. "Commercial food generators" means Tier I and Tier II commercial food generators, as defined in this section. For the purpose of this ordinance, food recovery organizations are not commercial food generators:

   1. Tier I commercial food generators are supermarkets, grocery stores with a total facility size equal to or greater than ten thousand (10,000) square feet, food service providers, food distributors, and wholesale food vendors.

   2. Tier II commercial food generators are large restaurants with two hundred fifty (250) or more seats or a total facility size equal to or greater than five thousand (5,000) square feet; hotels with an on-site food facility and one hundred (100) or more beds; large venues and large events; colleges or universities; local or state agencies with large cafeterias; and any public or private school grades kindergarten through twelve (K-12) with on-site food facilities that generate surplus food.

b. "Department" means [*define this as needed for your state and include the state agency that will be responsible for administering this requirement*].

c. "Surplus food," for the purpose of this section, means food that is not sold or used by a commercial food generator and is still safe to be consumed but would otherwise be disposed of by the generator. Surplus food shall not include unpackaged fresh meat, fish or poultry; food damaged by pests, mold, bacteria or other contamination; and food subject to governmental or producer recall due to food safety.

d. "Food recovery organization" means a not-for-profit organization that provides food to individuals without charge or at a charge sufficient only to cover the cost of handling such food* including but not limited to a food pantry, food bank, soup kitchen, shelter, or other community-based organization.

e. "Food recovery transportation service" means a person or entity that collects and transports surplus food from a commercial food generator to a food recovery organization.

**Including organizations that charge a small fee allows flexibility for innovative food recovery models that charge a nominal fee to end recipients of donated food. Some states may not yet recognize these organizations, but we encourage their inclusion.*

Section 3. The Food Recovery Program

a. The Food Recovery Program shall require that commercial food generators, to the maximum extent practicable, separate and donate their surplus food to a food recovery organization either directly or through a food recovery transportation service, in accordance with applicable laws, rules, and regulations related to food donation.

b. Commercial food generators shall have the following responsibilities related to the Food Recovery Program:

   1. Tier I commercial food generators shall comply with the requirements of this section commencing [*two years after enactment*];

   2. Tier II commercial food generators shall comply with the requirements of this section commencing [*three years after enactment*];

   3. Commercial food generators shall demonstrate compliance with the requirements of this section through maintaining a contract or written agreement with a food recovery organization for regular food donations to be picked up or dropped off;

   4. Commercial food generators donating surplus foods containing more than one ingredient that are not commercially packaged shall include a list of any major food allergen pursuant to the Food Allergen Labeling and Consumer Protection Act of 2004 (FALCPA) in the surplus food to the maximum practicable or, if not possible, an allergen disclaimer;

   5. Commercial food generators shall comply with the requirements of this section unless the generator demonstrates the existence of extraordinary circumstances beyond its control that make such compliance impracticable. For the purposes of this section, extraordinary circumstances include earthquakes, wildfires, flooding, and other emergencies and natural disasters; and

   6. Nothing in this section shall require or authorize a commercial food generator to donate food that does not meet food safety requirements.

c. A designated commercial food generator may petition the Department for a temporary waiver from some or all of the requirements of this section. The Department may grant temporary waivers upon receipt of proof that compliance with this section would cause undue economic hardship. A waiver shall be no longer than one year in duration; however, the Department may renew such waiver.

d. The Department shall have the following responsibilities related to the Food Recovery Program:

   1. Publish and maintain on its website: a list of types of businesses included in Tier I and Tier II as commercial food generators, a list of all food recovery organizations, a list of food recovery transportation services, a model contract between commercial food generators and food recovery organizations, and educational materials related to food donation;

2. Develop and make available educational materials to assist designated commercial food generators with compliance with this section. The Department shall also distribute educational materials on food waste prevention and minimization;
3. Create and administer a process to adjudicate hardship waiver requests;
4. Work with [*insert relevant state agencies*] to develop, publish, and distribute guidance around food safety requirements for food donation;
5. Work to increase the capacity of food recovery organizations as needed; and
6. No later than [*3 years from enactment*] and on an annual basis thereafter, submit a report on the operation of the Food Recovery Program including, but not limited to, the amount of food donated, sample educational materials, and the number of waivers provided.

e. Food Recovery Organizations shall have the following responsibilities related to the Food Recovery Program:

1. Food recovery organizations that enter into a contract with commercial food generators under 3(b)(iii)* shall submit a report to the Department within one year of implementation of this ordinance, and no less than annually thereafter, in an electronic format. The report must summarize the total amount of food received from commercial food generators in the state throughout the year, the amount received from each commercial food generator, and any other information as required by the Department. Food recovery organizations may report the required information in the format used by the food recovery organization to track donations in the normal course of business.

**While making food recovery organizations responsible for reporting may create a burden, such organizations typically already track how much food they recover to: (1) help donors get tax credits for which a letter is needed and (2) track donations to prove success. However, in some circumstances, such as where a food donation requirement is enacted in addition to or as part of an organic waste ban, it may make sense to make businesses responsible for reporting.*

f. To the maximum extent allowable under state law, donations made pursuant to this section shall be covered by [*insert citation for the federal Bill Emerson Good Samaritan Food Donation Act and any state liability protection law*], which protects eligible food donors that donate and food recovery organizations that distribute wholesome food either directly or through nonprofits for distribution to those in need from civil and criminal liability.

Section 4. Outreach and Grants

a. The Department shall perform outreach and education as necessary to inform relevant persons, including food businesses, commercial food generators, food recovery organizations, and food recovery transportation services of the requirements associated with section 5.

b. Subject to appropriation [*May need to adjust for how your state addresses funding in legislative language*], the Department shall create and administer a grant program to support compliance with the

requirements of this section with [*E.g., $500,000, you will need to decide how large you want this grant program to be*] in funds annually.

Section 5. Rulemaking

The Department is authorized to promulgate rules and regulations as required to implement sections 2 through 4, and 6.

Section 6: Enforcement

a. The Department may issue a warning to a commercial food generator who violates the requirements of Section 3 or any rule or regulation adopted under Section 5.

b. After receiving a warning, a commercial food generator who subsequently violates Section 3, or any rule or regulation adopted under Section 5, may be subject to a civil penalty, to be collected in a civil action brought by the Department, of:

   1. $250 for the second violation;
   2. $500 for the third violation; and
   3. $1,000 for the fourth and each subsequent violation

c. Each day a violation occurs is a separate violation under this section.

d. Penalties collected under this subsection shall be distributed to a special fund, to be used only to finance incentives that encourage food waste reduction and composting in the state.

APPENDIX C: MANDATORY REPORTING

This legislation is modeled very closely after NRDC and Environmental Law Institute's model local ordinance for mandatory reporting by large food waste generators, and much of the language is identical except that it was modified for state-level laws.[415]

Section 1. Goals and Purpose

a. Diverting food waste from landfills by preventing food waste, donating surplus food, and recycling food scraps can help states achieve waste reduction and climate mitigation goals. Specifically, diverting food waste from landfills and incinerators typically:

   1. Reduces emissions of methane—a potent greenhouse gas that contributes to climate change and that is emitted from food waste as it decays in landfills—and emissions of carbon dioxide from food waste that is incinerated;
   2. Avoids wasting the greenhouse gas emissions associated with producing, transporting, and disposing of wasted food;
   3. Extends the useful life of landfills, thereby reducing the need to expand and create new landfills, which are costly and disproportionately sited in low-income communities and communities of color;
   4. Reduces the harmful public health and environmental impacts of landfills and incinerators;
   5. Fosters economic development through increased compost supplier and processor jobs;
   6. Lowers waste management costs associated with landfill disposal;
   7. Addresses food insecurity when surplus food is rescued and distributed to those in need, particularly households and communities of color which disproportionately face hunger; and
   8. Increases production of compost when food scraps are recycled, thereby producing valuable soil amendment that can sequester carbon and increase nutrient and water retention, which can reduce the demand for irrigation and fertilizer.

b. It is intended that mandatory food waste generation reporting by covered entities will:

   1. Provide data that can inform state laws as well as waste management operations;
   2. Increase awareness among businesses and the general public about the problem of food waste and food insecurity and the need for organics recycling; and
   3. Lead to reductions in landfill disposal and incineration of food waste as a result of raised awareness, reputational considerations, and other factors contributing to increased food waste prevention, surplus food rescue, and food scrap recycling.

