

Keeping Food Out of the Landfill:

Policy Ideas for States and Localities



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Authors

This toolkit was written by Emily Broad Leib, Director of the Harvard Law School Food Law and Policy Clinic (FLPC), Christina Rice, Clinical Fellow in the FLPC, Ona Balkus, Senior Clinical Fellow in the FLPC, Jill Mahoney, Student extern in the FLPC, and the following FLPC clinic students and summer interns: Alene Anello, Jabari Brown, Robin Cheng, Erika Dunyak, Daniel Edelstein, Claudia Golden, Candace Hensley, Meaghan Jerrett, Molly Malavey, Sydney Montgomery, Katherine Sandson, Marina Shkuratov, Steven Xie, and Conrad Zhong.

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Introduction

Approximately 40 percent of the food produced in the United States goes to waste.¹ The mountain of wasted food totals 63 million tons, of which 10.1 million tons never get harvested from farms and 52.4 million tons ends up in landfills uneaten.² The U.S. spends \$218 billion per year (or 1.3% of GDP) growing, manufacturing, processing, distributing, and then disposing of food that never makes its way onto the table.³

Food is wasted at all levels of the food system. On the farm, low market prices, high labor costs, and a market that demands perfect-looking produce leads farmers to leave food unharvested in the field.⁴ Grocery stores and restaurants waste food because of over-ordering and trying to meet unrealistic consumer demands.⁵ Consumers waste food in their homes because of inefficient shopping and cooking practices, misunderstanding of date labels that leads to them waste perfectly safe past-date food, and lack of access to recovery mechanisms, like composting.⁶

The land allocated to grow food, the use of scarce resources like water to make it grow, the fossil fuels used to ship it, and the space used to store it are all wasted when food ends up in a landfill. To illustrate, approximately 21% of the United States' fresh water supply⁷ and 300 million barrels of oil are used to produce food that goes to waste.⁸ Uneaten food is the largest contributor of solid waste in our landfills,⁹ leading to local crises with landfills that are running out of space. And once in a landfill, food waste is a significant emitter of methane, a greenhouse gas that is 25 times more potent than carbon dioxide.¹⁰

The negative consequences of wasting food extend beyond the environmental impacts and loss of resources that could have been otherwise allocated. At the same time that we are wasting 40% of our food supply, one in seven Americans suffer from food insecurity.¹¹ Pervasive food insecurity remains a challenge, although the abundance produced by our farms and factories provide us with the ability to solve such issues. There is a growing awareness and well-deserved sense of incredulity about the amount of food we waste while many among us go hungry.

Despite the many challenges, food waste is also a problem with solutions, both on the national level and on the state and local levels. In 2015, the U.S. Department of Agriculture (USDA) and U.S. Environmental Protection Agency (EPA) jointly announced the nation's first-ever food waste reduction goal of cutting our food waste by 50 percent by the year 2030.¹² The federal government already provides comprehensive liability protections to food donors and food recovery organizations, tax incentives to encourage the donation of surplus foods, grants for food recovery infrastructure, and educational resources to educate the public and private sectors on the serious implications of our current levels of food waste. These federal actions are commendable, though opportunities abound to continue to build on these initiatives at the federal level.

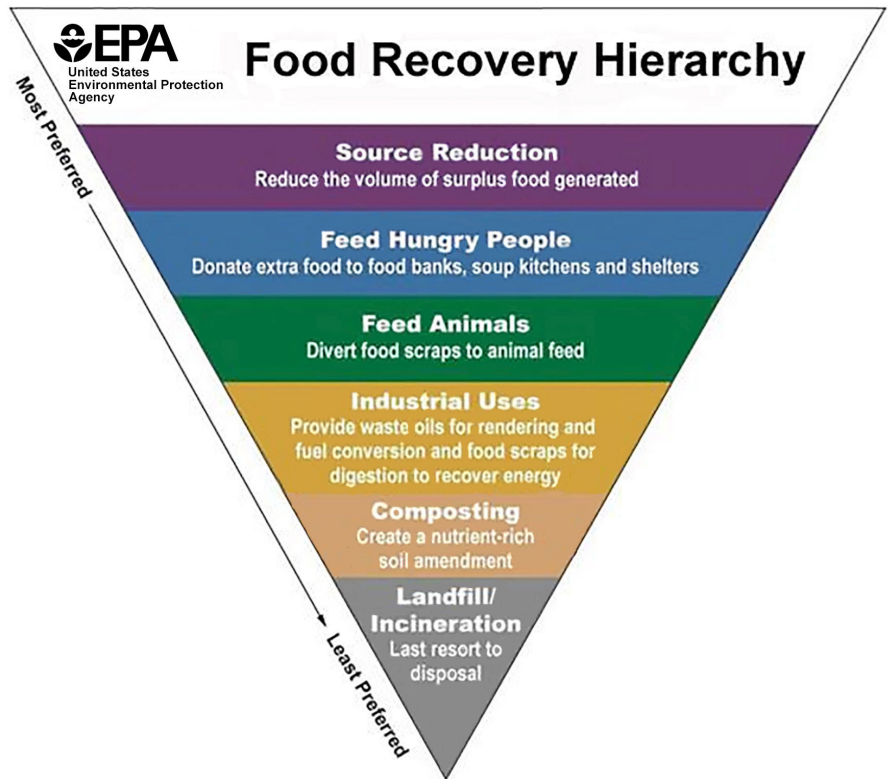
Where Can I Learn More About Food Waste?

- ReFED is a collaborative of businesses, nonprofits, foundations, and government leaders committed to reducing food waste in the U.S. through through philanthropic and investment capital, as well as technology, business, and policy innovation. For more information about ReFED, check out their website at <https://www.refed.com/?sort=economic-value-per-ton>.
- The Natural Resources Defense Council published a report on how the U.S. government, food producers, and consumers should address food waste. *Wasted: How America Is Losing Up to 40 Percent of Its Food from Farm to Fork to Landfill*, Natural Res. Def. Council (Aug. 2012), <https://www.nrdc.org/sites/default/files/wasted-food-IP.pdf>.
- The EPA and USDA offer great resources and food waste reduction challenges:

The EPA's Food Recovery Challenge encourages organizations to improve their sustainable food management practices and report their results. For more information, visit: <https://www.epa.gov/sustainable-management-food/food-recovery-challenge-frc>.

The USDA and EPA launched the U.S. Food Waste Challenge, calling for a 50% food waste reduction by 2030. For more information, visit: <http://www.usda.gov/oce/foodwaste/join.htm>.

At the same time, much can be done by states and localities. The involvement of state and local policymakers in finding appropriate solutions to food waste and food recovery is vital. State and local government serve as liaisons between those with the ability to donate and the communities and individuals in need. In recent years, state and local governments have sought to increase food recovery by providing state tax incentives to food donors, allocating funding to support food recovery infrastructure, re-evaluating how schools handle food waste, and passing laws that ban organic waste from landfills. The methods employed by states and localities vary, but all provide examples of the experimentation necessary to identify local problems and craft local solutions, while building a stable of best practices for food recovery, upon which other states and the federal government can now draw.



As policymakers at all levels of government consider opportunities to reduce food waste, they should utilize the EPA Food Recovery Hierarchy, which helps to prioritize among food recovery activities.¹³ According to the Hierarchy, food waste reduction is the most important goal, followed by feeding surplus food to people in need, providing food scraps to animals, diverting food waste to industrial uses, and finally composting. These are all the possibilities for food waste reduction that are superior to disposing of food in a landfill or via incineration. Policy efforts to reduce waste should emphasize the importance of diverting food higher up the hierarchy by incorporating the hierarchy into their policies and educational materials.

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, food waste is unique as a social, environmental, and economic problem that is solvable and for which solutions have the potential to offer win-win opportunities. States and localities are well-positioned to identify local needs, create new policies and programs to support regional success, and ultimately have a wide-reaching impact.

Intended Audience

This toolkit was developed in response to the growing state and local interest in adopting policies to reduce the amount of food that goes to waste. This toolkit surveys eight different policy areas that state and local governments can examine as methods to reduce food waste and increase food recovery. This toolkit also provides information about the relevant federal laws, because they often serve as a legal floor, on which states can layer additional protections or opportunities. This toolkit should be useful to legislators on the state and local levels and their staff members, to the vast array of potential food donors (including large and small businesses, farmers, food producers, manufacturers, schools, institutions, and end consumers), and to activists and concerned citizens seeking to use policy to reduce food waste. The suggestions and highlighted best practices are intended to provide context and resources for state and local actors as they seek to improve their local food recovery landscape.

Food systems vary significantly by region and locality, so policy solutions are strongest when crafted with those regional and local differences in mind. This toolkit is intended to equip and empower states and localities by providing suggestions for implementing the strongest possible food recovery policies, while sharing existing policies and programs from across the country.

How to Use this Toolkit

The utility of this toolkit will depend on the current state of food waste policies within the particular state or locality. Some areas have already done significant work and experimentation on these topics, and will find the toolkit most useful for improving upon their existing policies or exploring what policy levers they have not yet tried. Other locations will be starting from scratch and can use this toolkit to become educated on policy options, in order to learn from the success and challenges examined in this toolkit. To make the most of the resources contained within this toolkit, we recommend the following:

- Customize the suggestions to fit your state or local environment. This toolkit aims to explore and highlight success stories from across the country that may work in full or in part for your community, but likely will require customization to ensure success. The examples we highlight can serve as a starting place as you determine what will work best for your community. Take stock of the current landscape and seek out the policies that make the most sense for your state or locality.
- Use the toolkit one section at a time. This toolkit covers a wide array of policy areas that can impact food recovery, but state and local governments need not implement them all at once in order to make a tangible difference in food recovery. Moving the needle in one area can have a ripple effect in terms of building momentum and support for food recovery as a whole, and can offer time to assess the impact of one policy change before trying out others. The toolkit sections do contain some overlap, and we have incorporated references to relevant sections, where appropriate, within each.
- Several key terms appear throughout the toolkit. “Food recovery organizations” is the term we use to encompass the range of organizations that collect and distribute wholesome food, including food banks, food pantries, innovative recovery models, and other similar initiatives. A few interchangeable terms are used to indicate a food business that has food that could be donated or diverted instead of going to waste, including: food donors, food waste generators, food producers, food manufacturers and food retailers.

Contents of this Toolkit

This toolkit comprises eight sections that cover a range of policy activities that states or localities can use to reduce the amount of food wasted and increase food recovery.

- **Section I: Liability Protection for Food Donations:** This section provides an introduction to the federal Bill Emerson Good Samaritan Act, which provides liability protections to food donors and nonprofit food recovery organizations, and describes the many state Good Samaritan laws that exist. It then suggests methods of expanding liability protection at the state level and explores ways states and localities can raise awareness about liability protection so food donors understand the protections and thus donate more food.
- **Section II: Tax Incentives for Food Donations:** This section presents the current federal and state tax incentives that exist for food donors. It delves into the limitations of the existing laws and offers suggestions to strengthen and expand state tax incentives as a mechanism to incentivize food donation.
- **Section III: Date Labeling:** Date labels are generally intended as indicators of quality, not safety, but confusion about these labels leads to massive quantities of waste. This section explains what date labels mean and makes suggestions for how state and local governments can strengthen their date labeling laws.
- **Section IV: Food Safety for Food Donations:** This section explains the complexities that state and local food safety regulations, which often are silent on food donations, present for food donors and food recovery organizations. It lays out the role of the federal government in developing food safety regulations, as well as the role of state and local governments. It then presents ways that state and local legislators and regulators, health department inspectors, and activists can break down barriers to food donation presented by unclear food safety regulations.
- **Section V: Food Waste Reduction in K-12 Schools:** This section discusses the policies that states, municipalities, school districts and schools can implement to decrease food waste. The section suggests methods for schools to

reduce the amount of waste produced, recover food for the school and broader community, and recycle, via compost, whatever they cannot reduce or recover. Schools present a unique area of focus for food recovery efforts, because any school-based food recovery moves will impact future generations' perceptions of food and food waste.

- **Section VI: Feeding Food Scraps to Livestock:** This section provides a brief introduction to the benefits of feeding food scraps to animals. It explains the federal laws that act as a floor in regulating the practice, as well as provides an overview of the pertinent state statutes and regulations. The section explores ways state and local governments can strengthen current laws and help grow the practice of feeding food scraps to animals.
- **Section VII: Organic Waste Bans and Waste Recycling Laws:** This section looks into the existing state and local laws that ban disposal of food scraps in landfills or require food scraps to be diverted to recycling methods, such as composting and anaerobic digestion. It then suggests ways that state and local governments can strengthen their existing laws or improve these laws, while providing support for those impacted by such laws.
- **Section VIII: Government Support for Food Waste Reduction:** This section surveys the options for government support of food recovery efforts. It delves into food recovery grant programs, direct government spending on food recovery programming and infrastructure, and government-provided educational and informational resources, providing recommendations for utilizing state resources to reduce food waste.

Endnotes

- ¹ *A Roadmap to Reduce U.S. Food Waste by 20 Percent*, REFED 10 (2016), http://www.refed.com/downloads/REFED_Report_2016.pdf.
- ² *Id.*
- ³ *Id.*
- ⁴ *Id.* at 14.
- ⁵ *A Roadmap to Reduce U.S. Food Waste by 20 Percent*, REFED 14 (2016), http://www.refed.com/downloads/REFED_Report_2016.pdf.
- ⁶ *Id.*
- ⁷ *A Roadmap to Reduce U.S. Food Waste by 20 Percent*, REFED 10 (2016), http://www.refed.com/downloads/REFED_Report_2016.pdf.
- ⁸ Kevin D. Hall et al., The Progressive Increase of Food Waste in America and Its Environmental Impact, PLOS ONE 4(11):e7940, (2009), <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0007940>.
- ⁹ *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2013 ES-14*, U.S. ENVTL. PROT. AGENCY (Apr. 15, 2015).
- ¹⁰ *Overview of Greenhouse Gases*, U.S. ENVTL. PROT. AGENCY, <https://www.epa.gov/ghgemissions/overview-greenhouse-gases>.
- ¹¹ Alisha Coleman-Jensen et al., U.S. DEP'T OF AGRIC., ECON. RESEARCH SERV., *Household Food Security in the United States in 2014* 4 (2015), <http://www.ers.usda.gov/publications/err-economic-research-report/err194.aspx>.
- ¹² *EPA and USDA Join Private Sector, Charitable Organizations to Set Nations First Goals to Reduce Wasted Food*, U.S. ENVTL. PROT. AGENCY, <https://www.epa.gov/newsreleases/epa-and-usda-join-private-sector-charitable-organizations-set-nations-first-goals>.
- ¹³ *Food Recovery Hierarchy*, U.S. ENVTL. PROT. AGENCY, <https://www.epa.gov/sustainable-management-food/food-recovery-hierarchy> (last visited Mar. 14, 2016).

Section I: Liability Protection for Food Donations

Restaurants, retailers, and other food businesses are often hesitant to donate because they fear being held liable for harm caused by the donated food. Yet the federal Bill Emerson Good Samaritan Act provides liability protection for both food donors and food recovery organizations, and state liability statutes can strengthen this protection to encourage food donation by further reducing liability risks for those participating in food recovery.



Overview

This section presents a brief overview of the federal Bill Emerson Good Samaritan Food Donation Act (Emerson Act), which provides uniform federal liability protection for food donations. It then discusses ways in which states can go above the federal floor and provide additional liability protection to encourage food donation. It concludes with a discussion of what states can do to increase awareness of liability protection among potential food donors.

- 1. Introduction** Many businesses fail to donate foods because they do not know about the liability protections available to food donors under the Emerson Act or state liability protection laws. For those that know of these federal and state laws, they may be fearful because of unclear provisions or may not want to incur additional costs needed to comply. Further, several provisions in both the Act and the state laws could be broadened to better align with the current food recovery landscape. Clarifying the scope of liability coverage and expanding federal and state law protections, as described below, can boost food donations.
- 2. The Federal Bill Emerson Good Samaritan Act** The Bill Emerson Good Samaritan Act provides a federal floor of civil and criminal liability protections for food donors and the nonprofits that receive and distribute those donations. The protections afforded by the Emerson Act are significant and have enabled many food donors to begin donating. While the Emerson Act was an important first step, several reforms can be made to more effectively address liability concerns.
- 3. Recommendations for Strengthening State Liability Protection Laws** Every state has its own version of liability protections for food donors and food recovery organizations. States can improve these statutes by clarifying and expanding protection for food donations beyond what is offered in the federal Emerson Act. Areas of improvement include providing liability protection when food recovery organizations sell or otherwise charge for food, when donors donate directly to end-users, when the donated food does not satisfy all quality and labeling standards, and when donors donate past-date foods.