Section 2. Definitions

a. "Anaerobic digestion" means a process through which bacteria break down organic materials, such as food waste, in the absence of oxygen to generate biogas and nutrient-rich matter.

b. "Animal feed" means edible material in a form that complies with applicable regulatory requirements and, when consumed by an animal, provides energy and/or nutrients.

c. "Business" means a commercial entity including, but not limited to, a firm, partnership, proprietorship, or corporation.

d. "Compost" means a product that results from controlled aerobic, biological decomposition of biodegradable materials, including food waste, that is typically used as a soil amendment.

e. "Covered entity" means businesses, nonprofit organizations, and state and municipal governmental subunits that cook, assemble, process, serve, or sell food—or do so as service providers for other enterprises—and generate a total annual average of two tons per week or more of food waste based on the methods referenced in Section 4.

f. "Department" means [*insert name of department of agency responsible for administering this requirement in your state*].

g. "Food" means any raw, cooked, processed, or prepared substance, beverage, or ingredient used or intended for human consumption.

h. "Food scraps" means inedible food parts, trimmings from the preparation of food, edible food that is not donated, and food processing waste that results from the distribution, storage, preparation, cooking, handling, selling, or serving of food.

i. "Food waste" means 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.

j. "Food waste generation" means includes all discarded food waste regardless of its destination, including food scraps that are later recycled, landfilled, or incinerated.

k. "Nonprofit organization" means an incorporated or unincorporated entity that:

   1. is operating for religious, charitable, or educational purposes; and

   2. does not provide net earnings to, or operate in any other manner that inures to the benefit of, any officer, employee, or shareholder of the entity.

l. "Quasi-governmental entities" means organizations that have both a public and a private component, such as convention centers that are municipally owned but privately operated.

m. "Sampling" means choosing to measure or approximate, over a period of time, the amount of food waste:

   1. from a subset of food waste producing units within a population (such as a few hotels that belong to a larger hotel chain); or

   2. from a fraction of the physical food waste produced.

n. "Scaling" means increasing data in a fixed ratio from a limited number of observations in order to estimate the entire amount of food waste over the period of an inventory.

o. "Standard units" means common units of measurement such as inches, pounds, and tons.

p. "Surplus food" means food (including inedible parts) that is not sold or used by a covered entity and that meets food safety regulations, even though it may not be readily marketable due to appearance, age, freshness, grade, size, surplus, or other conditions.

q. "Undue hardship" means a degree of hardship related to the compliance burden that is unreasonable or excessively costly for a covered entity to bear.

Section 3. Reporting Requirements

Covered entities shall submit an annual report to the Department on or before [*add date that corresponds to start of fiscal or calendar year*], and annually thereafter, in an electronic format acceptable to the Department. The report shall include:

a. Amount of food waste generated during the prior year by weight (expressed in pounds/tons).
    1. Method used, pursuant to Section 4, to determine the amount of food waste generation reported;
    2. If sampling and scaling are used, a description of the approach, calculations used, and the period of time over which sample data were collected; and
    3. Qualitative description and/or a quantitative assessment of any uncertainties around the amount of food waste generation reported.

b. Amount and types of surplus food donated to a nonprofit organization during the prior year.
    1. Method used, pursuant to Section 4, to determine the amount by weight (expressed in pounds/tons) of donated surplus food reported.
    2. Major donation challenges that had to be overcome in the past year or are ongoing, such as donation logistics, storage, and transportation.

c. Amount of food scraps recycled during the prior year by weight (expressed in pounds/tons).
    1. Destination of food scraps, including:
        A. Animal feed;
        B. Anaerobic digestion; and
        C. Composting.
    2. Major food scrap recycling challenges that had to be overcome in the last year or are ongoing, such as odor, staff training, or availability of organics recyclers.

d. Concerns or problems complying with the requirements of this Section.

e. Reports submitted pursuant to this Section shall include a certification in a form acceptable to the Department.

Section 4. Methods for Quantifying Food Waste Generation and Surplus Food Donation:

Covered entities shall use one or more of the following methods to determine the weight of their generated food waste and surplus food (expressed in pounds/tons):

a. Directly measuring the generated food waste or surplus food with an instrument or device marked in standard units:
    1. Sampling and scaling data may be used in lieu of measuring total food waste or surplus food generated, provided reporting requirements in Section 3 are followed;
    2. Records obtained from waste haulers and processors with which the covered entity has a contractual relationship may be relied upon to quantify the amount of generated food waste and recycled food scraps; and
    3. Records obtained from nonprofit organizations that accept surplus food may be relied upon to quantify surplus food donations.
b. Employing approximation methods to generate weight estimates (expressed in pounds/tons) using the following methods:
    1. Counting: assessing the number of items that make up food waste and using the result to estimate the weight;
    2. Volume: assessing the physical space occupied by food waste and using the result to estimate the weight or relying on approximations provided by waste haulers and processors with which the covered entity has a contractual relationship; or
    3. Records: using individual pieces of data that have been written down or saved and that are often routinely collected for reasons other than quantifying food waste, such as warehouse record books.
c. If a method used pursuant to this Section produces results that are not expressed in weight—such as unit counts of items or volume—covered entities shall convert the results to weight (expressed in pounds/tons).

Section 5. Business Education and Compliance Assistance

a. The Department shall create and make available educational materials to assist covered entities in complying with the requirements of Section 3 during the [*calendar or fiscal*] year prior to the effective date of Section 3 and on an ongoing basis, including publishing information on its website. Such materials shall address:
    1. Benefits of food waste reduction;
    2. Benefits of measuring food waste; and
    3. Resources to facilitate measures to prevent food from going to waste, rescue surplus food, and recycle food scraps.

b. The Department shall provide compliance assistance to help covered entities comply with the requirements of Section 3 during the [*calendar or fiscal*] year prior to the effective date of Section 3 including:

   1. A platform for receiving and responding to compliance questions from covered entities;
   2. Resources on methods for quantifying food waste generation as described in Section 4; and
   3. Such other materials determined to be useful in aiding timely and effective compliance.

c. All educational and compliance assistance materials shall be appropriately translated into any non-English language spoken by a substantial number of owners of covered entities.

Section 6. Record Keeping:

Covered entities shall maintain records created for purposes of complying with the requirements in Sections 3 and 4 for a period of three years from the date of the filing of a report, and shall submit the records upon request of the Department within five business days of such request either by postal or electronic mail.

Section 7. Waivers

Covered entities may apply for a waiver from the reporting requirements in Section 3 in any [*calendar or fiscal*] year. Applications shall be submitted at least sixty (60) days prior to the start of the [*calendar or fiscal*] year for which a waiver is requested. Waivers may be granted on a case-by-case basis upon a written finding that the facts presented by the applicant support a finding of undue hardship as defined in Section 2. The Department shall notify the covered entity within thirty (30) days whether the waiver has been granted or denied. Interim waiver applications that present new and extenuating circumstances of undue hardship will be accepted throughout the course of the reporting year. The Department shall respond to interim waiver requests within thirty (30) days.

Section 8. Enforcement

A warning shall be issued for any violation by a covered entity that occurs during the first twelve months after the effective date. Any covered entity that violates Sections 3 or 6 after the law has been in effect for one year shall be liable for civil penalties, to the extent permissible under state law, in an amount not to exceed [*dollar amount consistent with comparable state violations*].

Section 9. Rulemaking

The Department is authorized to promulgate rules and regulations as required to implement sections 3 through 8.

Section 10. Effective Date

This section takes effect [*number of days*] after its [*adoption/publication*].

APPENDIX D: DISPOSAL SURCHARGE FEES

This legislation is adapted from the Institute for Local Self-Reliance's (ILSR) model state legislation for Funding Waste Diversion and On-Farm Composting via a Disposal Surcharge. Much of the language is identical except that the requirement for detailed plans for the allocation of funds collected has been removed. Policymakers can refer to ILSR's model legislation for detailed plans for the allocation of funds to an On-Farm Composting and Compost Use Grant Fund, a Waste Diversion Grant Fund, a County Waste Diversion Grants, and Competitive Waste Diversion Grants.

Section 1. Definitions

a. "Compost" means a stable organic product produced by a controlled aerobic decomposition process that can be used as a soil additive, fertilizer, growth media, or for other beneficial uses.

b. "Composting" means the controlled aerobic biological decomposition of organic waste material resulting in compost.

c. "Composting facility" means buildings, grounds (such as a composting pad), and equipment dedicated to the manufacture of compost. Composting facilities also include stormwater control systems.

d. "Department" means [*Define this as needed for state as the entity responsible for managing statewide accounts (such as Comptroller)*].

e. "Farm" means the site of a business or activity operated for the primary purpose of tilling, cropping, keeping, pasturing, or producing an agricultural product other than compost, including livestock, poultry, plants, trees, sod, food, feed, or fiber, by in-ground, out-of-ground, container, or other culture. It does not include the site of a business or activity operated for the primary purpose of producing compost.

f. "Refuse Disposal System" includes an incinerator; solid waste transfer station; landfill system; a landfill; and any other facility accepting mixed solid waste.

g. "Recycling" means any process in which recyclable materials are collected, separated, or processed and returned to the marketplace in the form of raw materials or products.

h. "Solid Waste" means any discarded material destined for landfill disposal, incineration, or other final disposal at a Refuse Disposal System. It does not include segregated or source-separated materials that are rescued, reused, recycled, or composted.

Section 2. Solid Waste Disposal Surcharge

a. There is a solid waste disposal surcharge of [*insert $ surcharge rate*] per ton of solid waste processed by a refuse disposal system to be paid by each owner or operator of a refuse disposal facility in the state.

b. On or before [*insert date 5 years after surcharge start date*], and every 5 years thereafter, the Department shall:

1. Adjust the solid waste disposal surcharge to reflect changes in the Consumer Price Index for the [*insert region in which the state is located*]; and
2. Increase the surcharge further as the Department deems necessary.

c. The surcharge may only be assessed once on solid waste destined for final disposal. (For example, if the surcharge has been assessed on an owner or operator of a transfer station that first processes solid waste, the surcharge may not be assessed on an owner or operator of a refuse disposal system that receives that same solid waste for final disposal.)

d. The Department shall collect the solid waste disposal surcharge assessed under this section and deposit the revenue into an Environmental Stewardship Fund.

1. Beginning [*insert start date*], on a quarterly basis, an owner or operator of a refuse disposal system shall complete and submit a return and pay the solid waste disposal surcharge.
2. The return shall include information on the number of tons of solid waste accepted for disposal, transfer, or collection, as appropriate, during the reporting period.

Section 3. Environmental Stewardship Fund

a. There is an Environmental Stewardship Fund to provide funding to the [*entities in charge of awarding grants*] to assist with the costs of developing, implementing, or expanding equipment, infrastructure, and education relating to:

1. Reducing the amount of solid waste generated in the state;
2. Reusing, repairing, recycling, and composting;
3. Surplus food rescue;
4. On-farm composting and compost use; and
5. Minimizing illegal dumping.

b. The Department shall administer the Fund.

c. The Fund is a special, non-lapsing Fund. The state Treasurer shall hold the Fund separately, and the Department shall account for the Fund.

d. The Fund consists of:

1. The solid waste disposal surcharge revenue deposited into the Fund;
2. Money appropriated in the state budget to the Fund;
3. Interest earnings (the state Treasurer shall invest the Fund's money in the same manner as other state money may be invested); and
4. Any other money from any other source accepted for the benefit of the Fund.

e. The Fund may be used only to provide the funding necessary to award grants under Section 3 (a) of this law and to cover the Fund's reasonable administrative costs, including those for grant programs.

Up to 5% of the estimated annual solid waste surcharge revenue may be used to cover reasonable administrative costs.*

**Your state might want to specify what percent of the funding should be allocated to which programs; for example: 25% of the money in the fund to an on-farm composting and compost use grant fund; and 75% of the money in the fund to a waste diversion fund.*

Section 4. Reporting Requirements

a. On or before December 1 each year, beginning in [*insert start year*], the Department shall report to the [*insert name of state*] legislature on the grants awarded under the Fund.

b. The report shall include the number and types of grants awarded; the impact of grant awards on job creation, waste prevention, and diversion; and the quantity of compost used by farmers.

c. Beginning with the report due [*insert date 5 years after start year*], and every 5 years thereafter, in the report, the Department shall include a recommendation on whether and to what extent an adjustment to the solid waste disposal surcharge is necessary.

APPENDIX E: LIABILITY PROTECTIONS FOR FOOD DONATION

As discussed in the toolkit, federal law offers comprehensive liability protection for food donation, including against state law claims. Given this federal baseline, the protections outlined in sections 1-3 & 5-6, below, are duplicative of existing federal protections and are not strictly necessary to protect food donation. However, if passed, they may ease donor confusion. The model law also builds off the federal baseline by protecting the donation of past-date foods, requiring state agencies to offer liability protection guidance, and defining the rules that must be met to receive liability protection more narrowly to only ensure food safety.

Section 1. Definitions

a. "Apparently fit grocery product" means a grocery product that meets all quality and labeling standards imposed by Federal, State, and local laws and regulations even though the product may not be readily marketable due to appearance, age, freshness, grade, size, surplus, or other conditions.

b. "Apparently wholesome food" means food that is fit for human consumption at the time it was donated so long as it meets all safety rules and safety-related labeling standards required by federal, state, and local laws regardless of compliance with any laws, rules, or ordinances regulating the packaging or labeling of food which are not linked to food safety. Apparently wholesome food includes food that is not readily marketable due to appearance; age; freshness, including bearing a past-date quality date, sell-by date, or other date; grade; size; surplus; or other condition.

c. "Donate" means to give without requiring anything of monetary value from the recipient, except that the term shall include giving by a nonprofit organization to another nonprofit organization, notwithstanding that the donor organization has charged a nominal fee to the donee organization, if the ultimate recipient or user is not required to give anything of monetary value.

d. "Food" means any raw, cooked, processed, or prepared edible substance, ice, beverage, or ingredient used or intended for use in whole or in part for human consumption.

e. "Gleaner" means a person who harvests for distribution to food insecure individuals, or for donation to a nonprofit organization for ultimate distribution to such individuals, an agricultural crop that has been donated by the owner.

f. "Good Samaritan Reduced Price" means with respect to the price of an apparently wholesome food or apparently fit grocery product, a price that is an amount not greater than the cost of handling, administering, harvesting, processing, packaging, transporting, and distributing the apparently wholesome food or apparently fit grocery product.

g. "Grocery product" means a nonfood grocery product, including a disposable paper or plastic product, household cleaning product, laundry detergent, cleaning product, or miscellaneous household item.

h. "Gross negligence" means voluntary and conscious conduct by a person with knowledge, at the time of the conduct, that the conduct is likely to be harmful to the health or well-being of another person.

i. "Intentional misconduct" means conduct by a person with knowledge, at the time of the conduct, that the conduct is harmful to the health or well-being of another person.

j. "Nonprofit organization" means an incorporated or unincorporated entity that:

   1. Is operating for religious, charitable, or educational purposes; and

   2. Does not provide net earnings to, or operate in any other manner that inures to the benefit of, any officer, employee, or shareholder of the entity.

k. "Person" means an individual, corporation, partnership, organization, association, or governmental entity, including a retail grocer, wholesaler, hotel, motel, manufacturer, restaurant, caterer, farmer, school food authority, institute of higher education, and nonprofit food distributor or hospital. In the case of a corporation, partnership, organization, association, or governmental entity, the term includes an officer, director, partner, deacon, trustee, councilmember, or other elected or appointed individual responsible for the governance of the entity.

l. "Qualified direct donor" means a retail grocer, wholesaler, agricultural producer, agricultural processor, agricultural distributor, restaurant, caterer, school food authority, or institution of higher education (as defined in section 102 of the Higher Education Act of 1965 (20 U.S.C. § 1002)).

m. "Safety-related labeling standards" means standards for labeling or branding intended to communicate information to a consumer related to a food product's safety, including but not limited to allergen information and ingredients.

Section 2. Liability Protection for Food Donors

Both (a) a person or gleaner who donates apparently wholesome food or an apparently fit grocery product in good faith to a nonprofit organization for ultimate distribution to needy individuals or (b) a qualified direct donor that donates apparently wholesome food or an apparently fit grocery product in good faith directly to needy individuals shall not be subject to civil or criminal liability arising from the nature, age, packaging, or condition of the apparently wholesome food or apparently fit grocery product except that this section does not apply to an injury to or death of an ultimate user or recipient of the food that results from an act or omission of the donor constituting gross negligence or intentional misconduct.

Section 3. Liability Protection for Nonprofit Organizations

A nonprofit organization which distributes or serves apparently wholesome food or an apparently fit grocery product without charge or at a Good Samaritan Reduced Price shall not be subject to civil or criminal liability arising from the nature, age, packaging, or condition of the apparently wholesome food or apparently fit grocery product except that this section does not apply to an injury to or death of an ultimate user or recipient of the food that results from an act or omission of the donor constituting gross negligence or intentional misconduct.

Section 4. Liability Protection for Past-Date Foods

The donation of food that is fit for human consumption, but that has exceeded the labeled shelf-life date, is an activity covered by the exclusion from civil or criminal liability under this section if the person that distributes the food to the end recipient makes a good faith evaluation that the food to be donated is wholesome.

Section 5. Liability Protection for Gleaners

A person who allows the collection or gleaning of donations on property owned or occupied by the person by gleaners, or paid or unpaid representatives of a nonprofit organization, for ultimate donation to food insecure individuals or distribution to food insecure individuals by a nonprofit organization without charge or at a Good Samaritan Reduced Price, is not subject to civil or criminal liability that arises due to the injury or death of the gleaner or representative, except that this subsection does not apply to an injury or death that results from an act or omission of the person constituting gross negligence or intentional misconduct.

Section 6. Reconditioning

If some or all of the donated food or grocery product does not meet safety rules or safety-related labeling standards imposed by federal, state, and local laws and regulations, the person or gleaner who donates the food or grocery product is not subject to civil or criminal liability in accordance with this section if the nonprofit organization that receives the donated food or grocery products:

a. Is informed by the distributor of the distressed or defective condition of the donated food or grocery products;

b. Agrees to recondition the donated food or grocery products to comply with all safety and safety-related labeling standards prior to distribution; and

c. Is knowledgeable of the standards to properly recondition the donated food or grocery product.