4. Education and Awareness For liability protections to lead to increased food recovery, potential food donors need to know that such protections exist. States can complement their liability protection, and thereby increase food donation, by making potential food donors aware of the federal and state liability protections available.

Introduction

While the U.S. produces an abundance of food every year,¹ a significant amount of this food ends up in businesses' dumpsters and consumers' trash cans, making its way to landfills instead of the plates of hungry families.² Donating safe, edible food to those in need can significantly reduce the amount of food being sent to landfills and support food security goals in the state or locality. However, many potential food donors, including grocers and retailers, cite fear of liability as a primary deterrent to donating food.³ A 2014 survey conducted by the Food Waste Reduction Alliance, a joint industry task force comprised of leading companies and trade associations in the food, beverage, food service, and food retail industries, found that 54 percent of retailers and wholesalers and 67 percent of food manufacturers cite liability concerns as one of the main barriers to food donation.⁴

Congress attempted to address these concerns in 1996 by passing the Bill Emerson Good Samaritan Food Donation Act (Emerson Act) to provide civil and criminal liability protection to a broad range of food donors and recipient non-profit organizations.⁵ The Emerson Act laid an important foundation to support increased food donations. As an indicator of this success, the year after the bill passed food donations to Feeding America increased by 87 million pounds.⁶ However, liability concerns are still the largest barrier to food donation, and improving provisions of the Emerson Act—as well as increasing awareness of the Act—will continue to bolster donations of healthy, wholesome food.

All fifty states have passed state liability protection acts, and several states have improved upon the protections afforded by the Emerson Act by providing additional liability protection above those offered in the federal law. Examples of state improvements include providing protection even when nonprofit food recovery organizations charge the final recipient; protecting donors that donate directly to the final recipient; removing labeling requirements for liability protection for donated food; and explicitly offering protection when donors donate past-date foods. Additionally, in order to clarify and advertise these protections, some states publish guidance about federal and state liability protections for food donations. By going beyond the federal liability protection floor, or undertaking education and awareness efforts, states encourage food donation and help ensure more food makes it to the tables of those in need.

The Federal Bill Emerson Good Samaritan Act

The Emerson Act provides a federal baseline of liability protection for food donors and the nonprofit food recovery organizations that receive donations and distribute that food to needy individuals.⁷ States cannot make laws that remove or reduce the protection created under the Act, but they are free to enact laws that are even stronger.⁸ The Emerson Act provides liability protection to a broad range of food donors,⁹ including individuals, businesses, nonprofit food recovery organizations, government entities, and gleaners, which are individuals or entities that harvest donated agricultural crops from the fields.¹⁰ Donors and food recovery organizations must meet the following four requirements to receive protection under the Emerson Act:

- (1) The food must be donated to a nonprofit organization¹¹ in good faith, which means the food must be donated with the honest belief that the food is safe to eat.¹²
- (2) The food must meet all federal, state, and local quality and labeling requirements, even if it is not “readily marketable due to appearance, age, freshness, grade, size, surplus, or other conditions.”¹³ Examples of required federal labeling standards include the name of the food, the food’s manufacturer, and the net quantity of contents.¹⁴
- (3) The nonprofit organization that receives the donated food must distribute it to needy individuals.¹⁵
- (4) The ultimate recipient must not pay anything of monetary value for the donated food.¹⁶

Regarding the first requirement, donors must donate food in “good faith” to a nonprofit organization for distribution.¹⁷ This means the Emerson Act does not provide protection if the liability from the donated food arises out of “gross negligence or intentional misconduct.”¹⁸

Regarding the second requirement, even if a food does not initially meet all applicable quality and labeling standards, donors and distributors can still be protected by the Emerson Act as long as the food is reconditioned to become fully compliant.¹⁹ For this exception to apply, the food donor must inform the nonprofit organization of the defective condition of the food, and the nonprofit organization must be knowledgeable of the standards to properly recondition the food and agree to recondition the food.²⁰

Regarding the fourth requirement, if one nonprofit donates food to another nonprofit for distribution, the donor nonprofit can charge the distributing nonprofit a nominal fee to cover handling and processing costs.²¹ However, the liability protection is lost if the ultimate recipient pays for the food.

So long as the above requirements are met, the food donor and the nonprofit food recovery organization receiving the food will be shielded from both civil and criminal liability that may arise from the donated food, unless either acts with gross negligence or intentional misconduct.²² In other words, the donor or nonprofit food recovery organization should not donate or facilitate the distribution of donated food that they know is likely to be harmful or dangerous. The Emerson Act’s liability protection also extends to premises owned by donors who allow gleaners or food recovery personnel onto their property.²³ In this case, the property owner is protected from liability if injury or death arises due to any donation or collection activities on the owner’s premises.²⁴

The Emerson Act’s protections are quite broad, and it is intended to provide blanket protection across the nation in order to encourage food donors of all types to get their food to those in need. However, there are no court cases that involve food donation liability, nor agency attempts to interpret the protections offered by the Act.²⁵ Thus, some potential food donors are confused about certain terms in the Act. Further, the Act’s protections work extremely well when food is being donated to a nonprofit food bank, but there are some instances where additional or clearer protection could increase donation of foods in situations that are unclear or unprotected under the current federal law.

Despite its protections, the federal Emerson Act has the following limitations:

1. Donated food must be distributed to final recipients for free in order for the protections to apply;
2. No liability protection is given when donors donate directly to final recipients without going through a nonprofit food recovery intermediary;
3. Donated food must comply with all federal, state, and local quality and labeling standards, even when such standards are not linked to safety risks;
4. The Emerson Act does not explicitly state that donations of past-date foods are protected from liability; and
5. Food businesses lack awareness and education about the Act, which stems from the absence of direction and oversight over the Act by a federal agency.

The Emerson Act offers an excellent federal baseline for providing liability protection for food donation. Nevertheless, it could be improved upon. This leaves room for state legislatures to step in and offer additional liability protection above what Congress provides.

State Liability Protection Laws

State	Citation	Type of Protection		Protections Apply When End Recipient Pays for the Donated Food	Protections Apply to Direct Donations
		Civil	Criminal		
Alabama	Ala. Code 1975 § 20-1-6	x	x		
Alaska	Alaska Stat. § 17.20.346	x	x	x	
Arizona	Ariz .Rev. Stat. Ann. § 36-916	x		x	x
Arkansas	Ark. Code Ann. § 20-57-103	x	x	x	
California	Cal. Civ.Code § 1714.25	x			
Colorado	Colo. Rev. Stat. § 13-21-113	x	x		
Connecticut	Conn. Gen. Stat. Ann. § 52-557L	x	x	x	
Delaware	Del.Code Ann. Tit. 10, § 8130	x	x		
District of Columbia	D.C. Code § 48-301	x	x		
Florida	Fla. Stat. Ann. § 768.136	x	x		
Georgia	Ga. Code Ann. § 51-1-31	x	x	x	
Hawaii	Haw. Rev. Stat. § 145D-1–D-5	x	x		
Idaho	Idaho Code Ann. § 6-1301–1302	x	x		
Illinois	745 Ill. Comp. Stat. 50/1–50/4	x			
Indiana	Ind. Code § 34-30-5-1–34-30-5-2	x			
Iowa	Iowa Code Ann. § 672.1	x	x	x	
Kansas	Kan. Stat. Ann. § 65-687	x	x		
Kentucky	Ky. Rev. Stat. § 413.247–248	x	x		
Louisiana	La. Rev. Stat. Ann. § 9:2799	x			Only wild game
Maine	Me. Rev. Stat. tit. 14, § 166	x			
Maryland	Md. Code Ann. Cts. & Jud. Proc. § 5-634 Md. Code Ann. Health–Gen. § 21-322	x			
Massachusetts	Mass. Gen. Laws Ann. Ch. 94, § 328; 105 Mass. Code Regs. 520.119	x		x	**
Michigan	Mich. Comp. Laws Ann. § 691.1572	x		x	
Minnesota	Minn. Stat. Ann. § 604A.10	x			x
Mississippi	Miss. Code Ann. § 95-7-1	x			
Missouri	Mo. Rev. Stat. § 537.115	x	x		
Montana	Mont. Code Ann. § 27-1-716	x	x	x	
Nebraska	Neb. Rev. Stat. § 25-21,189	x		*	

State Liability Protection Laws

State	Citation	Type of Protection		Protections Apply When End Recipient Pays for the Donated Food	Protections Apply to Direct Donations
		Civil	Criminal		
Nevada	Nev. Rev. Stat. § 41.491	x			x
New Hampshire	N.H. Rev. Stat. § 508:15	x	x	x	x
New Jersey	N.J. Stat. Ann. § 24:4A-1–A5	x	x	x	
New Mexico	N.M. Stat. Ann. § 41-10-1–3	x	x		x
New York	N.Y. Agric. & Mkts. Laww § 71-y–z	x	x		
North Carolina	N.C. Gen. Stat. Ann. § 99B-10	x	x	x	
North Dakota	N.D. Cent. Code § 19-05.1-02–19-05.1-05	x	x		
Ohio	Ohio Rev. Code Ann. § 2305.37	x			
Oklahoma	Okla. Stat. Ann. tit. 76, § 5.6	x	x	x	
Oregon	Or. Rev. Stat. § 30.890	x	x	x	
Pennsylvania	10 Pa. Stat. Ann. § 351-58	x	x		
Rhode Island	R.I. Gen. Laws Ann. § 21-34-1–2	x	x	*	
South Carolina	S.C. Code Ann. § 15-74-10–40	x	x		
South Dakota	S.D. Codified Laws § 39-4-22–24	x	x		
Tennessee	Tenn. Code Ann. § 53-13-101–103	x	x		
Texas	Tex. Civ. Prac. & Rem. Code Ann. § 76.001–004	x	x	*	
Utah	Utah Code Ann. §§ 4-34-5, § 78B-4-502	x	x		
Vermont	Vt. Stat. Ann. tit. 12, § 5761–5762	x	x		x
Virginia	Va. Code Ann. § 3.2-5144	x			
Washington	Wash. Rev. Code Ann. § 69.80.031	x	x		
West Virginia	W. Va. Code, § 55-7D-1–4	x	x		
Wisconsin	Wis. Stat. Ann. § 895.51	x			
Wyoming	Wyo. Stat. Ann. § 35-7-1301	x			

* Food recovery organization must distribute the food for free in order to receive protection; donor is protected even if the food recovery organization charges

** Explicitly allows donation of past-date food, as long as the food is wholesome, separated from foods that are not past-date, and clearly labeled as past-date

Recommendations for Strengthening State Liability Protection Laws

Similar to the federal Emerson Act, state laws provide liability protection to in-state donors and distributing food recovery organizations, generally when food is donated to a nonprofit organization and distributed for free. Even with the presence of the federal Emerson Act, state statutes continue to play an important role by encouraging the development of innovative food recovery organizations and improving upon the Act's shortcomings by providing additional protections. For example, some states go above the Emerson Act by allowing donors to charge final recipients for food, providing liability protection when donors donate directly to the final recipients, offering protection for food that does not comply with all labeling requirements, or explicitly protecting donors that donate past-date foods. Each of these topics is explored in more detail below. All state liability protection laws are covered in the state liability protection laws chart on pages 8-9.

Social Supermarkets in the U.S.

On June 4, 2015 in Dorchester, MA, Daily Table opened its first store. Founded by former president of Trader Joe's, Doug Rauch, Daily Table is "a not-for-profit retail store that offers a variety of tasty, convenient and affordable foods." Daily Table offers prepared meals as well as a selection of produce, bread, dairy, and grocery items at modest prices, thanks to a large network of growers, supermarkets, manufacturers, and other food suppliers who donate their surplus food. Organizations like Daily Table are following the model of "social supermarkets," popularized in Europe, that have been successful at serving communities by selling surplus foods in a low-cost grocery setting.

Sources: *Our Story*, DAILY TABLE (2015) <http://dailytable.org/about-us/our-story/>; Serri Graslie, *Social Supermarkets A 'Win-Win-Win' For Europe's Poor*, NPR (Dec. 13, 2013); Rebecca Smithers, *UK's first 'social supermarket' opens to help fight food poverty*, *The Guardian* (Dec. 8, 2013).

Provide liability protection when nonprofit food recovery organizations charge needy individuals for food. The Emerson Act, and the majority of state liability protections for food donations, only protect food donors and food recovery organizations when the food is given away for free to end recipients. This means that they do not provide liability protections to food donors or food recovery organizations when the end recipients pay for the food, even at a reduced rate. This harms food recovery efforts because it excludes innovative approaches to sell surplus food at deeply reduced prices.

Excluding such models from the liability protection discourages food donors from donating to these organizations, hampering development of new organizations and constraining existing food recovery organizations from broadening their offerings. Allowing food recovery organizations to sell some of their food at a low cost could help fill a need in communities where individuals are food insecure or lack regular food access, but for various reasons are not willing or able to qualify for government assistance or use a food pantry or soup kitchen. Such models also offer the potential for an economically sustainable solution to food recovery because they recognize the labor, storage, and transportation costs of recovering food and allow those costs to be offset by end-user purchases. This means that food recovery organizations can focus on collecting donated food, rather than chasing additional monetary donations to support operational costs.

To encourage these innovative models, states should provide liability protection to food donors and food recovery organizations even when the food recovery organization charges end recipients a low cost for donated food, so long as the food recovery organization maintains nonprofit status and distributes its food to those in need. Several state laws already provide liability protection even when the food is sold to the end recipient, and these offer great models. They vary in their wording, but all provide a similar blanket of protection:

- **Arizona's** law provides liability protection for nonprofit food recovery organizations charging final recipients for food by defining donation as giving food "for a fee significantly less than the value of the item."²⁶
- **Massachusetts'** law allows nonprofit food recovery organizations to charge recipients for food at a level high enough to "cover the cost of handling such food" without sacrificing liability protection.²⁷ So long as the food recovery organization does not make a profit off the distribution, it will be shielded from liability. The passage of the Massachusetts' law allowed for the creation of Daily Table (see Social Supermarkets in the U.S. text box).
- **New Hampshire's** law is similar to that of Massachusetts. It provides liability protection for nonprofit food recovery

organizations that charge recipients for food at a level high enough to “cover the cost of handling and administering such food and the distribution thereof.”²⁸

- **Oregon’s** law provides liability protection when a nonprofit food recovery organization charges the final recipient “on a scale reflecting ability to pay or only requiring a shared maintenance contribution.”²⁹
- **Wisconsin’s** law provides liability protection to food recovery organizations who “sell at a price not to exceed overhead and transportation costs.”³⁰

Providing liability protection even when food recovery organizations charge recipients for food creates a favorable climate for innovation in food recovery, and offers the opportunity for a more economically sustainable food recovery model that potentially serves a broader segment of the community. The examples from Massachusetts and New Hampshire offer a particularly clear starting point for other states that consider broadening their protection.

Provide liability protection for food service establishments and retail stores donating directly to final recipients. The majority of state liability protection statutes provide liability protection only for food donated to a nonprofit food recovery organization, which then distributes the food to end users. Likewise, the Emerson Act only provides protections when nonprofit food recovery organizations serve as middlemen between donors and recipients. This means that direct donations from donors to recipients generally do not receive liability protection under state or federal law.

Extending protections to direct donations could help increase efficiency and enable timely use of perishable food. If food has to be donated through a food recovery organization, donors may be discouraged from donating certain food items, such as perishable foods, because the food recovery organization may not have the capacity to get that food to those in need before it spoils.³¹ Providing protections for direct donations, as least in certain cases, could allow donors to donate more efficiently and get perishable food onto the tables of those in need. Food service establishments and retail stores already must comply with food safety training and inspections as part of their normal operations, mitigating the need for further safety-motivated restrictions on direct donations.