Section 7. Guidance

In order to support food donations and increase awareness of available liability protections, the Department shall publish guidance about liability protections for food donation, including the liability protections covered in sections 2 through 6 of this act and the liability protections provided in the Bill Emerson Good Samaritan Food Donation Act, as modified by the Food Donation Improvement Act, codified at 42 U.S. Code § 1791. The guidance should explain the limitations on liability protection and any steps a person must take to receive liability protection when donating food or when transporting, processing, or distributing donated food.

APPENDIX F: TAX INCENTIVES FOR FOOD DONATION

Section 1. Definitions

a. "Apparently wholesome food" means food that is fit for human consumption at the time it was donated so long as it meets all "safety and safety-related" standards required by federal, state, and local laws regardless of compliance with any laws, rules, or ordinances regulating the packaging or labeling of food which are not linked to food safety. Apparently wholesome food includes food that is not readily marketable due to appearance; age; freshness, including bearing a past-date quality date, sell-by date, or other date; grade; size; surplus; or other condition. Apparently wholesome food does not include canned goods that are leaking, swollen, dented on a seam, or no longer airtight.

b. "Donate" means to give without requiring anything of monetary value from the recipient.

c. "Department" means [*Insert relevant state tax agency*].

d. "Nonprofit organization" means an incorporated or unincorporated entity that:

   1. Is operating for religious, charitable, or educational purposes; and

   2. Does not provide net earnings to, or operate in any other manner that inures to the benefit of, any officer, employee, or shareholder of the entity.

e. "Qualified taxpayer" means an individual, corporation, partnership, organization, association, or governmental entity, including a producer, retail grocer, wholesaler, hotel, motel, manufacturer, restaurant, caterer, farmer, school food authority, institute of higher education, nonprofit food distributor, or hospital.

Section 2. Credit for Food Donation

a. For taxable years beginning on or after [*insert date*], any qualified taxpayer that donates apparently wholesome food shall be allowed a credit against the tax levied pursuant to [*insert cross reference to relevant provisions of state's income tax law*] for the taxable year of the donation. The qualified taxpayer shall be allowed a credit in an amount equal to 75 percent of the fair market value* of such apparently wholesome food. This credit shall not exceed $5,000 per tax year.**

**The most generous credits are over 75% but some states offer as little as 15%. You will need to decide what amount is right for your state.*

***Caps range from $1,000 to unlimited.*

b. In the case of a qualified taxpayer who transports any apparently wholesome food donated in accordance with section 2(a) for taxable years beginning on or after [*insert date*], there shall be allowed as a credit against tax levied pursuant to [*insert cross reference to relevant provisions of state's income tax law*] for the taxable year of the donation. The qualified taxpayer shall be allowed a credit in an amount equal to 50 percent [*or set amount*] of the transportation costs (or any portion thereof) paid or incurred by the qualified taxpayer with respect to the conveyance of a donated food, including the

coordination or arrangement of transportation services, in connection with the transportation of that qualified donated food item. This credit shall not exceed $5,000 per tax year [*or amount decided*].

c. Credits shall be allowed under this section only if

   1. The use of the donated food by the donee nonprofit organization is related to providing food to the needy; and

   2. The donated food, if sold by the donee nonprofit organization, is sold to the needy or other nonprofit organizations that intend to use the food to provide food to the needy at a charge sufficient only to cover the cost of transporting and handling such food.

d. Upon receipt of the donated food, the nonprofit organization shall provide a certificate to the qualified taxpayer, which shall contain the name of the qualified taxpayer, the name and address of the donee nonprofit organization, the date of the donation, the type and quantity of donated food, and, as provided by the qualified taxpayer, the fair market value of the donated food. The certificate shall also include a statement by the donee nonprofit organization that its use and disposition of the donated food complies with the requirements under section 2(c).

e. For every taxable year for which a qualified taxpayer seeks a tax credit under section 2, the person shall apply to the Department in accordance with the forms, instructions, dates, and procedures prescribed by the Department.

f. The amount of the credit claimed under sections 2(a) and 2(b) shall not exceed the total amount of tax imposed by the [*insert cross reference to relevant provisions of state's income tax law*] upon the qualified taxpayer for the taxable year. Any credit not usable for the taxable year for which the credit was first allowed may be carried over for credit against the income taxes of the qualified taxpayer in the next five succeeding taxable years or until the total amount of the tax credit has been taken, whichever is sooner.

g. Credits granted to a partnership, limited liability company, or electing small business corporation (S corporation) shall be allocated to the individual partners, members, or shareholders, respectively, in proportion to their ownership or interest in such business entities.

h. [*The strongest policies will not have a statewide annual cap. Some states chose to include an annual cap, using language like: "In no case shall the Department issue more than $X in tax credits pursuant to this section in any taxable year.*]

i. The Department shall be authorized to develop guidelines or regulations implementing the provisions of this section. The guidelines or regulations shall include procedures for the allocation of tax credits among qualified taxpayers.

j. Using information available to the Department and as provided pursuant to section 2(e), the Department shall report to the legislature annually regarding the use of the credit authorized under section 2. The report shall include, at a minimum, the credits generated in the taxable year, the credits claimed in the taxable year, and the number of qualified taxpayers claimed credits.

APPENDIX G: FOOD SAFETY GUIDANCE FOR FOOD DONATION

Food safety for food donation is one of the most complex topics, and legislation will largely depend on a state's existing food safety laws and regulations. Given the complexity and variation in food safety regimes, this section includes two different options. First, the legislation can require the relevant state agency to promulgate food safety regulations specific to food donation. Alternatively, states can issue regulations based on the FDA Food Code to include provisions around food safety for food donation. It is recommended that states using the FDA Food Code as the basis for their food safety laws and regulations use the second option.

LEGISLATION THAT REQUIRES GUIDANCE

Section 1. Purpose

Over one-third of the United States' food supply is wasted, resulting in significant environmental and social harms. Donating wholesome food is a logical way to prevent food waste and feed those experiencing food insecurity. It is the intent of the state to promote food donation. However, it is crucial that any donated food not only be wholesome but also safe and hygienic to prevent foodborne illness. Currently, there is significant confusion around which food safety requirements apply to food donation. This statute requires [*insert relevant state agency information for the state health department*] to promulgate regulations and clarifying guidance on food safety for donated food.

Section 2. Definitions

a. "Surplus food," for the purpose of this section, means food that is not sold or used by the food donor and is still safe to be consumed.

b. "Department" means [*insert relevant state agency information for the state health department*].

c. "Food donor" means any individual, corporation, partnership, organization, association, or governmental entity, including a retail grocer, wholesaler, hotel, motel, manufacturer, restaurant, caterer, farmer, school food authority, institute of higher education, and nonprofit food distributor or hospital that donates food. In the case of a corporation, partnership, organization, association, or governmental entity, the term includes an officer, director, partner, deacon, trustee, councilmember, or other elected or appointed individual responsible for the governance of the entity.

d. "Food recovery organization" means a nonprofit organization that provides food to individuals without charge or at a charge sufficient only to cover the cost of handling such food,* including but not limited to, a food pantry, food bank, soup kitchen, shelter, or other community-based organization.

**Including organizations that charge a small fee to cover transportation and handling costs enables organizations to provide significantly more food. Some states may not yet recognize these organizations, but we encourage their inclusion.*

e. "TCS food" means food that requires time/temperature control for safety (TCS) to limit pathogenic microorganism growth or toxin formation.

Section 3. Regulations

a. The Department, in consultation with other state and municipal agencies, shall adopt regulations outlining food safety requirements for food donors and food recovery organizations. Such regulations shall outline the responsibilities of food donors and food recovery organization to ensure that donated food is kept safe during transportation, storage, re-heating, and distribution, including specific requirements related to TCS food or previously served food.

b. The Department, in consultation with other state and municipal agencies, shall adopt regulations outlining food labeling requirements. Such regulations shall clarify that food with a labeling flaw can be donated and that food past quality-based dates can be donated.

c. Nothing in this regulation shall prohibit food donors from donating and food recovery organizations from distributing food even if it bears a past-due expiration date so long as the food donor determines that the food is safe. *Confirm that this provision does not conflict with your state's laws.*

d. Nothing in this regulation shall prohibit food donors from donating commercially prepackaged food that fails to comply with any laws, rules, or ordinances regulating the packaging or labeling of food which are not linked to food safety.

Section 4. Guidance and Training

a. The Department [*and any other relevant local departments*] shall ensure that health inspectors are trained annually on the regulations promulgated pursuant to Section 2 and on food safety for food donations more generally.

b. The Department shall publish guidance documents outlining the requirements in the regulations promulgated pursuant to Section 2.

c. The Department shall perform outreach to educate businesses on food safety for food donations and the benefits of food donation.

REGULATION INCORPORATING A FOOD DONATION SECTION TO THE FDA FOOD CODE LANGUAGE

This regulation would create an additional section of the state food code that deals with food safety for food donation. States that currently model their food safety rules on the FDA Food Code, either completely or in part, should be able to incorporate this section relatively seamlessly, though the section includes several comments noting where states must include the correct cross reference to state law. For ease, we have included the current reference to the section of the FDA Food Safety code that states can use to determine the correct cross reference to their food safety laws or regulations.

Section 1. Purpose

Over one-third of the United States' food supply is wasted, resulting in significant environmental and social harms. Donating wholesome food is a logical way to prevent food waste and feed those experiencing food insecurity. It is the intent of the state to promote food donation. However, it is crucial that any donated food not only be wholesome but also safe, and hygienic to prevent foodborne illness. The intent of this section is to provide food safety standards to support persons and organizations that wish to donate surplus food. This section applies to donating, preparing, cooking, and transporting donated food to recipients.

Section 2. Lawful Food Donation

a. The practice of donating food to another party, for ultimate distribution to needy individuals, is a lawful practice for a food establishment.

b. The following categories of food shall not be donated:

   1. Food that is unsafe, adulterated, or otherwise required to be discarded as specified under [*insert rules regulating contaminated food—FDA Food Code § 3-701.11. You will need to find the relevant provisions in your state regulations that correspond to this requirement*];

   2. Food that has not been protected from contamination as specified under [*insert reference to food safety requirements—FDA Food Code §§ 3-301 – 3-307. You will need to find the relevant provisions in your state regulations that correspond to these requirements*];

   3. Food that is not from an approved source as specified under [*insert section about complying with food laws—FDA Food Code § 3-201.11; You will need to find the relevant provisions in your state regulations that correspond to this requirement*];

   4. Food that does not comply with the standards for food donation as specified in this section.

Section 3. Previous Service Food

a. Except as specified in subsection (b) of this section, exposed food which has been previously served to a consumer may not be donated.

b. Food that has been offered for consumer self-service may be donated if the food establishment can verify that the food has been protected from contamination in accordance with [*insert food safety rules—FDA Food Code §§ 3-305, 3-306 and 3-307. You will need to find the relevant provisions in your state regulations that correspond to these requirements*].

Section 4. Time/temperature Control for Safety Foods

a. Time/temperature control for safety (TCS) food that has been heated, cooked, or hot held in a food establishment may be donated if:

   1. The food has been maintained at or above 57 degrees Celsius (135 degrees Fahrenheit) up until the time of donation; or

2. The food

   A. Has been kept at or above 57 degrees Celsius (135 degrees Fahrenheit) during hot holding and service, and subsequently cooled in accordance with time and temperature requirements under [*insert regulations related to cooling and cooling methods—FDA Food Code §§ 3-501.14 and 3-501.15. You will need to find the relevant provisions in your state regulations that correspond to these requirements*]; and

   B. Has a temperature at or below 5 degrees Celsius (41 degrees Fahrenheit) at the time of donation.

3. Food transported by a food establishment for donation shall be maintained and delivered at or below 5 degrees Celsius (41 degrees Fahrenheit) for cold foods or above 57 degrees Celsius (135 degrees Fahrenheit) for hot foods.

   A. Foods received at a temperature between 5 and 57 degrees Celsius (41 and 135 degrees Fahrenheit) that have been within that range for less than four hours must be immediately served.

   B. Foods received at a temperature between 5 and 57 degrees Celsius (41 and 135 degrees Fahrenheit) that have been within that range for more than four hours may not be donated.

Section 5. Labeling

a. Except as specified in subsection (b) and (c) of this section, donated packaged foods shall be labeled consistent with federal law and with [*insert regulations related to packaging and segregation—FDA Food Code § 3-302.11; You will need to find the relevant provisions in your state regs that correspond to this requirement*].

b. Nutrition labeling is not required on donated foods pursuant to 21 CFR 101.9. Labels on donated prepackaged foods need only include the following information:

   1. Name and location (address, city, state, zip code) of the producer/manufacturer;
   2. Name of the product;
   3. An allergens list; and
   4. An ingredients list.

c. Donated prepared foods should be labeled consistent with federal law. Labels on donated prepared foods need only include the following information:

   1. Name and location of the donor and of the recipient organization;
   2. Description of the food;
   3. Date the food was donated;
   4. Any pertinent disclaimers that the food may contain or have come into contact with a major food allergen.

d. Donated fresh produce does not require any labeling.

Section 6. Past-date food products

a. Ready-to-Eat food may not be donated after the passage of the manufacturer's "use by" date or other such safety-based date intended as a safety indicator unless it was frozen prior to that date and has remained in a frozen state.

b. Foods that are not Ready-to-Eat may be donated after the passage of the manufacturer's "best if used by" date or other such quality-based date that is intended as a quality indicator.

APPENDIX H: PERMITTING AND ZONING COMPOSTING FACILITIES

Section 1. Definitions

a. "Department" means [*insert relevant department*].

Section 2. Compost Zoning Regulations and Guidance for Municipal Governments

a. The Department shall promulgate regulations and guidance for municipal governments pertaining to compost zoning by [*insert reasonable date*]. These regulations and guidance shall:

   1. Create a separate regulatory pathway for food scraps;
   2. Implement a tiered system for permitting and operational requirements;
   3. Exempt small-scale and on-site facilities from permitting requirements;
   4. Facilitate favorable local zoning; and
   5. Ensure that permit requirements for solid waste, air, water, and other permit requirements as relevant are streamlined by centralization through one agency.

APPENDIX I: RECYCLING FOOD SCRAPS INTO ANIMAL FEED

Section 1. Definitions

a. "Department" means [*insert relevant department*].

b. For purposes of this section, "food scraps" means material derived from the processing or discarding of food, including pre- and post-consumer vegetables, fruits, grains, dairy products, and meats.*

**If your state has a definition of "garbage" when referring to the regulation of feeding food scraps to animals, replace it with the definition for "food scraps."*

Section 2. Guidance and Education

a. The Department shall encourage the feeding of food scraps to animals by promulgating guidance and educational resources by [*insert reasonable date*].

Section 3. Food Scraps to Animal Feed Program

a. The Department shall establish and oversee a Food Scraps to Animal Feed Program for local farms and businesses feeding food scraps to their animals. The program shall seek to facilitate food scrap animal feed partnerships by providing incentives and support, including, but not limited to, educational resources and a pilot program for collecting and delivering food scraps to local farms and businesses in partnership with local collection companies where possible.

b. The Department shall establish a central online repository displaying interested parties' information. The repository should include, but is not limited to, food waste generators who have food scraps to give away and animal feed facilities or farms that are seeking food scraps for their animals to consume.

Section 4. Removing Barriers to the Use of Food Scraps as Animal Feed

Include Section 4 if your state has regulations that exceed federal standards.

a. The Department shall by [*insert reasonable date*] eliminate regulations that exceed the federal rules governing the feeding of food scraps to animals found in the Swine Health Protection Act, codified at 7 U.S. Code § 3801; the FDA's Bovine Spongiform Encephalopathy (BSE)/Ruminant Feed Ban Rule, 21 C.F.R § 589.2000 (2016); the Food Safety Modernization Act, Public Law No. 111-353; and all federal regulations regarding labeling and adulteration.

b. The Department, in partnership with [*insert all other state departments that may regulate food and animal feed], shall by [insert reasonable date*] re-evaluate their existing regulatory authority under existing provisions of the law to eliminate regulatory redundancies that may impact the recycling of food scraps into animal feed, while ensuring the continued safety of animal feed according to the federal rules governing the feeding of food scraps to animals, as referenced in subsection a.

1. In carrying out the requirements of subsection b, the Department shall reasonably consult with organizations likely to be affected by the Food Scraps to Animal Feed Program and the modification of future regulations under subsection b.

APPENDIX J: COMPOST PROCUREMENT

This legislation is modeled very closely off NRDC and Environmental Law Institute's model municipal ordinance for compost procurement and has been modified to be suited for a state-level law.

Section 1. Purpose

a. The state requires the procurement of compost (finished compost products) by all state and municipal departments and encourages the purchasing of compost by [*insert names of quasi-governmental and/or semiautonomous entities that the state does not fully control, such as semiautonomous boards, commissions, and other authorities, or public-private partnerships such as convention centers*], as well as by private entities, for use in projects where compost is a suitable material.

b. By increasing the use of compost, the implementation of this policy will provide economic and environmental benefits, including:

   1. Increased demand for compost from local compost suppliers;
   2. Reduced costs associated with landfill disposal;
   3. Development of new compost processing facilities and job creation;
   4. Increased soil-nutrient and water retention, which may reduce demand for irrigation and fertilizer and reduce stormwater runoff;
   5. Reduced greenhouse gas emissions by minimizing methane emissions from landfills and maximizing carbon storage from composting, potentially mitigating the need for new landfill construction; and
   6. Erosion prevention and land stabilization.

c. This statute is not intended to supersede existing federal, state, or local laws and regulations, including those that address materials procurement.