While the majority of states require food to be distributed through a food recovery organization, several state statutes serve as models for providing liability protection for direct donation:

- **Arizona’s** law contains a provision that provides liability protection to donors donating “to a charitable or nonprofit organization or to any other person.”³² The statute thus extends liability protection beyond donations made to a nonprofit food recovery organization, offering protection for direct donation as well.
- **New Hampshire’s** law provides liability protection to donors donating to a “needy individual or individuals or to a bona fide charitable or non-profit organization.”³³ It serves the same purpose as the Arizona statute.

Arizona and New Hampshire do not place any limitations on the direct donations that receive liability protection. However, a state nervous about direct donation could limit liability protection to apply only to foods originating from a food service establishment or retail store.

Provide liability protection regardless of compliance with non-safety related labeling requirements. Currently, most states follow the Emerson Act’s model of providing liability protection only when the donated food fully complies with all federal, state, and local quality and labeling requirements. Several states, like Arizona, Nevada, and Washington, also provide liability protection so long as the donated food is reconditioned to meet such requirements.³⁴ These requirements impose extraneous burdens on donors and food recovery organizations by forcing them to meet all labeling standards. Often food goes to waste precisely because of a labeling deficiency and the burdensome time and costs required for reconditioning. However, many food labeling rules are not essential to ensure food safety. For example, under federal law, foods are required to be labeled with ingredients, allergens, and net weight, among other details. Although allergen labeling is relevant to food safety, net weight is not. Protecting the donation of food that is mislabeled in a way that bears no relevance to safety could help prevent unnecessary waste.

While eliminating the requirement that food meet all safety-related labeling standards would provide a starting place, several states go further, eliminating compliance with any packaging or labeling laws as a condition for liability protection:

- **Oregon’s** statute states that liability protection applies “regardless of compliance with any laws, rules or ordinances regulating the packaging or labeling of food.”³⁵ This allows donation of partially compliant food and absolves donors of any duty placed on the food recovery organization to recondition the food as compliant.
- **California’s** statute states that liability protection applies “regardless of compliance with any laws, regulations, or ordinances regulating the packaging or labeling of food.”³⁶ It serves the same function as the Oregon statute.

States could use Oregon or California as models to eliminate the compliance burden for donated foods, or could take an interim step and only require compliance with labeling requirements relevant to food safety.

Clearly provide liability protection for the donation of past-date food. State statutes are generally silent about whether past-date food receives liability protection.

This silence creates ambiguity for potential donors about whether or not they will be protected from liability if they donate past-date food, even if they are knowledgeable enough about date labels to know that past-date food is generally safe. States can remove this ambiguity by explicitly stating that donations of past-date food will be protected. For example, in its liability protection statute, Massachusetts explicitly protects the donation of past-date food, stating “No person who donates food, including open-dated food whose date has passed, . . . shall be liable for civil damages.”³⁷ Such clear guidance in the liability protection statute can reduce food waste and ensure that wholesome, safe past-date food can be shared with those in need.

Date Labels at Manufacturer’s Discretion

With the exception of dates on infant formula, date labels are not regulated under federal law. While some states require date labels on food under state law, these labels are generally set by the manufacturer, and indicate the manufacturer’s suggestion for peak freshness, not safety. Despite common misperceptions, almost no date labels actually indicate food safety. Safe, wholesome food often goes to waste because of these misperceptions.

Source: *The Dating Game: How Confusing Food Date Labels Lead to Food Waste in America*, NATURAL RES. DEF. COUNCIL (2013), <http://www.nrdc.org/food/files/dating-game-report.pdf>.

Unfortunately, many states, Massachusetts included, set additional conditions on the donation of past-date foods.³⁸ Massachusetts, for example, requires the past-date food be wholesome, segregated from non-past-date foods, and clearly marked as past-date.³⁹ These additional conditions are time consuming, burdensome and discourage food donors from donating—and food recovery organizations from accepting—past date food. See Section III: Date Labeling for more information.

In order to remove confusion surrounding past-date foods, states should include a provision in their liability protection statutes stating that liability protection extends to the donation of past-date food. With this change, state authorities can help ensure that safe, wholesome past-date food does not go to waste. State legislatures that set additional conditions for donating past-date foods should likewise revisit these laws to ensure that they do not extend beyond what is necessary for food safety.

Education and Awareness

Despite the federal Emerson Act and state liability protection statutes, many potential donors still do not donate because of fear of liability. This fear may stem from confusion over the scope of liability protection offered by federal and state laws, or it may originate in a lack of clear guidance from government authorities about the protected activities.

In order to minimize confusion, states should publish guidance about federal and state liability protection for food donations. Guidance can express the government’s support for food donation and clarify ambiguities surrounding liability protection. Any such guidance document should list limitations on liability protection and any steps the donor or food recovery organization must follow to receive such protection. The guidance should be easily understandable and implementable by employees of all ranks, not just those in management positions. The guidance can be a stand-alone document or can be part

of a broader guidance document for food recovery.

Some state and local governments already offer guidance to dispel concerns about food donation liability:

- In **Massachusetts**, the Department of Environmental Protection and its RecyclingWorks program developed a best management practices guide that provides a good example of state guidance.⁴⁰ Complemented by flowcharts and answers to FAQs, the Massachusetts donation guide covers a variety of topics related to food donation, including clear descriptions of the federal and state liability protections available to food donors and nonprofit food recovery organizations.
- **New York City, New York** provides guidance to food retailers, grocers, and other food organizations about federal and state donation liability protections and encourages such groups to donate surplus food to food pantries and soup kitchens in the city.⁴¹
- **Los Angeles County, California** published a guideline for safe food donation that specifically targeted food facility operators. A fillable “Food Donation Delivery Form” is included, as well as guidance on food safety and federal and state liability protections.⁴²

Aside from publishing guidance, state and local governments should enlist their health inspectors to serve as ambassadors for increasing food recovery and educating food donors about liability protection. Health inspector assistance and education is discussed further in Section IV: Food Safety for Food Donations.

Conclusion

Fear of liability often drives reticence to donate safe, wholesome food. Food donation is a voluntary act, and would-be donors will usually opt for disposal or composting in the face of uncertainty about their liability risk. Clarifying and expanding liability protection can create certainty and encourage food donation. States should look to this toolkit section to create a more comprehensive liability protection regime, and promote education and awareness about the available food donation liability protections.

Endnotes

- ¹ Mark Bittman, *How to Feed the World*, N.Y. TIMES, (Oct. 14, 2013), http://www.nytimes.com/2013/10/15/opinion/how-to-feed-the-world.html?pagewanted=all&_r=0.
- ² *A Roadmap to Reduce U.S. Food Waste by 20 Percent*, REFED 12 (2016), http://www.refed.com/downloads/ReFED_Report_2016.pdf.
- ³ *Analysis of U.S. Food Waste Among Food Manufacturers, Retailers, and Restaurants*, FOOD WASTE REDUCTION ALLIANCE, 13, 16 (2014) http://www.foodwastealliance.org/wp-content/uploads/2014/11/FWRA_BSR_Tier3_FINAL.pdf.
- ⁴ *Id.*
- ⁵ Bill Emerson Good Samaritan Food Donation Act, 42 U.S.C. § 1791 (2016).
- ⁶ Stacy H. Van Zuiden, *The Good Food Fight For Good Samaritans: The History Of Alleviating Liability And Equalizing Tax Incentives For Food Donors*, 17 DRAKE J. AGRIC. L. 237, 246 (2012).
- ⁷ 42 U.S.C.A. §1791(c).
- ⁸ 42 U.S.C.A. § 1791(b)(9).
- ⁹ 42 U.S.C.A. § 1791(c)(1).
- ¹⁰ 42 U.S.C.A. § 1791(c)(1), (b)(9); Farmers interested in allowing gleaners on their land should be aware that the Federal Crop Insurance Corporation encourages the gleaning of unharvested crops but has additional requirements to which farmers must adhere when allowing gleaners on their land in order for their crop insurance to be unaffected. *Loss Adjustment Manual (LAM) Standards Handbook*, U.S. DEP'T OF AGRIC. AND FEDERAL CROP INS. CORP. 137, 152-55 (2016), http://www.rma.usda.gov/handbooks/25000/2016/16_25010.pdf.
- ¹¹ The Emerson Act defines nonprofit organizations as “religious, charitable or educational” entities that provides neither “net earnings” to nor otherwise benefits “any officer, employee, or shareholder.” 42 U.S.C. § 1791.

12 *Food Recovery: A Legal Guide*, UNIV. OF ARK. 7 (2013), <http://law.uark.edu/documents/2013/06/Legal-Guide-To-Food-Recovery.pdf>.

13 42 U.S.C.A. § 1791(b)(1), (2).

14 U.S. FOOD & DRUG ADMIN., GUIDANCE FOR INDUSTRY: A FOOD LABELING GUIDE (Jan. 2013), <http://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/LabelingNutrition/ucm064866.htm>.

15 42 U.S.C.A. § 1791(c)(1)- (2).

16 42 U.S.C.A. § 1791(b)(3).

17 42 U.S.C. § 1791(c) (1996).

18 Good faith excludes “gross negligence” or “intentional misconduct.” “Gross negligence” is defined as “voluntary and conscious conduct (including a failure to act) by a person who, at the time of the conduct, knew that the conduct was likely to be harmful to the health or well-being of another person.” “Intentional misconduct” is defined as “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.” 42 U.S.C. § 1791(c).

19 42 U.S.C.A. § 1791(e) (2016).

20 42 U.S.C.A. § 179(e).

21 42 U.S.C.A. § 1791(b)(3).

22 42 U.S.C.A. § 1791(c)(3).

23 42 U.S.C.A. § 1791(d).

24 42 U.S.C.A. § 1791(d).

25 *Food Recovery: A Legal Guide*, UNIV. OF ARK. 3 (2013), <http://law.uark.edu/documents/2013/06/Legal-Guide-To-Food-Recovery.pdf>.

26 ARIZ. REV. STAT. § 36-916 (1991).

27 MASS. GEN. LAWS 94 § 328 (1988).

28 N.H. REV. STAT. § 508:15 (2016).

29 OR. REV. STAT. § 30.890 (2016).

30 WIS. STAT. ANN. 895.51 (2015).

31 Telephone Interview with Matthew Reich and Kate MacKenzie, Vice President of Food Sourcing & Information Technology and Director of Policy & Government Relations, City Harvest (Mar. 27, 2014).

32 ARIZ. REV. STAT. § 36-916 (2015).

33 N.H. REV. STAT. § 508:15.

34 ARIZ. REV. STAT. § 36-916; NEV. REV. STAT. § 41.491 (2009); WASH. REV. CODE § 69.80.031 (1994).

35 OR. REV. STAT. § 30.890.

36 CAL. CIV. CODE § 1714.25 (1996).

37 MASS. GEN. LAWS ch. 94, § 328 (2016).

38 *The Dating Game: How Confusing Food Date Labels lead to Food Waste in America*, HARVARD FOOD LAW & POL’Y CLINIC & NATURAL RES. DEF. COUNCIL 12 (2013).

39 105 MASS. CODE REGS. 520.119 (2016).

40 *Food Donation Guidance for Massachusetts Businesses*, RECYCLINGWORKS MASS., <http://www.recyclingworksma.com/donate/> (last visited Nov. 8, 2015).

41 *Simple Steps to Donate Your Health Surplus*, N.Y.C. DEPT. OF HEALTH AND MENTAL HYGIENE, et al., 2 (2015), <http://docplayer.net/8563080-Simple-steps-to-donate-your-healthy-surplus.html> (last visited Dec. 24, 2015).

42 *Guidelines for Safe Food Donation*, L.A. CNTY. DEP’T OF PUB. HEALTH (2013), <http://www.publichealth.lacounty.gov/eh/docs/WhatsNew/FoodDonations.pdf>.

Section II: Tax Incentives For Food Donations

■ Donating food can be expensive because it requires money to harvest, package, store, and ship food that otherwise would be discarded. Tax credits or deductions can help offset that expense by offering food donors an economic incentive for food donations. A federal tax incentive exists, but certain businesses struggle to utilize it. A state-level tax incentive for food donations could support the agricultural economy and food producers, strengthen ties between local businesses and consumers, reduce the amount of wasted food, and improve the healthy options available to state residents that use emergency food outlets.

Overview

This section presents a brief introduction to the tax incentives available for businesses that donate food. It then provides an overview of the benefits of federal tax incentives, as well as the existing state tax incentives created to support food donation. This section concludes with several recommendations about how states can use tax incentives to increase food donations to benefit all involved parties.

- 1. Introduction** Businesses ranging from large corporations to small-scale producers may have different rationales for donating their excess food products, but one can assume the cost of donating such food is always taken into consideration. Tax incentives for food donations provide a financial incentive to businesses by making food donations more cost-effective and economically beneficial. Tax incentives are essential to offset the real costs of getting healthy, wholesome food to those in need and provide a win-win for all parties involved.
- 2. Federal Tax Incentives for Food Donations** The federal government offers two types of tax incentives for food donations: general deductions and enhanced deductions. The federal incentives have made food donation more cost-effective and economically beneficial, but they are difficult to claim for certain businesses, and they leave some gaps that could be covered by state-level tax incentives.
- 3. State Tax Incentives for Food Donations** Although the federal government provides tax incentives for food donations, states are better equipped to offer tax incentives that suit each state's agricultural and economic landscape. Where the federal tax incentives fall short, states can create tax incentives that are more inclusive so as to prevent donors from opting out of donating because of the cost.
- 4. Recommendations for State Tax Incentives for Food Donations** There are several actions that states can take to better incentivize food donations. States can make their tax incentives more comprehensive by expanding eligibility, placing reasonable limits on claims per year, and providing additional tax credits to better cover the costs of transportation and processing associated with food donation.

Introduction

One of the main reasons that healthy, wholesome food goes to waste is cost. Food donation is costly and can be challenging; it is not as simple as just taking surplus food from one place to another. Businesses and organizations have to bear the cost of harvesting or preparing food for donation, storing it, transporting it, and ensuring it complies with relevant federal, state, and local food safety and labeling laws.

Tax incentives make food donation more cost-effective and economically beneficial. 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.¹ By contrast, a tax credit is a direct reduction in the amount of taxes owed.² These two types of tax incentives have been implemented to incentivize food donation in different ways at the state and federal level.

At the federal level, there are two different tax deductions for food donations: a general deduction and an enhanced deduction. In comparison to the general deduction, the enhanced deduction provides a significantly higher financial benefit, allowing

businesses to deduct a value for donated food that is almost twice as much as the general deduction.³

Federal tax incentives have been extraordinarily successful in motivating food donation. For example, when the federal enhanced deduction was temporarily expanded to cover more businesses in 2005, food donations across the country rose by 137% in the following year.⁴ In December 2015, Congress passed an important piece of legislation that greatly expanded opportunities to claim the enhanced deduction.⁵ Despite this exciting new development, opportunities remain to strengthen the federal tax incentive or add state tax incentives to encourage more donations and curb food waste. For example, many states focus their food donation tax incentives on farms, which are low-margin businesses and often struggle to benefit from a federal tax deduction. Recent years have seen growing numbers of states passing or considering state-level tax incentives. This is because states have seen that certain businesses, such as farmers or other businesses with low profit margins, struggle to benefit from the federal tax incentive. State tax incentives provide a way to target those businesses with a more tailored incentive also provide a benefit that is often easier to understand and easier for businesses to utilize than the federal one. For example, Washington DC passed its tax incentive in 2015⁶ and Virginia passed in 2016.⁷ In the past two years, Maryland, Massachusetts, New York, Pennsylvania, and West Virginia, among others, all considered legislation to create state tax incentives for food donations.

A tax incentive for food donation is an extremely cost-effective policy. Any money provided through such a program can directly incentivize a farm or food business to donate food by covering part of their costs. If a farm or food business does not donate, they receive no tax benefits and no state money is spent. Thus, the state funds are going solely toward their intended purpose. In addition to encouraging donations of healthy, wholesome food, tax incentives can support low-margin businesses, like farms, that will be able to recuperate some of the cost invested in producing food that they are unable to sell. Lastly, the investment in supporting the food security of a state's residents, particularly those served by emergency food programs, can reduce health expenditures, increase residents' productivity, and improve the overall economic well-being of the state.