Section 2. Definitions

a. "Compost" means the product manufactured through the controlled aerobic, biological decomposition of biodegradable materials. The product has undergone mesophilic and thermophilic temperatures, which significantly reduces the viability of pathogens and weed seeds, and stabilizes the carbon such that it is beneficial to plant growth. Compost is typically used as a soil amendment, but may also contribute plant nutrients.

b. "Composting" means biological decomposition of organic constituents under controlled conditions.

c. "Contract" means state and municipal agreements and contracts, regardless of what they may be called, for the procurement or disposal of supplies, services, or construction.

d. "Contractor" means any person having a contract with a state or municipal entity.

e. "Cost prohibitive" means the product purchasing cost exceeds by more than 10 percent the cost of another product that would serve the same purpose.

f. "Covered entities" are state and municipal agencies that are covered by the policy including [*list state and local agencies you want to be covered by the policy or alternatively cover all state and local agencies*].

g. "Erosion" means the disintegration or wearing away of soil by the action of water.

h. "Green infrastructure" means an approach to wet-weather management that is cost-effective, sustainable, and environmentally friendly, and that incorporates management approaches and technologies that infiltrate, evapotranspire, capture, and reuse stormwater to maintain or restore natural hydrologies. Green infrastructure practices include, but are not limited to, open space, rain gardens, porous pavements, green roofs, infiltration planters, trees and tree boxes, swales, and curb extensions.

i. "Impervious surface" means any ground or structural surface that water cannot penetrate or through which water penetrates with great difficulty.

j. "Landfill" means a facility, other than a land application unit, where solid wastes are disposed of by burial in excavated pits or trenches or by placement on land and covering with soil or other approved material.

k. "Locally produced compost" means compost that is produced in the same region where it is being used.

l. "Private entity" means any person, business, or nonprofit that is not a government body or a contractor thereof.

m. "Procurement" means buying, purchasing, renting, leasing, or otherwise acquiring supplies, services, or construction. It also includes all functions that pertain to the obtaining of any supply, service, or construction, including description of requirements, selection and solicitation of sources, preparation and award of contract, and all phases of contract administration.

n. "Stormwater" means runoff that is generated from rain and snowmelt events that flows over land or impervious surfaces—such as paved streets, parking lots, and building rooftops—and does not soak into the ground.

o. "Top-dressing" is a method of adding compost, mulch, loam, peat, or a combination of these things as improvements to the soil or for leveling existing lawns.

Section 3. Procurement Requirements

a. General policy

1. Covered entities, except if otherwise exempted, shall purchase compost for use in public projects in which compost is an appropriate material, provided it is not cost prohibitive to acquire;

2. [*Insert names of quasi-governmental and/or semiautonomous entities*], as well as private entities that are based or operate in [*insert state*], are also encouraged to purchase compost, when possible, for use in their projects; and

3. In conjunction with the overarching compost procurement requirement, compost shall be used to amend soil in landscaping and construction projects, as well as to provide for erosion control and stormwater management in road and highway and green infrastructure projects, in accordance with the requirements outlined in subsections 4(b) through 4(e). Compost used in landscaping, construction, roads and highways, and green infrastructure will count toward satisfaction of the compost procurement goals of [*insert names of state entities subject to policy*].

b. Landscaping

1. Soil amendment prior to new planting

A. Prior to the installation of new plants in landscaping projects, covered entities are required, and [*insert names of quasi-governmental and/or semiautonomous entities*] and private entities are encouraged, to amend existing soil with compost. This requirement does not apply if soil tests reveal that pre-amendment soil is composed of at least 6 percent organic material to a depth of six or more inches or a condition exists that prevents the application of compost, such as oversaturation.

B. Soil shall be amended with compost at a rate of at least four cubic yards of compost per 1,000 square feet of soil. The compost shall be spread evenly across the project area, then incorporated into the soil to a depth of six inches. In areas where there is not six inches of soil in which to incorporate the compost, compost shall be incorporated at a rate of 25 percent compost to 75 percent soil to the existing soil depth.

C. Proof of satisfactory soil quality that did not require amending, the condition that prevented application of compost, or the completion of the required soil amendment with compost shall be documented by [*insert names of entities subject to policy*] and made available for review by [*insert name of government office that oversees procurement*] upon request.

2. Ongoing maintenance

A. Covered entities shall, and [*insert names of quasi-governmental and/or semiautonomous entities*] and private entities are encouraged to, purchase and use compost, where feasible, in ongoing landscaping activities, such as for top-dressing.

c. Construction

1. In addition to providing benefits for post-construction landscaping, the use of compost to amend soil that is compacted or disturbed during construction projects increases on-site water retention, decreases erosion, and contributes to better stormwater management.

2. The following measures shall be implemented in construction projects undertaken by covered entities. It is encouraged, but not required, that the measures are adopted in the projects of [*insert names of quasi-governmental and/or semiautonomous entities*] and private entities.

3. Preserve existing soil

A. To the extent possible, [*insert names of entities subject to policy*] shall keep original soil in place and avoid compacting it with construction equipment.

B. When existing soil must be moved during construction, [*insert names of entities subject to policy*] shall keep it on-site for use once construction is completed.

4. Post-construction soil standards and amendment

A. In areas where soil is left exposed after construction is completed (not impervious surfaces) and soil is being amended, covered entities shall, and [*insert names of quasi-governmental and/or semiautonomous entities*] and private entities are encouraged to, amend the soil to achieve the organic matter and pH standards in the following subsection (4.c.iv.2). The soil shall be amended using compost.

B. Soil shall be amended such that the top eight inches contain between 5 and 10 percent organic material and are restored to their original pH levels, or to pH levels between six and eight. Five percent is sufficient for turf, and 10 percent is sufficient for planting beds. The amount of compost that will need to be added to achieve these standards will vary depending on the initial quality of the soil. Custom amendment rates specific to the soil for a particular project may be calculated using an online calculator from King County, Washington: https://kingcounty.gov/depts/dnrp/solid-waste/compost-calculator.aspx. Alternatively, the following preapproved amendment rates may be adopted:

i. In turf areas, 1.75 inches of compost shall be incorporated into the top eight inches of soil, which amounts to 5.4 cubic yards of compost per 1,000 square feet of soil; and

ii. In planting beds, three inches of compost shall be incorporated into the top eight inches of soil, which amounts to 9.2 cubic yards of compost per 1,000 square feet of soil.

C. If soil is particularly compacted, the top four inches of the soil below the eight inches of amended soil shall be scarified.

D. Compost shall only be incorporated into dry soil.

E. Proof of satisfactory soil quality that did not require amending, or of the completion of the required soil amendment with compost, shall be documented by covered entities and made available for review by [*insert name of state office that oversees procurement or alternative entity*] upon request.

d. Roads and highways

1. When undertaking erosion control measures in the context of road and highway construction and maintenance, covered entities shall use compost where possible, including when implementing best practices that call for the use of organic material. Measures for which compost shall be used include, but are not limited to, the following:

A. Landscaping and planting;

B. Filter berms and socks; and

C. Compost blankets.

2. Compost shall contain the required organic material content, pH, and particle size for the intended use.

A. Landscaping and planting:

i. Moisture content—35 to 60 percent;

ii. Particle size—less than 0.5 inches;

iii. Soluble salts concentration—less than 4.0 mmhos/cm (ds/m);

iv. Stability—stable to very stable; and

v. pH—6.0 to 8.5.

B. For filter berms, filter socks, and compost blankets compost must adhere to the specific standards contained in the 2003 American Association of State Highway and Transportation Officials' Provisional Standards Manual for filter berms (applies to filter socks as well) and compost blankets.

3. Satisfaction of the quality specifications for compost used in road and highway projects shall be documented by covered entities and made available for review by [*insert name of government office that oversees procurement or alternative entity*] upon request.

e. Low-impact development and green infrastructure

1. When constructing low-impact development and green infrastructure projects, covered entities shall, and [*insert names of quasi-governmental and/or semiautonomous entities*] and private entities are encouraged to, use compost where possible, including when adopting best management practices that call for the use of organic material. Measures for which compost shall be used include, but are not limited to, the following:

i. Green roofs;

ii. Downspout disconnections; and

iii. Bioretention projects/rain gardens.

2. Covered entities shall consult state policies and manuals, including [*insert names of relevant state policies and manuals*], or relevant municipal and manuals for additional ways to incorporate compost into their projects.

3. The use of compost in low-impact development and green infrastructure projects shall be documented by [*insert names of state entities subject to policy*] and made available for review by [*insert name of state office that oversees procurement or alternative entity*] upon request.

Section 4. Compost Sourcing and Quality Requirements

a. Locally produced compost

1. Compost purchased by covered entities for purposes of complying with this policy shall be locally sourced.

2. If locally produced compost is not available, compost shall be sourced from outside the region, with preference given to products sourced as close as possible to [*insert applicable standard such*

as "Smith metropolitan statistical area"]. Proof that locally produced compost was not available at the time of purchase or was cost-prohibitive shall be documented—including, if appropriate, by written confirmation from local providers—and included in the annual reports of [*insert names of entities subject to policy*].

3. [*Insert names of quasi-governmental and/or semiautonomous entities*] and private entities are encouraged to purchase locally produced compost or compost from outside the region when it is available and not cost prohibitive.

b. US Composting Council Seal of Testing Assurance (STA) Program certified compost

1. Covered entities shall, and [*insert names of quasi-governmental and/or semiautonomous authorities*] and private entities are encouraged to, purchase compost from US Composting Council STA Program–certified compost manufacturers.
2. Purchasers shall obtain technical data sheets from composting manufacturers detailing the test results for each compost shipment they receive. This information shall be kept on file and included in annual compost procurement reports.

Section 5. Reporting

a. Covered entities shall compile annual reports, to be submitted to [*insert name of state agency that oversees procurement or alternative entity*] on or before [*insert date*], that contain the following information:

1. The name of the [*insert names of entities subject to policy*];
2. The volume of compost purchased throughout the year and total funds expended on compost;
3. Information about the source of the compost and proof of its STA certification;
4. The end uses of the composted materials and proof of satisfaction of any quality specifications related to those uses;
5. The percentage of total materials purchased that consisted of composted materials; and
6. Recommendations for how to increase the percentage of purchasing composed of compost in the future.

b. [*Insert name of state office that oversees procurement or alternative entity*] shall review annual reports submitted by covered entities and track progress related to compost procurement throughout the state. This information will be made available to the public through regular reports on compost procurement and the state of composting in the state.

APPENDIX K: COMPOST APPLICATION

Section 1. Purpose

Application of compost has significant environmental and carbon sequestration benefits. Applying compost helps improve overall soil health, increasing soil's organic matter, its biodiversity, and its capacity of soil to absorb water and nutrients, and reducing the need for expensive and resource-intensive chemical fertilizers. Applying compost to farmland also has crucial carbon sequestration effects, mitigating the effects of greenhouse gas emissions. Given the value of compost application to healthy soils and climate change mitigation, the state hereby creates the Compost Application Program.

Section 2. Definitions

a. "Compost" means the product manufactured through the controlled aerobic, biological decomposition of biodegradable materials. The product has undergone mesophilic and thermophilic temperatures, which significantly reduces the viability of pathogens and weed seeds, and stabilizes the carbon such that it is beneficial to plant growth. Compost is typically used as a soil amendment, but may also contribute plant nutrients.

b. "Compost application" means application of compost to cropland and rangeland in a manner consistent with the Department's requirements.

c. "Department" means [*define this as needed for your state and include the state agency responsible for agriculture in your state. This could be called an agency, department, commission, etc.*].

d. "Greenhouse gas benefits" means greenhouse gas emissions source reduction or carbon sequestration.

Section 3. Compost Application Program

a. The Department shall establish and oversee a Compost Application Program. The program shall seek to optimize climate benefits while supporting the economic viability of [*insert name of state*] agriculture by providing incentives, including, but not limited to, loans, grants, other incentives, research, and technical assistance and educational materials and outreach, to farmers who apply compost to their cropland or rangeland.

    1. The Department shall provide targeted financial incentives to farmers who apply compost to their cropland or rangeland.

    2. The Department shall provide technical assistance to farmers who apply compost to their cropland or rangeland by researching, developing, and publishing guidance on best practices for the proper amount and timing of application to support the benefits described in this section and ensure food safety of agricultural products and by taking other relevant technical assistance actions the Department deems appropriate.

3. In addition to the other duties in this section, the Department may provide loans and grants to support the development of compost infrastructure, develop and publish educational materials, and offer outreach to farmers and ranchers who could benefit from the Compost Application Program.

b. Subject to appropriation, the Department shall have [*insert appropriate amount*] in funds annually to be used by the Department to oversee the Compost Application Program.

c. The Department, in consultation with the panel, may determine priorities for the program and give priority to socially disadvantaged farmers and ranchers (as defined by 7 U.S.C. § 2279 and the U.S. Department of Agriculture; see also [*insert state definition for marginalized communities if available*]) as well as projects that apply compost with a certain percentage food waste. [*For a baseline, Washington uses eight percent as its standard for compost procurement*].

d. The Department shall quantify greenhouse gas benefits from the Compost Application Program.

e. The Department shall provide education and outreach about the Compost Application Program, particularly to socially disadvantaged farmers and ranchers.

f. The Department shall develop and publish guidance to support the safety of the compost.

APPENDIX L: DATE LABELING

Section 1. Definitions

a. "Department" means [*insert relevant state agency responsible for public health*].

b. "Food labeler" means the producer, manufacturer, distributor, or retailer that places a date label on food packaging of a product.

c. "Quality date" means a date printed on food packaging that is intended to communicate to consumers the date after which the quality of the product may begin to deteriorate, even as the product may still be acceptable for consumption.

d. "Safety date" means a date printed on food packaging that is intended to communicate to consumers the date after which the product may pose a health safety risk and the food labeler advises the product not be consumed.

Section 2. Date label requirements

a. If a food labeler includes a quality date on food packaging, the label shall use the uniform quality date label phrase "BEST if used by", unless and until the Department specifies through rulemaking another uniform phrase to be used.

b. If a food labeler includes a safety date on food packaging, the label shall use the uniform safety date label phrase "USE by", unless and until the Department specifies through rulemaking another uniform phrase to be used.

c. The decisions on whether to include a quality date or safety date on food packaging and which foods should be so labeled shall be at the discretion of the food labeler.

d. The quality date or safety date and immediately adjacent date label phrase shall be:

   1. In single easy-to-read type style using upper- and lower-case letters in the standard form;

   2. Located in a conspicuous place on the food packaging; and

   3. Where applicable, stated in terms of day and month and, as appropriate, year.

e. A food labeler may add "or Freeze By" following a quality date or safety date uniform phrase.

f. The Department shall establish guidance for food labelers on how to determine quality dates and safety dates for food products.

g. No later than 1 year after the date of enactment of this act, the Department shall provide consumer education and outreach on the meaning of quality date and safety date food labels.

h. No one shall prohibit the sale, donation, or use of any product after the quality date for the product has passed, but nothing in this section shall be construed to prohibit any one from establishing or continuing in effect any requirement that prohibits the sale or donation of foods based on passage of the safety date. Only safety-based restrictions may be imposed on the sale, donation, or use of any

product after the quality date has passed. No one shall establish or continue in effect any requirement that relates to the inclusion in food labeling of a quality date or a safety date that is different from or in addition to, or that is otherwise not identical with, the requirements under this section.

i. Nothing in this section shall be construed to prohibit or restrict the use of time-temperature indicator labels or similar technology that is in addition to and consistent with the requirements of this section.

j. This section shall apply only with respect to food products that are labeled on or after a date that is 2 years [*determine appropriate effective date for your jurisdiction*] after the date of enactment of this act.

APPENDIX M: FOOD WASTE REDUCTION IN K-12 SCHOOLS

Section 1. Definitions

a. "Department" means the [*insert state education agency*].

b. "Educational entity" or "educational entities" means all [*insert state*] school districts, including a single school district, regional school district, multiple school districts, any public or private school grades kindergarten through twelve (K-12), any charter public school, or any career and technical high school.

c. "Food waste reduction" incorporates preventing food from going to waste, donating surplus food, and recycling food scraps.

d. "Nonprofit organization" means an incorporated or unincorporated entity that:

   1. Is operating for religious, charitable, or educational purposes; and

   2. Does not provide net earnings to, or operate in any other manner that inures to the benefit of, any officer, employee, or shareholder of the entity.

e. "Offer versus serve" is a provision in the National School Lunch Program (NSLP) and School Breakfast Program (SBP) that allows students to decline some of the food offered.

f. "Safety and safety-related labeling" means a marking intended to communicate information to a consumer related to a food product's safety.

g. "Share tables" means tables or stations to which students may return whole or unconsumed food or beverage items, allowing those food and beverage items to then be made available for students who may want additional servings or otherwise donated to nonprofit organizations for distribution to needy individuals.

h. "Waste audit" means an analysis of a facility's waste stream. The audit can identify what types of recyclable materials and food waste a facility generates; how much of each category is recovered for recycling or discarded for disposal; and what materials can be composted.