Federal Tax Incentives for Food Donations

U.S. businesses have received a variety of federal tax incentives for food donations over the past forty years. Before 1969,

Example: Calculating the Enhanced Deduction

A grocery store donated potatoes with a fair market value of \$100. The basis value of these potatoes was \$30. The expected profit margin is the fair market value minus the basis value (\$100 - \$30), which is \$70. Under the enhanced deduction, the grocery store is eligible to deduct the smaller of:

$$1. \text{Basis value} \times 2 = \$30 \times 2 = \$60$$

Or

$$2. \text{Basis value} + (\text{expected profit margin}/2) = \$30 + (70/2) = \$65$$

The enhanced deduction would be \$60. The enhanced deduction is substantially higher than the general deduction, which is limited to the basis value of \$30.

the tax code allowed businesses to deduct the full fair market value (FMV) of charitable contributions—including food donations—from their taxable income.⁸ This deduction created generous tax savings; in some circumstances, the tax savings even exceeded the profit a business would have been able to capture by selling the donated item on the open market.⁹ In the 1969 Tax Reform Act, Congress changed the tax code to allow businesses to deduct only the basis value of the donated property¹⁰—that is, the business' cost of acquiring or producing the property¹¹—which is generally lower than the property's FMV and commonly known as the “general deduction.”

In order for a charitable contribution to qualify for the general tax deduction, the donation must be used for charitable purposes and given to a qualified organization¹² under section 170 of the Internal Revenue Code (IRC).¹³ There is a limitation on the amount of overall charitable contributions businesses can deduct each tax year. For non-C-corporations, total deductions cannot exceed 30% of the business' total taxable income each year.¹⁴ Total deductions for C-corporations cannot exceed 10%.¹⁵

In 1976, after realizing that the general deduction was too low to offset many costs associated with donating food and thus did not provide an adequate incentive, Congress created an “enhanced deduction.”¹⁶ The enhanced deduction increases the amount of the deduction that can be claimed, allowing a business to deduct the smaller of the following two: (a) twice the basis value of the donated food or (b) the basis value of the donated food plus one-half of

the food's expected profit margin (fair market value minus basis value).¹⁷

Originally, the enhanced tax deduction applied only to C-corporations, which meant that all other business types could not qualify for it.¹⁸ However, in the wake of Hurricane Katrina in 2005, Congress passed the Katrina Emergency Tax Relief Act (KETRA), which qualified all business entities to be eligible for the enhanced deduction for qualifying donations made between August 28 and December 31, 2005.¹⁹ While KETRA's expansion of the enhanced deduction was meant to expire at the end of 2005, it was so successful that Congress renewed it annually every year between 2005 and 2014.²⁰ In December 2015, Congress permanently expanded the enhanced tax deduction to all businesses in the Protecting Americans from Tax Hikes Act of 2015, which was part of the 2016 omnibus budget.²¹

In order for a donor to qualify for the enhanced deduction, they must satisfy five requirements. First, the donee (food recovery organization) must be an IRC 501(c)(3) organization, and a public charity or a private operating foundation.²² Second, the donee must use the donated property solely for the care of the ill, the needy, or infants, in a manner consistent with the purpose constituting that organization's exempt status under IRC 501(c)(3).²³ Third,²⁴ the donee may not use or transfer the food in exchange for money, other property, or services.²⁵ Fourth, the donee must provide a written statement to the donor stating that all requirements of IRC 170(e)(3) have been met.²⁶ Fifth, the donated food must be in compliance with the Food, Drug, and Cosmetic Act (FDCA) at the time the donation is made, as well as for 180 days before the contribution.²⁷ If any of these conditions are not met, the donation is disqualified from the enhanced deduction and would only be eligible for the general deduction.²⁸

A C-corporation's charitable deduction cannot exceed 10% of its taxable income,²⁹ except when the corporation has donated food, in which case it can increase its deduction to up to 15%.³⁰ Non-c-corporations can also claim up to 15% of their taxable income in the enhanced deduction.³¹ Food donors can also carry forward any excess deductions beyond the 15% income limitation for up to five years.³²

State Tax Incentives for Food Donations

State tax incentives can provide an opportunity to target incentives to certain food producers, like farmers and small businesses, that often do not sufficiently benefit from the federal incentives. A growing number of states are realizing they can spur increased food donation by providing state-level tax incentives that are more tailored to their farms and businesses than the federal tax incentives. Currently, nine states (Arizona, California, Colorado, Iowa, Kentucky, Missouri, Oregon, South Carolina, and Virginia) and the District of Columbia offer tax incentives specifically targeted at food recovery efforts.³³ To note, in addition to food donation-specific tax incentives, many states also have general charitable giving tax credits and deductions that apply to the donation of food, clothing, money, and other contributions (e.g., Iowa, Massachusetts).³⁴

Other Federal Enhanced Tax Deduction Resources

For more information about federal tax incentives, check out the resources linked below:

- Harvard Law School's Food Law and Policy Clinic and the University of Arkansas School of Law's LL.M. Program in Agricultural & Food Law published the Federal Enhanced Tax Deduction for Food Donation, A Legal Guide, which provides an in-depth guide to the federal enhanced tax deduction.
- The National Resources Defense Council (NRDC) created, A Farmer's Guide to the Enhanced Federal Tax Deduction for Food Donation, a one-page guide for farmer's navigating the enhanced federal tax deduction.
- The National Gleaning Project published The Federal Enhanced Tax Deduction for Food Donations, which is a guide intended to help farmers and gleaning organizations understand the federal law.

Sources: *Federal Enhanced Tax Deduction for Food Donations, A Legal Guide*, HARVARD FOOD LAW AND POL'Y CLINIC & UNIV. OF ARK. (Apr. 2016), <http://www.chlpi.org/wp-content/uploads/2013/12/Food-Donation-Fed-Tax-Guide-for-Pub-2.pdf>; *A Farmer's Guide to the Enhanced Federal Tax Deduction for Food Donation*, NATURAL RES. DEF. COUNCIL (June 2016), <https://www.nrdc.org/sites/default/files/farmers-federal-tax-deduction-food-donation.pdf>; *The Federal Enhanced Tax Deduction for Food Donations*, THE NAT. GLEANING PROJ. (Apr. 2016), <http://forms.vermontlaw.edu/farmgleaning/EnhancedTaxDeductionGuideForFarmers.pdf>.

Each state’s food landscape is different, which means tax incentives for food donations vary across state lines. For example, all states except Arizona offer tax deductions instead of tax credits. Additionally, some states offer tax incentives for different types of donors. The bulk of states provide tax incentives targeted at farmers, but some incentives are broader or entail a separate piece of legislation aimed at other food businesses. For example, California provides one type of tax credit for farmers, or the “Farmer Credit,”³⁵ and another for food donation transportation, or the “Transportation Credit.”³⁶ Additionally, states vary in the type of donated food eligible for the tax credit or deduction. A majority of states incentivize the donation of agricultural crops, such as grains, fruits, vegetables, whereas others, such as Iowa, incentivize the donation of any apparently wholesome food.³⁷ The table below describes the state-level tax incentives for food donations in nine states and the District of Columbia; a discussion of the key provisions and recommendations in each of these incentives follows.

State Tax Incentives for Food Donations

Legislation	Deduction or credit	Benefit	Eligible donors	Eligible food	Eligible recipients
Arizona ARIZ. REV. STAT. ANN. § 42-5074	Deduction	Gross proceeds of sales or gross income from donated food	Restaurants	Prepared food, drink, or condiment	Nonprofits that regularly serve free meals to the needy and indigent at no cost
Arizona ARIZ. REV. STAT. ANN. § 43-1025	Deduction	Full wholesale market price, or the most recent sale price (whichever is greater) of donated crops	Taxpayer engaged in the business of farming or processing agricultural crops	Agricultural crops	Nonprofits located in Arizona whose use of the crop is related to their tax-exempt status
California CAL. REV. & TAX. CODE § 17053.88	Credit	10% of inventory cost	Taxpayer responsible for planting, managing, and harvesting crops	Fresh produce	Food banks located in California
California CAL. REV. & TAX. CODE § 17053.12	Credit	50% of transportation costs	Taxpayer engaged in the business of processing, distributing, or selling agricultural products	Agricultural crops	Nonprofits
Colorado COLO. REV. STAT. § 39-22-536	Credit	25% of wholesale market price, up to \$5,000 annually	All taxpayers	Agricultural crops (grains, fruit, vegetables), livestock, eggs, dairy	Nonprofit hunger-relief charitable organizations
Colorado COLO. REV. STAT. ANN. § 39-22-301	Credit	25% of wholesale market price, up to \$1,000 annually	C-Corporations	Crops and livestock	Charitable organizations that do not collect money, other property, or services in exchange for product

Legislation	Deduction or credit	Benefit	Eligible donors	Eligible food	Eligible recipients
District of Columbia D.C. CODE § 47-1806.14	Credit	50% of the value of the food commodity donation, up to 2,500 annually	All taxpayers	Food Commodities (vegetables, fruits, grains, mushrooms, honey, herbs, nuts, seeds, or rootstock grown in the District by urban farming or by a community garden)	District of Columbia food banks or shelters recognized as a tax-exempt organization
Iowa IOWA CODE §§ 190B.101-.106, 422.11E, 422.33(30)	Credit	15% of fair market value, up to \$5,000 annually	Taxpayers that produce a food commodity	Any apparently wholesome food	Food banks and emergency feeding organizations
Kentucky KY. REV. STAT. ANN. § 141.392	Credit	10% of fair market value	Taxpayer who derives income from agricultural products	Edible agricultural products	Nonprofit food programs operating in Kentucky
Missouri MO. REV. STAT. § 135.647	Credit	50% of food or cash donation, up to \$2,500 annually	All taxpayers	Cash or food that is not past-date	Local food pantries in the area where the donor resides in MO
Oregon OR. REV. STAT. § 315.154 and 315.156	Credit	10% of wholesale market price	Taxpayer or corporation that grows crops or livestock	Crops and livestock	Food bank or other charitable organization in OR that distributes food without charge
South Carolina S.C. CODE ANN. § 12-6-3750	Credit	\$75 per carcass	Licensed meat packer, butcher, or processing plant	Deer	Nonprofits engaged in distributing food to needy; no portion of deer can be sold
Virginia VA CODE ANN. § 58.1-439.12:12	Credit	30% of fair market value, up to \$5,000 annually	Any person engaged in the business of farming	Food crops (grains, fruits, nuts, or vegetables)	Nonprofit food bank engaged in providing food to the needy; food can be sold to the needy or other nonprofits

Recommendations for State Tax Incentives for Food Donations

As illustrated in the table above, state governments have taken a variety of approaches to encourage food donation. Although the federal government offers general and enhanced deductions, states are better equipped to provide more nuanced tax incentives based on the needs of their constituents.

Offer a tax credit rather than a tax deduction. Eight states and the District of Columbia offer tax credits for food donations, while the federal government and the state of Arizona utilize tax deductions.³⁸ A deduction reduces a taxpayer's taxable income, which is then used to determine the amount of taxes they owe. To illustrate, if a taxpayer is in the 25% tax bracket, a \$1,000 tax deduction would provide \$250 in tax savings.³⁹ However, if a business does not have a lot of income for the year, the deduction is not particularly helpful. By contrast, a tax credit is a direct dollar-for-dollar subtraction from

the amount of taxes the taxpayer owes.⁴⁰ Thus, a \$500 tax credit would reduce the amount of taxes a taxpayer is required to pay by \$500.⁴¹ Recently, Drake University Law School calculated how Iowa's tax credit for food donation (equal to 15% of the donated food's market value, up to \$5,000 a year) compares to Iowa's general charitable giving tax deduction (100% of the food's value, with a cap of 50% of the taxpayer's income).⁴² The study found that the tax credit did a better job of targeting funds at small and medium-sized businesses than the tax deduction.⁴³

Because a tax credit equally benefits taxpayers in low and high tax brackets, it is relatively more generous to small, low-income businesses than a tax deduction would be. The following states serve as models for tax incentives:

- In 2016, the **Virginia** General Assembly established the Food Crop Donation Tax Credit.⁴⁴ The credit is available to individuals and corporate entities engaged in the business of farming food crops and donating such crops to nonprofit food banks.⁴⁵ The amount of the credit is equal to 30% of the fair market value of the crops and no taxpayer is allowed to claim more than \$5,000 in credits each year.⁴⁶
- **California** helps alleviate the costs associated with food donation by offering a tax credit that explicitly covers the costs associated with the transportation of any agricultural product donated to a nonprofit charitable organization.⁴⁷ The tax credit is allowed as a credit against the "net tax" in an amount equal to 50% of the transportation costs paid or incurred by the taxpayer in connection with the transportation of that donated agricultural product.⁴⁸ Because many businesses cite the costs of transporting food items as a key barrier to donation, California's model is worth analyzing for potential applicability.

Because the value of a tax deduction depends on the business' marginal tax rate, a tax deduction favors large, high-income businesses. By contrast, a tax credit can noticeably benefit any farm or business, even those that sit in relatively low tax brackets. A tax credit for food donations is therefore more beneficial to most farms as well as local or regional restaurants and retailers, which tend to be small to medium-sized businesses. A tax credit thus can do more than a tax deduction to encourage businesses to donate. States can utilize a tax credit as a way to target businesses that generally would not be able to benefit, or would not benefit sufficiently, from the federal tax deduction, so as to benefit a wider community of donors.

Place only reasonable limits on the amount that a business can claim through the tax incentive each year.

States differ in several ways in terms of how they limit the size of their tax incentives. One way that they limit the size is by setting a percentage of the value of the donated food that can be claimed. Another way that they vary is by setting different size caps on the total dollar amount that can be claimed by a business in a year.

In terms of the percentage of the value, state tax credits range from 10% to 50% of the donated food's market value.⁴⁹ In terms of the cap, states range from a \$1,000 annual cap to no cap.⁵⁰ To understand how these percentages and caps work, here are a few examples:

- **Missouri** offers the most generous tax credit at 50% of the donated food's market value; however, the total credit available in that state is capped at \$2,500.⁵¹ This means that donors in Missouri only have a financial incentive to donate up to \$5,000 worth of food.
- By contrast, **California's** "Farmer Credit" provides a credit of only 10% of the donated food's value, but is uncapped.⁵²

Because Missouri and California limit the total amount of credit that can be received (by either providing a low percentage of the food's value or a low overall cap), they are not necessarily model states to follow.

As noted earlier, Arizona is the only state that offers a tax deduction instead of a tax credit. Arizona's tax deduction is for the wholesale market price or most recent sale price, or whichever is greater, of the donated food and is not capped at any amount.⁵³ This makes it a generous incentive, and the lack of an annual limit may provide large businesses with substantially more savings than other states' tax credit schemes. However, as discussed above, small or low-margin businesses may benefit more from a tax credit than from a tax deduction like Arizona's, given the low deduction percentage.

As previously mentioned, states vary greatly, and there is no clear recommendation for an appropriate tax credit or deduction size. Data on impact of tax credits in the existing states is limited. For food waste reduction purposes, the larger the benefit, the better. Tax incentives for food donation take money out of the state revenue, but they offer a return on investment in terms of health, nutrition, and the environment. States that are in difficult budgetary situations might experiment with providing a smaller tax incentive at first, and potentially scale it up over time. Alternatively, states may want to start with a higher tax credit, in order to provide a large enough incentive for businesses to put in place the necessary networks, infrastructure, and processes to begin donating food. The state could later scale down the amount of incentive offered, once food donation programs are in place and food businesses realize how easy it is to donate. In order to determine the size of tax incentive and any caps, states should conduct an assessment of their food donation and food waste needs, as well as the state's financial capacity to provide a robust benefit. States may want to consider implementing a cap that is scalable in relation to the size of a business' income, similar to the cap in place at the federal level (15% of the business's taxable income). Providing a progressive tax scale cap can better address the varying sizes of the food producers and allow for a benefit that can grow along with the size, and potential surplus food to donate.