Section 2. Waste audit/report

a. Within one year after enactment and every [*insert feasible number of years to allow between audits. Rhode Island allows three.*] years thereafter, every educational entity shall coordinate and cooperate with the [*insert environment or solid waste management agency*] for the purpose of conducting school waste audits. These audits shall produce waste management reports that shall be collected, maintained, and delivered to the educational entity. The waste audits shall be performed at every educational entity.

b. Waste audits and any reports required herein shall include guidelines and strategies on minimizing food waste, promoting recycling (including organics recycling), and donating food to local communities that shall be incorporated into the educational entity's operations.

c. Educational entities, using the guidelines and strategies pursuant to subsection (b), shall design and implement a waste collection system in accordance with applicable state law for the diversion of surplus foods.

d. Notwithstanding any other provision of law, any waste audit conducted pursuant to this section shall be provided free of charge by the [*insert solid waste management agency*] or its designee.

Section 3. Food donation and liability protection

a. It shall be the policy of the state, the Department, and any educational entity to donate unserved nonperishable food to individuals either directly or through nonprofit organizations and to require that any request for proposal (RFP) to select a vendor to provide food services to an educational entity will mandate such donations.

b. Vendors required to donate nonperishable and unspoiled perishable food to nonprofit organizations or individuals shall make arrangements to carry out the provisions of this section.

c. Except for injury resulting from gross negligence or intentional misconduct in the preparation or handling of donated food, no educational entity, person, or vendor that donates food that is fit for human consumption at the time it was donated, as required by subsection (a), shall be liable for any damage or injury resulting from the consumption of the donated food.

d. The donation of food that is fit for human consumption, but that has exceeded the labeled shelf-life date recommended by the manufacturer, is an activity covered by the exclusion from civil or criminal liability under subsection (c) if the person that distributes the food to the end recipient makes a good faith evaluation that the food to be donated is wholesome.

e. The nonprofit organization that, in good faith, receives and distributes food without charge, pursuant to subsection (a), that is fit for human consumption at the time it was distributed is not liable for any injury or death due to the food unless the injury or death is a direct result of the gross negligence or intentional misconduct of the organization.

Section 4. School Share Tables Program

a. The Department shall develop and implement a School Share Table Program, providing guidelines for the use of share tables in schools. The Program shall be implemented as part of any educational entities' school-based child nutrition program administered by the Department.

Section 5. Offer Versus Serve

a. To the maximum extent practicable, and in compliance with federal law, educational entities should use the offer versus serve model for meals or snacks provided as part of the school-based child nutrition program administered by the Department for all grades kindergarten through grade twelve, following the guidance manual published by the U.S. Department of Agriculture.

Section 6. Food Waste Grant Program

a. Subject to appropriation [*may need to adjust for how your state addresses funding in legislative language*], the Department shall create and administer a grant program for schools to prevent food from going to waste, donate surplus food, and compost food scraps with [*$500,000 or whatever amount you decide to designate to this grant program*] in funds annually.

b. The purpose of the Food Waste Grant Program is to award grants to public school boards and other educational entities to develop and implement programs for reducing food waste and composting of organic materials, including food scraps.

c. An educational entity may apply for a grant under this section, following an application process created by the Department.

d. A project is eligible for a grant if it is submitted by an educational entity and will:

    1. Educate students, staff, and parents on the connection between food waste, climate, environment, and hunger;

    2. Support school infrastructure to measure food waste and food waste reduction;

    3. Train and educate students and staff on food waste reduction; and

    4. Include at least one of the following activities:

        A. Transitioning to offer versus serve model (as outlined in section 5)

        B. Developing processes for surplus food to be served during after school activities or the following day, or to be taken home to student families;

        C. Replacing single-serve milk cartons with bulk milk dispensers;

        D. Establishing share tables (as outlined in section 4) [*if share tables are not already mandatory as outlined in Section 4; or alternatively, if they are mandatory, and Section 4 is adopted, funds could go to schools that demonstrates need*];

        E. Packaging and distributing surplus food to local nonprofit organizations to support local communities and to students and their families;

        F. Establishing any other program or activity that prevents and reduces food waste in educational entities;

        G. Contracting with a commercial composter or anaerobic digester or municipal or county agency to recycle in-school organic waste; or

        H. Establishing on-site composting bins.

e. Grant awards shall be prioritized for:

    1. Projects that meaningfully incorporate student leaders;

2. Educational entities with high numbers of students who receive free and reduced-price meals; and
3. Programs that will contract with small-and mid-sized businesses as well as minority- or veteran-owned businesses.

f. A public-school board or educational entity that receives a grant through the Food Waste Grant Program shall report to the Department on program outcomes including:

1. The amount of food waste disposed in landfills or incinerators, surplus food donated, and food scraps composted or digested; and
2. Improvement in student and staff education on food waste reduction best practices.

Section 7. Regulations

a. The Department is authorized to promulgate rules and regulations as required to implement Sections 2 through 6.

APPENDIX N: CLIMATE ACTION PLAN WITH A FOOD WASTE REDUCTION GOAL

Section 1. Purpose

a. Due to the threat posed by global warming, the legislature declares that it is in the public interest to establish a greenhouse gas emissions reduction program that includes a comprehensive strategy to reduce short-lived climate pollutants and to limit the level of statewide greenhouse gas emissions to reduce those emissions to 50 percent below the 2005 level by the year 2050.*

b. To pursue and achieve that goal, the legislature also commits to reducing food loss and waste by 50 percent by the year 2030.

**States can select different greenhouse gas emissions reductions goals. The suggested goal is based off the Biden Administration's stated goal.*

Section 2. Definitions

a. "Department" means [*define this as needed for your state and include the state agency responsible for environmental protection. This could be an agency, department, commission, etc. If you change this term, you will need to replace the term throughout the statute, in areas indicated via brackets.*].

b. "Greenhouse gas" means carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and any other gas or substance determined by the Department to be a significant contributor to the problem of global warming.

c. "Short-lived climate pollutant" means a pollutant that has a relatively short lifespan in the atmosphere, from a few days to a few decades, and has a warming influence on the climate that is greater than that of carbon dioxide and includes, but is not limited to, fluorinated gases, and methane.

Section 3. Climate Action Plan

a. No later than 18 months after the effective date of this section, the [*Department*] shall develop a comprehensive strategy to reduce emissions of greenhouse gases and short-lived climate pollutants in the state. In developing the strategy, the Department shall:

   1. Complete an inventory of sources and emissions of greenhouse gases and short-lived climate pollutants in the state based on available data;
   2. Identify research needs to address any gaps in the data;
   3. Identify existing and potential new control measures to reduce emissions;
   4. Identify opportunities to reduce food waste in order to reduce emissions;

5. Prioritize the development of new measures to reduce greenhouse gasses and short-lived climate pollutants that offer co-benefits by improving water quality or reducing other air pollutants that impact community health and benefit marginalized communities;
6. Outline specific actions for the state to take to reduce emissions and assign those tasks to the relevant state agencies; and
7. Coordinate with other state agencies and local government units to develop, implement, and evaluate measures identified as part of the strategy.

b. The [*Department*] shall revisit and reassess the strategy annually to determine progress towards goals outlined in section 1 and shall periodically update the strategy as needed.

c. The [*Department*] must submit annual reports regarding the implementation of the Plan, with the first such report due no later than [*2 years after enactment*]. The Department shall make these reports publicly available on its website.

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143. *See* Preemptive Effect of the Bill Emerson Good Samaritan Food Donation Act, 21 Op. O.L.C. 55 (1997) (construing the Emerson Act to preempt state statutes that provide less protection than the federal law in a non-binding advisory opinion by the United States Attorney General).

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145. 42 U.S.C. § 1791.

146. 42 U.S.C. § 1758 (I)(3) (providing that any "school or local educational agency making donations pursuant to this subsection shall be exempt from civil and criminal liability to the extent provided under section 1791 of this title.")

147. 42 U.S.C. § 1791(b)(5). With respect to gleaners, the Act not only protects against liability arising from the consumption of donated food, but also protects the property owner from liability related to injuries the gleaner might sustain while on the property. 42 U.S.C. § 1791(d).

148. 42 U.S.C. § 1791(b)(10)–(11), (c).

149. 42 U.S.C. § 1791(b)(1)–(2) (food or grocery products may be apparently wholesome even if they are not "readily marketable due to appearance, age, freshness, grade, size, surplus, or other conditions.").

150. The Act defines a non-profit as an incorporated or unincorporated entity that satisfies these requirements: (1) operates "for religious, charitable, or educational purposes" and (2) "does not provide net warnings to, or operate in any other manner for the benefit of any officer, employee, or shareholder." 42 U.S.C. § 1791(b)(10).

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152. 42 U.S.C. § 1791(c)(1). Further, if one nonprofit donates food to another nonprofit for distribution, the Act allows the first nonprofit to charge the distributing nonprofit a nominal fee to cover handling and processing costs. 42 U.S.C. § 1791(b)(3).

153. 42 U.S.C. § 1791(b)(6) ("The term 'good Samaritan reduced price' means, with respect to the price of an apparently wholesome food or apparently fit grocery product, a price that is an amount not greater than the cost of handling, administering, harvesting, processing, packaging, transporting, and distributing the apparently wholesome food or apparently fit grocery product.").

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