In addition to variation in the annual cap, the method for determining the value of donated food varies from state to state. Most states determine the value of the food donated based on its fair market value.⁵⁴ In California, however, the value of the “Farmer Credit” is determined based on the inventory costs to the farmer, that is to say the costs and indirect costs of producing the donated produce.⁵⁵ Basing the value of the donated food on its fair market value is better for businesses, as it is both more generous (the market value will almost always exceed its inventory cost) and less cumbersome (inventory costs are more difficult to track). When determining what percentage of the donated food's market value to offer as a credit, it may be useful to look at other states' incentives. These incentives range from 10% of the food's market value (Kentucky) to 50% (Missouri).⁵⁶

States can also look to Iowa and Washington, D.C. as models for fair market value:

- **Iowa** offers a tax credit for 15% of fair market value and up to \$5,000 annually to taxpayers that produce a food commodity and donate that food to food recovery organizations.⁵⁷
- The **Washington, D.C.** tax credit is based on 50% of the value of the food commodity donation and up to \$2,500 annually.⁵⁸

Tailor the tax incentive to support donations of the types of foods, or from the types of entities, most applicable to the state. State tax incentives vary significantly in terms of what types of individuals or businesses are eligible to claim benefits. Iowa, Kentucky, and Missouri allow any state taxpayer to claim their tax credits for food donation.⁵⁹ On the other hand, Arizona limits its deduction to restaurants and farmers,⁶⁰ California limits one of its credits to farmers,⁶¹ and Colorado limits one of its tax credits to C-corporations.⁶² Virginia limits its credit to people engaged in farming.⁶³

States should identify the types of taxpayers in their state that are most in need of additional incentives in order to encourage and offset the cost of their donations. In crafting tax incentives, the state should consider the types of businesses they hope to incentivize and support. For example, many farmers struggle to benefit from federal enhanced tax deduction, which leaves room for states to provide additional incentives that can help to support farms and get more fresh, wholesome food to those in need. As some states, like **California** and **Colorado** show, a state can offer two or more separate tax incentives, targeted to different types of food businesses, as this offers flexibility in tailoring the tax incentives for those different entities. For example, one tax incentive might be structured a certain way in order for it to best target farmers, and another might be tailored to restaurants or retailers.

Provide the tax incentive even when nonprofit food recovery organizations charge needy individuals for food. The federal enhanced tax deduction, and most state tax incentives for food donations, are only available to food donors when the food is given away for free to end recipients. For example, Arizona states that food donors can only receive the tax deduction if the food is not transferred by the recipient food recovery organization in exchange for money or other property.⁶⁴ Restrictions like this mean that donors are not able to claim tax incentives when the food recovery organization charges the end recipients for the food, even if they charge a reduced rate. This harms food recovery efforts because it excludes innovative approaches to sell surplus food at deeply reduced prices.

Excluding such models from the tax incentive discourages food donors from donating to these organizations, hampering development of new organizations and constraining existing food recovery organizations from broadening their offerings. For example, some nonprofit organizations are following the model of “social supermarkets,” popularized in Europe, to sell surplus foods in a low-cost grocery.⁶⁵ These organizations can fill a need in communities where individuals are food insecure or lack regular food access, but for various reasons are not willing or able to qualify for government assistance or use a food pantry or soup kitchen. But these are not supported with the majority of tax incentives. Such models also offer the potential for an economically sustainable solution to food recovery because they recognize the labor, storage, and transportation costs of recovering food and allow those costs to be offset by end-user purchases. This means that food recovery organizations can focus on collecting donated food, rather than chasing additional monetary donations to support operational costs.

To encourage these innovative models, states should allow food donors to receive the tax incentive even when they donate to a food recovery organization that charges end recipients, so long as the food recovery organization maintains nonprofit status and distributes its food to those in need. Explicitly stating that the tax incentives are available even when the nonprofit food recovery organization charges for the food encourages donors to donate to them as well as to traditional food recovery organizations. This can help to support the development of innovative food recovery models that provide opportunities to test new approaches to food recovery.

- As an example of how to structure this, in **Virginia**, food donors are eligible for the food donation tax credit even if “the donated food crops, if sold by the donee nonprofit food bank, are sold to the needy, other nonprofit food banks, or organizations that intend to use the food crops to provide food to the needy.”⁶⁶ This explicitly allows for donors to claim the tax credit even if the recipient food recovery organization sells the donated food to end recipients.

Providing tax incentives even when food recovery organizations charge recipients for food creates a favorable climate for innovation in food recovery, and offers the opportunity for a more economically sustainable food recovery model that potentially serves a broader segment of the community.

Offer additional tax credits for transportation and processing costs associated with donating food. The cost of transporting donations from businesses to recipients is a major barrier to food donation. Especially in rural states, farms and other potential donors are often located far from metropolitan areas, meaning transportation costs to food recovery organizations can be substantial. California is the only state that offers tax incentives specifically intended to offset the expenses of transportation.

- **California’s** “Transportation Credit” covers the transportation costs directly associated with donating agricultural products. The credit amounts to 50% of the transportation costs paid or incurred by the taxpayer in connection with the transportation of the donated food.⁶⁷ Transportation is an expensive and very real cost associated with donating food, so providing a tax credit to cover the transportation cost is a significant benefit that helps to incentivize additional food donation.

States can lessen the burden these businesses face by adopting an incentive modeled after California’s. States can also offer incentives to offset the processing costs associated with labor-intensive donated food, like hunted meat or other surplus meat products. South Carolina is the only state that offers tax incentives to defray the processing costs associated with donating food.

- **South Carolina** provides a tax credit for licensed meat packers, butchers, or processing plants that contract with charitable organizations to process deer for donation to needy clients.⁶⁸ The deer in question are typically hunted for sport and would not be eaten, meaning that it does not make sense to compensate the “producers”—in this case, hunters—for donating their surplus animals. Instead, South Carolina’s scheme recognizes that processing costs represent the most significant cost barrier for recovering this particular food source. The tax credit offers licensed meat packers, butchers, and processing plants \$50 per carcass donated in order to recover a large amount of high-value meat for low-income households.

The approaches utilized in California and South Carolina illustrate the possibility of crafting a tax incentive to target specific expenses that may have an outsized effect on food recovery practices. Their unique approaches to tax incentives, which factor in the very real costs of preparing and transporting food for donation, can eliminate major barriers to donating.

Conclusion

Tax incentives for food donations give local farms and food businesses financial incentives that make food donation economically viable for their business, while providing healthy, wholesome food to those in need. States can step in to offer additional incentives that fill gaps where the federal enhanced deduction is not sufficient. Because the right incentive will depend on each state’s unique agricultural and food system, economy, and business conditions, it is vital to consult local stakeholders when structuring any proposal.

Endnotes

¹ See Ronald Fowler & Amy Henchey, *In-Kind Contributions*, INTERNAL REVENUE SERV. 2 (1994), <http://www.irs.gov/pub/irs-tege/eotopice94.pdf>.

² *Id.*

³ See I.R.C. § 170 (2016).

⁴ Jim Larson, *Statement for the Record House Ways and Means Subcommittee on Oversight Joint Hearing on Food Banks and Front-line Charities: Unprecedented Demand and Unmet Need: Joint Hearing Before the Subcomm. on Oversight & the Subcomm. on Income Security & Family Support of the H. Comm. on Ways & Means*, 111th Cong. (2009) (statement of Jim Larson, Program Development Director, Food Donation Connection); Press Release, Congressman Sandy Levin, *Levin and Gerlach Introduce Bipartisan Bill to Encourage Food Donations* (Aug. 1, 2013), <http://levin.house.gov/press-release/levin-and-gerlach-introduce-bipartisan-bill-encourage-food-donations>; *Feeding America Urges Swift Vote On Expired Tax Provisions*, FEEDING AM. (June 8, 2012), <http://www.feedingamerica.org/hunger-in-america/news-and-updates/press-room/press-releases/feeding-america-urges-swift-vote-on-expired-tax-provisions.html>.

5 See H.R. 2029, 114th Cong. § 113 (2016) (to be codified at I.R.C. § 170(e)(3)(C)), <https://www.congress.gov/bill/114th-congress/house-bill/2029>.

6 Food Production and Urban Gardens Program Act, D.C. CODE § 47-1806.14 (2015).

7 Food Crop Donation Tax Credit Act, VA. CODE § 58.1-439.12:12 (2016).

8 See Tax Reform Act of 1969, Pub. L. No. 91-172, § 201, 83 Stat. 487, 555 (1969) (codified as amended at I.R.C. § 170(e)(1)).

9 See Ronald Fowler & Amy Henchey, *In-Kind Contributions*, INTERNAL REVENUE SERV. 2 (1994), <http://www.irs.gov/pub/irs-tege/eotopice94.pdf>.

10 See Tax Reform Act of 1969, Pub. L. No. 91-172, § 201, 83 Stat. 487, 555 (1969) (codified as amended at I.R.C. §§ 170(e)(1), (2)).

11 I.R.C. § 170(e)(1) (2016); *Charitable Contributions: For Use in Preparing 2014 Tax Returns*, I.R.S., DEP'T OF TREASURY (Jan. 13, 2015), <http://www.irs.gov/pub/irs-pdf/p526.pdf> (noting the amount of the deduction is FMV minus the amount of income gained had the product been sold at FMV).

12 A qualified organization includes: the federal government, any state government, or any political subdivision of the government; a corporation, trust, community chest, fund, foundation, that (1) is created or organized in the U.S.; (2) operates specifically for “religious, charitable, scientific, literary, education purposes”; (3) that does not use its net earnings to benefit a private individual; and (4) is tax exempt under section 501(c)(3) of the I.R.C. I.R.C. § 170(c) (2016).

13 I.R.C. §§ 170(b), (c), (e)(3)(c) (2016).

14 I.R.C. § 170(b)(1)(B)(i).

15 I.R.C. § 170(b)(2)(A).

16 See Tax Reform Act of 1976, Pub. L. No. 94-455, § 2135, 90 Stat. 1525, 1928-29, (1976) (codified at I.R.C. § 170(e) (3)); Ronald Fowler & Amy Henchey, *In-Kind Contributions*, INTERNAL REVENUE SERV. 3 (1994), <http://www.irs.gov/pub/irs-tege/eotopice94.pdf>.

17 See I.R.C. § 170(e)(3)(B) (2015).

18 See Tax Reform Act of 1976, Pub. L. No. 94-455, § 2135, 90 Stat. 1525, 1928-29 (1976).

19 Katrina Emergency Tax Relief Act of 2005, Pub. L. No. 109-73, § 305, 119 Stat. 2016, 2025 (codified at I.R.C. § 170(e)(3)(C)).

20 See Tax Increase Prevention Act of 2014, Pub. L. No. 113-295, § 126, 128 Stat. 4010, 4017; American Taxpayer Relief Act of 2012, Pub. L. No. 112-240, 126 Stat. 2313 (2013); Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010, Pub. L. No. 111-312, § 740, 124 Stat. 3296, 3319; Emergency Economic Stabilization Act of 2008, Pub. L. No. 110-343, § 323, 122 Stat. 3765, 3874; Pension Protection Act of 2006, Pub. L. No. 109-280, § 1202, 120 Stat. 780, 1066.

21 H.R. 2029, 114th Cong. § 113(a) (2015) (codified at I.R.C. § 170(e)(3)(C)). The expansion of the enhanced deduction not only applies permanently to all business entities in future tax years, but it also applies retroactively for the 2015 tax year. *Id.*

22 I.R.C. § 170(e)(3)(A) (2015).

23 I.R.C. § 170 (e)(3)(A)(i).

24 There is an exception to the third requirement if the recipient organization charges another organization an amount that is “small or nominal in relation to the value of the transferred property and is not determined by this value” and is “designed to reimburse the [recipient] organization for its administrative, warehousing, or other similar costs.” 26 C.F.R. § 1.170A-4A(b)(3)(ii) (2015).

25 I.R.C. § 170(e)(3)(A)(ii).

26 26 C.F.R. § 1.170A-4A(b)(4) (2015).

27 I.R.C. § 170(e)(3)(A)(iv); see FDCA ch. IV: Food, <http://www.fda.gov/RegulatoryInformation/Legislation/FederalFoodDrugandCosmeticActFDCAAct/FDCAActChapterIVFood/default.htm>.

28 I.R.C. § 170(e)(1).

29 I.R.C. § 170(b)(2)(A).

30 I.R.C. § 170(e)(3)(C)(ii).

31 I.R.C. § 170(e)(3)(C)(ii).

32 I.R.C. § 170(e)(3)(C)(iii)(l).

33 ARIZ. REV. STAT. ANN. §§ 42-5074, 43-1025 (2016); CAL. REV. & TAX. CODE §§ 17053.12, 17053.88 (West 2016);

COLO. REV. STAT. ANN. §§ 39-22-301, 39-22-536 (West 2016); D.C. CODE ANN. § 47-1806.14 (West 2016); IOWA CODE ANN. § 190B.101-.106 (2015); KY. REV. STAT. ANN. § 141.392 (West 2016); MO. ANN. STAT. § 135.647 (West 2016); OR. REV. STAT. ANN. §§ 315.154, 315.156 (West 2016); S.C. CODE ANN. § 12-6-3750 (2016); VA. CODE ANN. § 58.1-439.12:12 (West 2016).

34 IOWA CODE § 422.9(2); 830 MASS. CODE REG. 62.3.2 (2001).

35 CAL. REV. & TAX. CODE § 17053.88.

36 CAL. REV. & TAX. CODE § 17053.12.

37 IOWA CODE §§ 190B.101—106, 422.11E

38 California, Colorado, Iowa, Kentucky, Missouri, Oregon and South Carolina all offer tax credits for food donations. *See, e.g.*, CAL. REV. & TAX. CODE § 17053.12; *see* I.R.C. § 170 (West 2014); ARIZ. REV. STAT. ANN. §§ 42-5074, 43-1025.

39 *See* Elizabeth Rosen, *Tax Credits vs. Tax Deductions*, U.S. Tax Ctr. (Aug. 28, 2013), <http://www.irs.com/articles/tax-credits-vs-tax-deductions>.

40 *Id.*

41 *Id.*

42 *See* Kelly Nuckolls, *Donation Options*, Drake University Law School (2014), <http://www.law.drake.edu/clinicsCenters/agLaw/docs/farmFoodTaxCredit-incomeChart.pdf>; IOWA CODE § 422.9(2) (2014).

43 *Id.*

44 Food Crop Donation Tax Credit Act, Va. Code § 58.1-439.12:12 (2016).

45 Food Crop Donation Tax Credit Act, Va. Code § 58.1-439.12:12.

46 Food Crop Donation Tax Credit Act, Va. Code § 58.1-439.12:12.

47 CAL. REV. & TAX. CODE § 17053.12.

48 CAL. REV. & TAX. CODE § 17053.12.

49 ARIZ. REV. STAT. ANN. §§ 42-5074, 43-1025; CAL. REV. & TAX. CODE §§ 17053.12, 17053.88; COLO. REV. STAT. ANN. §§ 39-22-301, 39-22-536; IOWA CODE ANN. § 190B.101-.106; KY. REV. STAT. ANN. § 141.392; MO. ANN. STAT. § 135.647; OR. REV. STAT. ANN. §§ 315.154, 315.156.

50 KY. REV. STAT. ANN. § 141.392; CAL. REV. & TAX. CODE § 17053.88. This is a cap on the credit taken, not the value of the food donated. In Colorado, which offers 25% of the donated food's market value as a credit with a \$5,000 annual limit, a business can donate \$20,000 worth of food each year before reaching the cap. COLO. REV. STAT. ANN. § 39-22-301.

51 MO. ANN. STAT. § 135.647.

52 CAL. REV. & TAX. CODE § 17053.88.

53 ARIZ. REV. STAT. ANN. § 43-1025 (2016)

54 ARIZ. REV. STAT. ANN. § 43-1025; COLO. REV. STAT. ANN. § 39-22-301; KY. REV. STAT. ANN. § 141.392.

55 *New Legislation – Credit for Fresh Fruits or Fresh Vegetable Donations*, CA Franchise Tax Bd. (Feb. 2012), https://www.ftb.ca.gov/professionals/taxnews/2012/February/Article_6.shtml.

56 ARIZ. REV. STAT. ANN. § 43-1025; KY. REV. STAT. ANN. § 141.392; MO. ANN. STAT. § 135.647.

57 IOWA CODE §§ 190B.101-.106, 422.11E.

58 D.C. CODE ANN. § 47-1806.14.

59 *See* IOWA CODE ANN. §§ 190B.101-.106 422.11E, 422.33(30); KY. REV. STAT. ANN. § 141.392; MO. ANN. STAT. § 135.647.

60 ARIZ. REV. STAT. ANN. §§ 42-5074, 43-1025.

61 CAL. REV. & TAX. CODE § 17053.88.

62 COLO. REV. STAT. ANN. § 39-22-301.

63 VA. CODE ANN. § 58.1-439.12:12.

64 ARIZ. REV. STAT. ANN. § 43-1025.

65 Serri Graslie, *Social Supermarkets A 'Win-Win-Win' For Europe's Poor*, NPR (Dec. 13, 2013); Rebecca Smithers, *UK's first 'social supermarket' opens to help fight food poverty*, The Guardian (Dec. 8, 2013).

66 VA. CODE ANN. § 58.1-439.12:12(c).

67 CAL. REV. & TAX. CODE § 17053.12.

68 S.C. CODE ANN. § 12-6-3750 (2016).

Section III: Date Labeling

Date labels on food products are generally intended as indicators of food quality, not food safety. With the exception of infant formula, the federal government does not regulate date labels on food products. Regulation has therefore been left to the states, resulting in inconsistent policies—no two states have the same rules regarding date labels. States and local governments can play a significant role in reducing food waste by clarifying the meaning of date labels and raising awareness among consumers that these dates are primarily intended as indicators of freshness and quality.

Overview

Date labels are the dates stamped onto food items and accompanied by phrases such as “sell by,” “use by,” or “best by.” These dates are generally intended to communicate food quality, not food safety, but nevertheless exert a powerful influence on consumers and food vendors. This section begins with a brief introduction to the effect of date labels on decisions to dispose of food and opportunities to donate surplus food. Next, it presents an overview of the current state of the law surrounding food labeling: federal law generally does not regulate date labels, and states have widely varying regulations that are not grounded in food safety science. It then presents recommendations for how states and local governments can strengthen their date labeling laws, notably by standardizing date labeling language, eliminating bans on sales or donations of past-date products, and conducting education programs about the true meaning of date labels.

- 1. Introduction** The wording used on date labels varies widely, leading to confusion about their meaning. Consumers are often confused by date labels and equate them with food safety, when in actuality such labels are generally intended as indicators of quality. The uncertainty surrounding date labels leads to wasteful behaviors, hungry individuals, and overflowing landfills.
- 2. Federal and State Regulation of Date Labels** Federal law generally does not regulate date labels. In the absence of federal regulation, many states have enacted their own date labeling laws. This section describes the current federal law, as well as the varied ways in which states have chosen to regulate by requiring date labels on certain products and restricting the sale of certain past-date foods.
- 3. Strengthening State and Local Date Label Laws** State and local governments should work to strengthen date labeling laws, as doing so can reduce inconsistency, confusion, and food waste. States are well positioned to impact food waste by standardizing date labels and eliminating bans on the donation or sale of past-date foods.
- 4. Supporting Date Label Education** Consumers are generally confused about the meaning behind date labels. State and local organizations can support better decisions at stores, food banks, and households by providing date label guidance that debunks the myths surrounding date labels.

Introduction

Date labels are dates that are applied to food products and accompanied by prefixes such as “sell by,” “best before,” “use by,” and “freeze by.” Unbeknownst to many consumers, these phrases have different meanings. Generally, these meanings can be placed into the following categories: “produced on” or “packed on” dates, which provide the date on which the food was manufactured or packaged; “sell by” or “pull by” dates, which communicate information from manufacturers to retailers for stock control purposes; “best if used by,” “use by,” or “enjoy by” dates, which provide the last date that food will be at or near peak quality; and “freeze by” dates, which serve to remind consumers that shelf life can be extended through freezing. The number of possible terms is nearly limitless. Following a survey of its private label suppliers, Wal-Mart discovered 47 distinct date label types on its private label products alone!¹ The absence of federal date label law means there are no regulations regarding the use of these terms or standardizing their meanings.

Not surprisingly, consumers are generally confused about the meaning of these labels. Though the majority of consumers believe consuming food past the date presents a safety risk,² the truth is that date labels generally are not intended to indicate a food product’s safety. They are intended as indicators of a food’s quality.³ These dates are generally set by the manufacturer based on an estimate of when the food will still taste fresh, so that consumers will have the best experience of the product.

Survey Says...

- 37% of Americans report always or usually throwing away food that is close to or past the date on the package, and 84% report doing so at least occasionally.
- Consumers ages 18-34 are most likely to discard food based on its date label, while consumers over the age of 65 are least likely to do so.
- Over a third of Americans incorrectly believe that the federal government regulates date labels.

Source: Emily Broad Leib, Christina Rice, Roni Neff, Marie Spiker, Ali Schklair & Sally Greenberg, *Consumer Perceptions of Date Labels: National Survey (May 2016)*, http://www.chlpi.org/wp-content/uploads/2013/12/Consumer-Perceptions-on-Date-Labels_May-2016.pdf.

Research shows that consumers rely on food labels in deciding whether or not to throw food away. According to a 2016 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 percent of consumers always throw away food close to or past the date on its label, and 84 percent throw such food away “at least occasionally.”⁴ Similarly, a survey conducted by the Food Marketing Institute found that 91 percent of consumers had at least occasionally thrown away food after the date due to safety concerns.⁵

In addition to consumer confusion, state and local regulators seem to be confused as well. As described in more detail below, many states enacted laws requiring date labels on certain food products or restricting sale or donation of products past the date. Yet no two states have the same law, lending evidence that these laws are not based in science or sound public policy.

Consumer confusion, combined with state laws that in some cases mandate food be thrown away past the date, results in significant waste of healthy, wholesome food that could be avoided with clearer, more uniform date labels and sensible state laws. ReFED found that standardizing date labels nationally was the most cost effective solution to this country’s food waste problem. Because so much food is wasted due to date label confusion, simply standardizing date labels would divert 398,000 tons of food waste per year and provide \$1.8 billion per year in economic value.⁶ While ReFED’s report looked at the opportunity for changes to federal date label law, there is much that states can do in the absence of supportive federal law to reduce date label confusion and prevent unnecessary waste.

Federal and State Regulation of Date Labels

Under current federal law, date labels remain almost entirely unregulated. Two main federal agencies regulate food safety and labeling—the U.S. Food and Drug Administration (FDA) and the U.S. Department of Agriculture (USDA). In the FDA’s own words, the agency “does not require food firms to place ‘expired by,’ ‘use by’ or ‘best before’ dates on food products,” but instead leaves that information “entirely at the discretion of the manufacturer.”⁷ In fact, the FDA has said that it does not regulate date labels because these labels are not related to safety.⁸ The sole exception is infant formula, which is required to bear a “use by” date indicating the date at which the nutrient content may begin to decline.⁹

The USDA (which regulates meat, poultry, and certain types of eggs)¹⁰ also does not require date labels on products under its purview,¹¹ with several exceptions. These exceptions include a required “pack date” for poultry,¹² certain labeling requirements for USDA-certified egg products,¹³ and technical requirements for manufacturers whose products do feature date labels, either on a voluntary basis or because such labels are required under state law.¹⁴ Proposed federal legislation introduced in 2016 would, for the first time, mandate standard date labels in food products, distinguishing between a standard quality-based date label and a standard safety-based date label.¹⁵ However, barring passage of this legislation, federal law does not have much to say about date labels.

With no federal standards to unify the country’s date labeling practices, states have filled the void with a variety of date labeling regulations. However, these date label regulations vary widely, and often fail to reflect the distinction between food safety and food quality. They often unnecessarily restrict past-date sale or donation of foods, even when such foods are still healthy and safe to consume.

State-Level Date Labeling Regulations

Generally, state date labeling laws fall into one of four date labeling categories:

1. States that regulate date labels on some foods (shellfish is the most commonly-regulated food), but do not regulate the sale of goods after those dates have passed.
2. States that do not regulate date labels, but do regulate sales once manufacturers voluntarily choose to use date labels.
3. States that regulate both date label presence and product sale after the dates have passed.
4. States that do not require or regulate labels.

Source: *The Dating Game: How Confusing Food Date Labels Lead to Food Waste in America*, HARVARD FOOD LAW AND POLICY CLINIC AND NATIONAL RESOURCES DEFENSE COUNCIL, at 12-15 (2013), <http://www.chlpi.org/wp-content/uploads/2013/12/dating-game-report.pdf>.

Currently, 41 states and the District of Columbia require at least some foods to have date labels.¹⁶ Of these, 20 states and the District of Columbia also restrict sales past the date.¹⁷

Below is a sampling of state regulations, illustrating the arbitrary variability that currently exists across the United States:

- **Vermont** requires a “sell by” date only on shellfish products, and does not restrict the sale of these products after the date.¹⁸
- **Connecticut** only requires date labels on dairy products, and does not restrict the sale of these products after the labeled date.¹⁹
- **Michigan** requires date labels on pre-packaged perishable foods²⁰ and dairy products,²¹ and restricts the sale of both of these items²²—as well as meat²³—once the labeled date has passed.
- **Montana** requires that milk be labeled with a “sell by” date of 12 days from the date of pasteurization, and bans the sale or donation of milk after that date.²⁴
- **New York** does not require date labels on any food products, and does not regulate the sale of past-date foods.²⁵

In addition to state governments, some local governments have imposed their own date label regulations. For example, the city of Baltimore bans the sale of perishable foods past their dates, despite the fact that the state of Maryland only regulates date labels for milk.²⁶

Strengthening State and Local Date Label Laws

Existing state and local date label regulations are confusing and inconsistent. Though federal legislation standardizing these date labels would address the issue comprehensively, states can take incremental steps toward clarity and uniformity that would reduce food waste. By standardizing date labels on products sold within the state and eliminating bans on the donation or sale of past-date foods, states can make date labels comprehensible to consumers and avoid the systematized waste of safe and wholesome foods.

Eliminate confusion by standardizing date labels. The staggering variety of date labels inevitably results in consumer confusion. Creating uniform date label language would effectively and efficiently address this problem.

While the majority of food products bear date labels indicating quality, there are a small handful of foods—products like deli meats and unpasteurized cheeses—for which safety risks increase after the date. Any system of standardized date labels should clearly distinguish between dates that refer to food quality and dates that refer to food safety. With regard to quality-based date labeling, manufacturers who choose to label their foods should be required to use one standard phrase. Multiple surveys, including one conducted by the Harvard Law School Food Law and Policy Clinic, the National Consumers Institute, and the Johns Hopkins Center for a Livable Future,²⁷ and another conducted by Wal-Mart,²⁸ found that “best if used by” is the phrase consumers most commonly associate with food quality.

The small subset of foods for which the safety risk increases after the date should bear a separate label, in order to help consumers differentiate between quality and safety. The Harvard, National Consumers League, and Johns Hopkins survey mentioned above found that “expires on” is the phrase that consumers most commonly associate with food safety.²⁹ Because these labels will correspond to food safety and not merely quality, states should then allow for past-date sale and donation of quality-dated foods, but can choose whether to restrict sale of goods after the safety date has passed.

A recent California bill provides a strong model for state efforts to standardize date labels. The bill, introduced by Assembly

member David Chiu, would have created a single quality-related food label (using the term “best if used by”) and a single safety-related food label (using the term “expires on”).³⁰ Although the bill failed to pass the Assembly Health Committee,³¹ it demonstrates a growing awareness that states can and should take legislative action to address the inconsistencies and confusion arising from prevailing date labeling practices.

Change laws to eliminate bans on donating or selling past-date foods. Because date labels are generally unrelated to food safety, the 20 states (and the District of Columbia) banning the donation or sale of past-date, wholesome foods should reform their policies in order to allow such foods to be sold or donated.³²

Montana, for example, bans the sale or donation of milk 12 or more days after pasteurization.³³ This regulation is in place despite the fact that milk is pasteurized, which means harmful pathogens have been eliminated and the milk should be safe well after the date. Further, the industry standard is to date milk 21 days past pasteurization,³⁴ nearly twice as long as the time allowed in Montana. As a result, thousands of gallons of safe-to-drink milk get thrown away each week.³⁵ By eliminating its ban on the sale of past-date milk, a ban that is not supported by science, Montana could help reduce milk waste while allowing wholesome products to end up in the hands of those who want them.

New York City, New York provides an example of a government choosing to eliminate unnecessary date labels. New York City used to require dates on milk, even though the state of New York imposes no date labeling requirements on any foods. The city repealed its date labeling requirement for milk in 2010, harmonizing with the regulations of the state.³⁶ The City recognized that its date label requirement was not necessary to protect public health because milk, if handled properly, is still safe to consume even after the date passes (and if handled improperly, the date is irrelevant in any case). The City also noted that New York State had not reported any “adverse public health effects, poor milk quality or a decrease in milk demand” arising from its hands-off approach to date labels.³⁷

Furthermore, once states ensure they allow past-date food donations, they should make sure their policies on the matter are clear, so that food donors, food recovery organizations, and health inspectors are fully informed and allow the donation of safe, past-date foods. One way to do this is to publish state guidance explaining what date labels mean and clarifying that food can be sold or donated past the date. The other is to explicitly provide that donated past-date food is subject to liability protection in the state Good Samaritan statute. For example, the **Massachusetts** Good Samaritan law, which provides for liability protection for any food donor or nonprofit food recovery organization that helps distribute food to those in need, specifically mentions that the protection extends to food that is past its date.³⁸ See Section I: Liability Protection for Food Donations for more information on this and other liability protection laws.

Supporting Date Label Education

Because of the confusion and inconsistency surrounding date labels, state and local agencies should provide guidance and education to consumers, food vendors, food donors, and state and local agencies about what these dates mean. Educational tools can come in the form of date labeling information on state agency websites, legal factsheets outlining state and federal date labeling law, or any other easily-accessible, comprehensible explanation of the true meaning of date labels and the corresponding state laws.

Some states have already made efforts to educate consumers about the intersection between date labeling and food waste.

- The **Connecticut** Department of Energy and Environmental Protection has posted an easy-to-use legal factsheet on date labeling on its website.³⁹
- **Vermont** created a guidance document for food donation that clarifies that date labels signify the quality of a product, not the safety.⁴⁰
- The **Florida** Department of Agriculture and Consumer Services disseminated a handout explaining that date labels are generally not regulated and are not indicators of safety.⁴¹
- **San Diego County, California** published an FAQ on the meaning behind date labels to explain the date labeling system within the county.⁴²

Educational Resources

- “The Dating Game:” This report, published by the Harvard Law School Food Law and Policy Clinic and the National Resources Defense Council, gives a comprehensive overview of date labeling rules and practices that currently exist across the United States.
- “EXPIRED”: This short film, released by the Harvard Food Law and Policy Clinic and Racing Horse Productions, discusses how state date labeling laws and consumer confusion contribute to the problem of food waste.
- The USDA FoodKeeper App: This application can be accessed online and downloaded onto Android and Apple phones; it helps consumers understand the length of time assorted foods and beverages can be stored. It is organized by category and subcategorized by food product, and includes detailed explanations about how long foods stay fresh.

Sources: *The Dating Game: How Confusing Food Date Labels Lead to Food Waste in America*, HARVARD FOOD LAW AND POL’Y CLINIC AND NAT’L RES. DEF. COUNCIL (2013), <http://www.chlpi.org/wp-content/uploads/2013/12/dating-game-report.pdf>; *Expired?: Food Waste in America*, HARVARD FOOD LAW AND POL’Y CLINIC & RACING HORSE PROD. (2016), <http://notreallyexpired.com/watch-the-film/>; *FoodKeeper App*, FOODSAFETY.GOV (Sept. 28, 2016), <https://www.foodsafety.gov/keep/foodkeeperapp/>.

Conclusion

The federal government provides virtually no regulations for date labels. States are left to decide independently whether to regulate date labels. The result is a disjointed, inconsistent system severed from scientific evidence about food safety. States can increase consumer understanding and decrease food waste by enacting legislation to standardize date labels and permit the sale and donation of wholesome past-date foods. When combined with educational efforts, such changes could make a sizeable impact on the nation’s food waste.

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Section IV: Food Safety for Food Donations

Food donors and food recovery organizations must comply with food safety regulations. These regulations often do not directly address food donation, and can be difficult to navigate for food donors and health inspectors alike. To facilitate increased food recovery, state and local actors should create better and more consistent food safety regulations, produce guidance on those regulations for food donations, and prepare health inspectors to serve as food donation advocates.

Overview

This section presents a brief introduction to the barriers that food safety regulations create for food donors and food recovery organizations. It then provides background information on the role of the federal government in creating resources and tools for food safety regulations for food establishments, and how state and local agencies regulate food safety for food establishments. This section concludes with several recommendations for steps state and local government actors and advocates can take to increase food recovery.

- 1. Introduction** Food donors and the organizations to which they donate must comply with food safety regulations. These regulations can serve as barriers to food donations because donors and recipients find it challenging to discern which regulations apply to donated food. Donors often lack sufficient time and resources to devote to navigating regulations beyond those they already deal with in their daily business. They also fear potentially causing illness, taking on unnecessary liability risks, or getting into trouble with health inspectors if they are out of compliance.
- 2. Federal Food Safety Regulation** The federal government inspects food manufacturing facilities, but does not inspect or regulate food safety for food establishments. However, it does have a large impact on the way that state and local governments regulate these entities. The federal government produces model food safety language in a document called the FDA Food Code. State and local governments chose to use the FDA Food Code as a basis for their food safety regulations. With regard to food donation, the FDA Food Code is flawed, as it does not provide guidance on the topic. This means most states do not have specific, clear guidance on food donation.
- 3. State and Local Food Safety Regulation** States regulate food safety for food establishments, and typically do so through their health or agriculture departments. They often share this regulatory authority with local health departments as well. Food donors and food recovery organizations must comply with the food safety regulations for their location, which may include both state and local layers of regulations.
- 4. Recommendations for Breaking Down Food Donation Barriers Created by Food Safety Regulations** There are several actions that advocates can suggest, and that state and local legislators and regulators can take, to remove the barriers to food donation erected by food safety regulations. States can improve their food safety regulations to be more donation-friendly, agencies can develop guidance to provide clarification to donors, and health inspectors can be empowered to support food donations.

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, depending on the structure of that state’s agencies and how they have chosen to allocate regulatory authority. Food donors and food recovery organizations often have trouble figuring out which food safety regulations apply to the food they wish to donate or distribute. Meanwhile, health inspectors typically lack the ability or resources to help them figure it out. This confusion results in food being wasted rather than recovered.

Food establishments already must navigate food safety laws for their daily food service. Thus, they are already familiar with the importance of complying with food safety laws and meeting the expectations of their health inspectors. However, in order to donate food in a manner compliant with all relevant food safety laws, they need to identify the food safety laws that apply to donated food.

Unfortunately, this can be a challenging process. Many state food safety codes do not have a separate donation-specific section. This is because the Food and Drug Administration (FDA) Food Code,¹ upon which many state food codes are based, does not have a donation-specific section. As a result, potential donors must sort through the full food safety code and figure out which pieces apply. Determining which food safety laws apply to donated food can be particularly challenging

“...Lawsuits arising out of the donation or provision of recovered food are extremely uncommon. Indeed, a thorough search of filings and review of reported decisions did not turn up a single case that involved food donation-related liability or any attempts to get around the protections offered by the Bill Emerson Act. Additionally, several leading food recovery experts and antihunger advocates report that they are unaware of any such actual or threatened lawsuits.”

Source: *Food Recovery: A Legal Guide*, UNIV. OF ARK. SCHOOL OF LAW LLM PROGRAM IN AGRIC. & FOOD LAW 3 (2013) <http://law.uark.edu/documents/2013/06/Legal-Guide-To-Food-Recovery.pdf>.

for donors that operate in multiple locations or that wish to donate outside their geographical area. The rules vary greatly and sometimes in ways that contradict each other from state to state and often from city to city. It can be a daunting task for a food donor to make sure they are in compliance with all of the rules.

This burden of figuring out which food safety regulations apply to donated food is compounded by the fact that health inspectors are often unable to answer questions about food donations. Health inspectors typically serve as the liaison between food establishments and food safety regulations, but because health inspectors do not usually have a great amount of information or training on food donation, they are unable to provide useful guidance. Health inspectors are often unable to assist potential donors because the relevant food safety regulations do not specifically mention donation, and existing regulations often present ambiguities that health inspectors are hesitant to resolve without guidance. When confronted with an unfamiliar topic like food donation, many food businesses report that health inspectors, who have been trained to be risk-averse and who are not equipped to advise on how to donate safely, often err on the side of discouraging food donation.

Keeping the recipients of donated food safe is the most important reason that donors must comply with food safety regulations, but there are scant examples of recipients of donated food becoming ill from the food. Bill Reighard, President of Food Donation Connection (FDC), which supports food establishments in the donation of prepared food items, says, “Since FDC’s beginning in 1992, we have coordinated over 500 million pounds of surplus prepared food donations without a single food-borne illness incident.”² Donors must also be in compliance with all federal, state, and local “quality and labeling standards” in order to qualify for federal liability protections from the federal Bill Emerson Good Samaritan Act,³ and historically this has not been a problem for food donors. A thorough survey of filings and reported decisions, conducted by the Food Recovery Project at University of Arkansas School of Law, found no cases or pending litigation involving food donation liability.⁴ Clarifying food safety regulations for food donation can help ensure that food continues to be donated safely, while also ensuring that food safety rules for food donation are clearer and more accessible to donors.

The lack of clarity around which safety regulations apply to donated food, coupled with the inadequacy of health inspectors’ training and resources on food donation, leads to the waste of safe and wholesome food that could be donated. These food safety-based challenges present several opportunities for improved regulations, clarification and guidance on those regulations, training, and resources to help increase the recovery of safe, wholesome food.

Federal Food Safety Regulation

The federal government does not regulate food safety for food establishments such as restaurants, institutional kitchens, and retail food stores. That is because these entities sell food within states, and the federal government only has the power to regulate food that is traveling in interstate commerce. As a result, states are responsible for regulating and enforcing food safety regimes for food establishments within their borders.

Even though there are no federal laws on food safety for food establishments, the federal government supports the food safety regulatory process for these entities by publishing documents such as the FDA model Food Code. The FDA is the federal agency tasked with protecting the public health by “assuring the safety, efficacy, and security of...the nation’s food supply.”⁵ The FDA’s model food code and reference document is called the FDA Food Code. The FDA Food Code

consists of rules and guidance to control the practices in kitchens that can result in foodborne illness.⁶ It is updated every four years, most recently in 2013.⁷ Local, state, and tribal governments use the FDA Food Code as a model to ensure their own food safety rules are up-to-date with the best food safety evidence.⁸

The FDA Food Code is not binding law unless a state or local government chooses to adopt it as such by passing a statute or by incorporating it into regulations.⁹ However, all fifty states have voluntarily built their food codes on some version of the FDA Food Code,¹⁰ in large part because it was written by an array of experts and represents a considerable investment of resources that states may not have the means to duplicate.¹¹

Because the FDA Food Code is not law and adoption of all or part of it is entirely voluntary, states that adopt it are free to modify it in any manner they see fit. However, because so many states have chosen to wholly adopt it or use it as the foundation of their food codes, the problems and deficiencies in the FDA Food Code end up in many state food codes. This is a problem for food donations, because the FDA Food Code does not have a specific section where all rules applicable to food donation are collected in one place. As a consequence, many states also do not have a donation-specific section in their state food code. This leaves individual food donors and food recovery organizations, as well as health inspectors, to discern which food safety regulations are relevant for their particular food recovery plans and to navigate ambiguities on their own. If the FDA Food Code had a specific section on food donation, that section would likely end up in the food codes of every state that adopted the language from the FDA Food Code; this would clarify to food donors and recipient organizations which food safety regulations are relevant to food donation, help to reduce barriers to donation, and in turn, help increase food recovery.

Comprehensive Resource for Food Recovery Programs

In the late 1990s, the USDA and FDA responded to stakeholder inquiries about safe practices in food recovery programs by creating the document now known as the Comprehensive Resource for Food Recovery Programs. The Comprehensive Resource is “intended to assist all stakeholders, whether new or existing, involved in the recovery, distribution or service of food to people who live their lives insecure about where their next nutrition meal will come from.” It includes guidance on the relevant food safety rules for food recovery programs, a breakdown of food recovery programs’ responsibilities, and sample forms such as a Sample Foodhandler/Volunteer Illness Agreement for Reporting Illness. Like the FDA Food Code, the Comprehensive Resource is not binding law and is only intended to be a supportive tool.

The Comprehensive Resource was most recently updated in April of 2016 and represents a significant federal effort to support increased food donations by making the process easier.

Source: Comprehensive Resource for Food Recovery Programs, CONFERENCE FOR FOOD PROT. (2016), <http://www.foodprotect.org/media/guide/comprehensive-resource-for-food-recovery-2016-version.pdf>.

State and Local Food Safety Regulation

Although the federal government provides guidance via the FDA Food Code, individual states are responsible for regulating the safety of food establishments. This regulatory authority is structured differently in different states. States may designate their public health department, their agriculture department, or both to regulate food safety in food establishments. In some states, the state agency or agencies regulating food safety share regulatory authority with local health departments. In such states, the state agency implements food safety regulations that apply statewide, but local health departments are charged with interpreting and enforcing those regulations, and may also implement stricter local regulations. As a result, food donors and food recovery organizations sometimes must comply with food safety regulations that are put out both by state and city or county agencies. Below are a few examples of ways states have chosen to allocate this regulatory authority:

- **Massachusetts:** The state’s Department of Public Health shares authority with 351 local health departments. Food donors and food recovery organizations must comply with the regulations made by the Massachusetts Department of Public Health and the local health department where they are located.¹² Health inspections are conducted by employees of the local health departments.
- **Mississippi:** The state’s Department of Health controls food safety regulations. Food donors and food recovery organizations must comply with those state-level regulations.¹³ Inspections are conducted by regional and local

employees of the state Department of Health.

- **Tennessee:** Tennessee uses state authority in some areas and local authority in others. State health authority is divided between the Department of Agriculture, which regulates retail stores, and the Department of Health, which regulates restaurants.¹⁴ The relevant state agency conducts inspections in some parts of the state, such as rural and incorporated areas, while local health departments have local regulations and conduct inspections in certain metropolitan areas.¹⁵

If a food donor is located in a state that shares regulatory authority with a local health department (like Massachusetts), then the donor must seek out and comply with both the local and state regulations. The FDA has compiled a chart with the food safety codes and regulations for each state, which is a useful starting place for potential food donors.¹⁶ The Association of State and Territorial Health Officials and the National Opinion Research Center at the University of Chicago published a report about understanding the relationship between state and local health departments, including a profile of each state's allocation of authority.¹⁷ Both of these are useful starting places for food donors working to figure out which regulations apply to them. However, the number of states with regulations specifically mentioning food donations is very low.



Recommendations for Breaking Down Food Donation Barriers Created by Food Safety Regulations

The lack of clear, science-based food safety regulations for food donations creates confusion among potential food donors, but there are several concrete steps that state and local legislators and regulators, as well as activists, can take to change the food safety landscape to make it more conducive to food donations.

States should improve their food safety regulations to make them more donation-friendly. States can improve their food safety regulations by gathering all food safety regulations for food donation into one section of the code, clearly indicating what types of foods may be donated, and making food safety regulations uniform across the entire state. Increased consistency and accessibility of relevant regulations will make it easier for potential donors to start donating. State legislators, agency regulators at the state or local level, and activists can all work to improve food safety regulations in these ways.

States should incorporate a specific food donation section into their state food safety regulations. Because states choose either to wholly adopt or pattern their food safety regulations on the FDA Food Code, states end up without a

donation-specific section in their food safety regulations. The consequence of this dearth of information on donations is that food donors and health inspectors are confused, and thus food is unnecessarily wasted. Incorporating into state regulations a designated area where all of the relevant food safety rules are compiled sends a powerful message that the state government supports food donation, removes the burden from the donor of hunting down the relevant regulations, and provides a roadmap to health inspectors about how to address food donations.

States should pass regulations that explicitly state what foods can be donated. Donors often have foods that can be donated, but cannot find any specific reference to them in the food safety regulations. This ambiguity causes donors to fear that they should not donate such food. Certain food categories cause the most anxiety, like prepared foods or past date foods. To encourage food donation, states should identify specific food items that are frequently not donated due to donor confusion and make clear in regulations that these specific food items can be donated.

- **Washington** passed regulations that clearly state that certain types of foods—wild game animals, baked goods from residential kitchens, and foods prepared in a donor kitchen—can be safely donated.¹⁸
- **Minnesota** passed regulations that detail how distressed food, such as food that has been damaged by fire, flood, or adverse weather, can be salvaged for donation. This prepares donors who end up with distressed foods to know what steps to take to donate those items.¹⁹
- **Massachusetts** has a bill pending to clarify that food service establishments can donate leftover edible cooked food and perishable food to pantries and shelters.²⁰ While the law already allows such food to be donated, this explicit language can assuage concerns about the donation of prepared foods, which is a category of foods that is often not donated due to donor or health inspector concerns. The Massachusetts bill shows government support for such donations and specifies that donors can receive tax deductions and liability protection for such donations.

Regulations that apply to donated foods should be as uniform as possible across the state. Food donors cite the lack of uniformity in regulations or in regulatory interpretations as a major barrier to donating, particularly when they operate across cities or counties where the regulations differ. Dealing with different sets of regulations or differing health department interpretations means donors are required to spend time and resources identifying and keeping track of all of them to ensure they are in compliance. Intentionally creating a uniform regulatory framework for donated food that applies across an entire state, where possible, will make it much easier for donors to donate. Providing clear state regulations on food safety for donations, as discussed above, can help circulate accurate food safety information so local health departments can streamline their requirements and only include unique regulations when there is a specific local concern.

The state or local agency that implements food safety regulations should produce and disseminate clarifying guidance. The agency that issues food safety regulations should produce guidance to support potential food donors. Guidance can serve to express the government's support for food recovery, make clear which safety regulations are relevant for food donation (whether or not a specific section of the regulations addresses food donations, as recommended above), clarify ambiguities that come up for food donors, and help reduce the lack of uniformity among health inspectors' understandings of food donation. Agency-produced guidance is particularly useful when the state legislature has not yet implemented the changes suggested above.

Agency food donation guidance should facilitate donation by clarifying the food recovery landscape for donors. When regulations are ambiguous, potential donors tend to err on the side of caution and avoid donating even perfectly safe food, often because they do not know what food safety precautions they must take or whether certain foods may be safely donated. Agency-produced guidance documents can play a clarifying role when there are ambiguities in legislation, and can serve as a roadmap for food establishments that hope to make donations. In order to best facilitate donation, agency guidance should clearly detail all of the food safety regulations that apply to food donations, including liability protections available for food donors. It should specify what foods may be donated safely, and lay out some best practices for food donation. Making such guidance readily available to food establishments will improve food recovery by taking the mystery out of the food donation process.

- **New York City, New York** produced an easy-to read guide titled “Simple Steps to Donate Your Healthy Surplus: A Guide for Food Donors.” It contains contact information for food recovery organizations in NYC, information on the liability protections donors receive, food safety instructions, and answers to frequently asked questions that directly address donors’ concerns.²¹
- **San Diego County, California** produced a “Too Good to Waste!” guide which includes sections on food handling rules for how to donate food safely, such as required temperatures for cooling down cooked food.²² They also produced an easy-to-use safe food handling food donation checklist.²³
- The **Washington County, Oregon** Department of Health and Human Services has produced a useful piece of guidance for restaurants on donating food.²⁴ It includes a list of foods that can and cannot be donated, information for labeling foods that will be donated, information on keeping logs, and contact information for when questions arise. This guidance is a great model for state and local agencies that wish to develop their own similar handouts.
- The **Washington** State Department of Health’s guidance says, “[l]icensed food establishments are encouraged to donate surplus foods” and, “[f]ood processors are encouraged to donate foods that may not meet their specifications for reasons that do not affect food safety, such as package printing errors.”²⁵ This explicit health department support for donations can help potential donors feel confident participating in food donations.²⁶

Food donation guidance should be produced in partnership with food recovery organizations. When a city or state agency works in collaboration with organizations that are on the front lines of food recovery to create regulations and guidance, the end product will reflect the needs and goals of food recovery organizations as well as respond to nuances with which city and state agency officials may not be familiar.

- The **Minnesota** Department of Health put out a guidance document on food safety for onsite feeding locations, food shelves, and food banks.²⁷ Minnesota produced the document in partnership with food recovery organizations, which helps ensure that the document has a pro-donation angle and that it speaks to the unique concerns of potential food donors.

If the State or local food safety agency does not take the initiative to create guidance, another state agency could take the lead on creating guidance. That agency could coordinate with the health department or health inspectors to ensure the guidance is legally and scientifically accurate.

- The **Massachusetts** Department of Environmental Protection, in partnership with the Center for EcoTechnology and its RecyclingWorks program, has produced a guide for the best managements practices on food donation. It has been vetted by the Massachusetts’ Department of Public Health and accurately reflects Massachusetts food safety regulations, as well as best practices for donating food.²⁸ This guide is disseminated to interested potential donors online and via trainings, presentations, and direct technical assistance to help donors create well-structured food recovery programs.

Health inspectors should receive training on safe food donation and be equipped with resources that empower them to serve as food donation ambassadors. Food establishments undergo regular health inspections to ensure consistent compliance with food safety regulations. These regular inspections position health inspectors as the main liaison between food donors and the state or local food safety regime. Because health inspectors are already in consistent contact with potential donors via their periodic health inspections, they represent an efficient messenger to spread information, clarity, and encouragement around food donations.

Health inspectors should be ambassadors for increasing food recovery. Towards this end, health inspectors can bring copies of a donation-specific guidance document with them when they do inspections. This would encourage businesses to think about food donation and ensure that inspectors have donation-specific rules at the ready, should a facility indicate that it wants to begin donating food.

- The 2011 Food Donation Policy of the **Wyoming** Department of Agriculture includes instructions to health department inspectors. “Inspectors should act as educators and consultants in a way that allows us to combine our

knowledge of public health principles and good communication skills. If we can combine these two elements, we have a good chance of making positive, lasting improvements to the safety of the foods being donated. Inspectors should thoroughly explain the donation process to all interested parties.”²⁹ This brings the inspectors into the fold and positions them to be advocates for food donation.

Conclusion

Food safety regulations present challenges to food donation because they can be difficult for donors and food recovery organizations to navigate, particularly in light of the traditional approach health inspectors take to the subject. However, the hurdles to food donation that are rooted in food safety can be mitigated by improved and uniform food safety regulations, useful food donation guidance produced by state and local agencies, and health inspectors who are trained to support and facilitate food donation.

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Section V: Food Waste Reduction in K-12 Schools

Schools present unique and important food recovery opportunities. By cutting back on food waste, schools can save precious dollars. Food recovery efforts can also nurture children's healthy impulses to conserve and serve to educate students about reducing food waste, thus building better future habits.

Overview

This section discusses the policies that states, municipalities, school districts, and schools can implement to decrease food waste. As multiple levels of government play a role in regulating school food, this section explains the basic regulation of school food before describing opportunities to reduce food waste in schools. These policies are geared towards preventing waste by shifting food preparation patterns and policies, finding ways to use leftover foods to feed hungry people within the school or outside, and recycling food waste into usable compost for other community members or for school gardens.

- 1. Introduction** The logistical considerations of serving school lunch every day and requirements of the National School Lunch Program, both real and perceived, result in high levels of food waste in schools. Making changes in schools can help schools reduce their waste, better manage tight school meal budgets, and teach children about the need to treat food as a valuable resource.
- 2. Federal and State Regulation of School Food** School food is highly regulated. As the federal government provides the bulk of the funding for school meals, federal standards govern the food that is served. The federal government also plays an active role in regulating and implementing food waste prevention, recovery, and recycling programs. State and local governments also implement health and safety regulations that affect what food is served and what can be done with surplus food.



- 3. Recommendations to Reduce Food Waste** Preventing food waste is the best way to reduce waste. As a first step, schools can conduct audits to gauge food consumption and waste. Going trayless and changing the timing and duration of lunch can have positive effects in waste reduction. Following the Offer Versus Serve model further discourages students from taking excess food and decreases overall food waste.
- 4. Recommendations to Recover Surplus Food** If food waste cannot be prevented, the next best option is to get surplus food to people in need. Recovered food items can be shared with those in the school and beyond. Food can be offered on share tables or in pop-up food pantries, temporary food donation and recovery sites held at schools. Schools can also identify ways to send leftover food home with children and families. There are many resources available to schools who wish to donate their food to outside organizations, and schools are generally able to benefit from liability protections when they donate their excess food.
- 5. Recommendations to Recycle Via Composting** Lastly, if food waste cannot be avoided, recycling food scraps through composting can reduce school food waste. There are both state and local policy avenues for implementing composting, as well as projects that can be implemented by individual schools. While the United States Department of Agriculture (USDA) fully supports composting initiatives, composting should only be explored after exhausting waste reduction and food recovery channels.

Introduction

A multitude of factors contribute to the high levels of food waste seen in schools. Students generally have too little time to eat,¹ and rushed students eat less and throw away more.² Additionally, schools participating in the National School Lunch Program (NSLP) are required to serve every child both a fruit and a vegetable with every lunch, but these sometimes go uneaten.³ Many schools also erroneously believe that every child must take milk with their lunches.⁴ Further, school administrators often mistakenly believe the federal government prohibits school food donation, and therefore throw away wholesome food that could otherwise be donated to those in need.⁵ Due to these factors, much of the food served goes directly from the tray to the trash.

Reducing food waste in schools offers particular promise. To procure and prepare food that then goes to waste costs money, so any reduction in waste can help the school's bottom line. Further, undertaking efforts to reduce waste can reframe how children think about food; food recovery efforts create an educational opportunity to discuss the value of food and share perspectives from communities where healthy food may be scarce. Educating students about food waste may make future generations more conscientious. This is particularly important, as forty-five percent of food waste occurs inside the home.⁶ Changing habits in school can create a generation of more thoughtful consumers in the future.

Federal and State Regulation of School Food

The federal government plays an active role in regulating school foods, particularly those procured using funds under the National School Lunch Program (NSLP)⁷ or the School Breakfast Program (SBP), which provide school children lunch and/or breakfast during the school day.⁸ In both programs, the federal government reimburses all or a portion of the total price of a school meal.⁹ Because these programs use federal money to procure food, schools must follow federal rules regarding nutrition and the use of the food. The federal government also regulates “a la carte” items, the meals, snacks, and vending machine items sold in all schools that participate in NSLP and SBP.¹⁰ While some of these regulations can result in food waste, the federal government has shown support for various food waste reduction and donation measures. School districts that participate in the NSLP and SBP must also follow certain food safety standards, including implementing a written food safety program and undergoing a health inspection twice a year.

Federal agencies have used multiple methods to encourage schools to avoid food waste. The USDA created a series of webinars aimed at educating stakeholders about decreasing school food waste.¹¹ USDA and the Environmental Protection Agency (EPA) jointly launched a U.S. Food Waste Challenge, in which schools can register to publicly declare food waste goals and achievements.¹² Additionally, the EPA runs a Food Recovery Challenge, in which schools and other organizations commit to reduce, reuse, and dispose of food waste, while receiving guidance and support.¹³ USDA also published a guide

to help schools avoid food waste.¹⁴

States also play a role in regulating school foods. States are able to go above and beyond the health and nutrition standards required by the federal government for both NSLP/SBP meals and a la carte meals and snacks. In addition, each state adopts its own food safety regulations and enforces food safety at schools.¹⁵ Generally, state agencies draft the food safety regulations and either the state agency itself conducts health inspections or the local departments of health interpret and enforce state regulations.¹⁶

Recommendations to Reduce Food Waste

The EPA Food Recovery Hierarchy allots prevention of food waste to the top of the hierarchy. Similarly, USDA asserts that the best way to avoid food waste is through prevention, preparation, and thoughtful serving practices.¹⁷

Conduct a Food Audit. A food audit can help schools track and determine how much food they waste.¹⁸ A 2013 study published by the Harvard School of Public Health looked at plate waste in several Boston middle schools and found that 40% of food served was discarded uneaten.¹⁹ The study estimated the nationwide cost of school food waste to be over \$1 billion annually.²⁰ Food waste audits can help schools identify areas for food waste improvement. A strong and extensive waste audit includes both a back of house kitchen waste audit and a plate waste audit.

Back-of-the-House Kitchen Waste Audit. According to the USDA, the best way to minimize school food waste is to produce only the amount of food needed to serve students based on past history.²¹ Approximately four to ten percent of all school food purchases are discarded before they can be served to students because of over-ordering, overproduction, trim waste, expiration, and spoilage.²² Schools can determine how much food gets wasted before leaving the kitchen through a back-of-the-house kitchen waste audit, also known as a pre-consumer food waste audit. Additionally, kitchen staff should keep waste logs to prevent over-ordering. The EPA offers examples of food waste logs.²³

Plate Waste Audit. Schools can also conduct a plate waste audit, or a post-consumer audit, to determine what students are and are not consuming. During a plate waste audit, school staff should track and record characteristics of the trash. In schools, plate waste has commonly been measured four ways: (1) weighing or photographing the trays before they are cleared of food remains; (2) visual estimation by a trained observer; (3) food consumption recall by children; and (4) waste stream analysis.²⁴ Measuring plate waste is challenging, as each method is fraught with unique biases and limitations.²⁵ While weighed measurement of plate waste is the current gold standard, visual-measurement techniques are often more efficient and have been increasingly validated.²⁶ Plate waste audits can help schools identify the most-wasted food items and create a plan to address that waste.



- For example, a post-consumer audit of student food waste at Washington Elementary School in Fayetteville, Arkansas revealed that milk was one of the most wasted items. On average, 10-15 unopened milks were thrown in the trash each day.²⁷ The auditor surveyed students and administrators and learned that many people mistakenly believed that USDA required all students to take milk. However, milk is not mandatory in Offer vs. Serve schools.²⁸ The audit results led the school to take the following measures: posting a sign in the serving area stating that students do NOT have to take milk, b) providing 8oz cups for water, and c) providing a share table for students to place unopened milks, all of which led to a 20% decrease in overall milk waste.²⁹

Ban trays throughout the school or school district. A school may consider banning trays as a cost-free way to reduce

food waste. Trays subconsciously encourage students to take more food than they can eat.³⁰ ReFED recommends that restaurants and foodservice use trayless dining to decrease waste.³¹

- In 2009, **University of Massachusetts—Amherst** removed trays from its dining halls, and as a result students threw away 30% less food.³² K-12 schools can follow this successful model and, likewise, reduce waste.

Enact longer lunch periods and schedule lunch after recess. Students often waste food when they do not have enough time during the lunch period.³³ Elementary school students in particular discard a great deal of their food due to a lack of sufficient time to eat.³⁴ To give students enough time to select and eat their meals, states and school districts can mandate longer lunch periods. USDA encourages schools to offer at least thirty minutes of lunchtime; following this recommendation could reduce plate waste by nearly one-third.³⁵ In a recent study, researchers attempted to correlate length of lunch time to amount of food wasted.³⁶ The research found that even students with 25 minutes to eat lunch consumed only 77.2% of their entrees and 46.6% of their vegetables.³⁷ These numbers fell to 64.4% and 34.8%, respectively, when students had fewer than 20 minutes to eat.³⁸

Additionally, students waste 30% less food when lunch is after recess.³⁹ School districts, city departments of education, and states could pass laws or put out guidance encouraging lunch after recess. In addition to wasting less, students are more likely to make healthier choices if they have longer lunch periods or lunch following recess.⁴⁰

- In 2014, the **West Virginia** state legislature adopted a rule that required a minimum time allowance for student meal consumption to be twenty minutes or longer.⁴¹ This rule emphasizes that the twenty minutes must be allotted for actual eating time and does not include the amount of time needed for a student to select a meal and be served. Additionally, the rule strongly encourages elementary schools to schedule lunch after recess.⁴²

Establish an Offer Versus Serve policy for all grade levels—or issue guidance promoting Offer Versus Serve. Students waste food when they are forced to take items they do not plan to eat. USDA encourages schools to adopt a method called “Offer Versus Serve” (OVS). NSLP meals consist of five components: fruit, vegetable, whole grain, meat/alternative, and milk.⁴³ The OVS policy allows students to decline up to two items, as long as they take a fruit or a vegetable.⁴⁴ By contrast, students in schools without an OVS policy would receive a tray full of each food component offered that day. OVS is optional in elementary and middle schools, but USDA regulations require high schools to use OVS.⁴⁵ Schools can reduce plate waste by establishing OVS as the official lunch service method for *all* grade-levels.

Collaborate with chefs to create food students are more inclined to eat. The taste of food has a large impact on whether or not it is consumed, and plenty of school food is wasted because students do not like it. Schools can make food taste better through partnerships with chefs or local culinary schools.

- Two middle schools in **Boston, Massachusetts** underwent a two-year pilot study from 2007 to 2009 where a professional chef trained the school cafeteria staff in preparing healthier school lunches.⁴⁶ Due to the Chef Initiative, students chose healthier foods and ate larger portions, which reduced the amount of waste the schools produced.⁴⁷ Students in the study ate 36% more of the vegetables they were served than students in the control group.⁴⁸ Likewise, a follow-up study conducted in 14 elementary and middle schools in Massachusetts found that students receiving chef-prepared meals ate 30.8% more of the vegetables they were served.⁴⁹

Allow students to keep uneaten food. Schools can teach students to take ownership over the fate of their food items by allowing them to bring uneaten food back to their classrooms. This establishes that food is a valuable resource that should only be discarded as a last resort. USDA recommends allowing students to keep their uneaten food for later in the day as a key way to reduce waste.⁵⁰

- The **Milwaukee, Wisconsin** Public School Breakfast-in-the-Classroom policy states that once food is served to a student, it is the property of the child.⁵¹ Students are allowed to consume the item at school, share it with a classmate, take it home, or return it to the teacher for proper storage.⁵²

Create incentives for schools to reduce waste. State and local governments can use financial resources or recognition to motivate schools to make progress in food waste reduction. Monetary rewards show the importance of reducing food waste, but allow for customized approaches for different school cultures. If no funds are available, states or districts can create challenges or award programs that honor schools that have made impressive strides towards reducing food waste.

- In 2008, the **Seattle, Washington** Public Schools created the Shared Savings Award Program.⁵³ Every year, the district offers awards that can total over \$50,000 to schools that meet their conservation goals.⁵⁴
- The **New York** Department of Environmental Conservation sponsored the Green School Challenge, which recognized schools for reducing waste through recycling or composting.⁵⁵ Schools are broken into age groups and receive awards based on the highest per capita recycling or lowest per capita waste production.⁵⁶ The Green School Challenge was replaced by the Recycle-Bowl Competition in 2013.⁵⁷

Recommendations to Recover Surplus Food

When food waste cannot be prevented, the federal government encourages the reuse or donation of leftover food as the next best way to fight food waste.

Create share tables. The easiest way to reuse food is to allow uneaten food to be eaten by another student in the school. The USDA supports the use of “share tables,” where students can put uneaten food still in its original wrapper or peel.⁵⁸ Once food reaches the “share table,” another student can take the food for free, or the school can resell or donate the food.⁵⁹ Share tables are allowed under federal law and are promoted by USDA. However, schools often face concerns over whether share tables are allowed under state law. States, cities, and school districts can help encourage the use of share tables by issuing guidance and disseminating information about the applicable health rules and regulations.

- **California’s** Department of Education created a guidance document on share tables.⁶⁰ The document confirms that California permits share tables, and explains the criteria schools must follow.⁶¹ In addition, the California guidance offers best practices for where to put share tables and how to handle food safely.⁶²
- **Indiana’s** Department of Health also created a guidance document that discusses the benefits of share tables and gives instructions for how to use a share table system.⁶³
- **Wisconsin’s** Department of Public Instruction created a protocol for schools to use when setting up a share table.⁶⁴

Send leftover food home with students. In addition to sharing food during the school day, a school may send leftover food home with students at the end of the day or week. This can help provide additional food to food insecure students. However, schools must be discrete in their distribution of recovered food to students, as the NSLSA prohibits schools from publicly signifying which students receive free or reduced lunch, so as to avoid income-based discrimination.⁶⁵ Schools could implement a first-come first-serve policy that allows all students, regardless of need, to take home leftover food at the end of the school day.⁶⁶ If a school has an afterschool meals program on site, the school may also use lunchtime leftovers for that program.⁶⁷ In addition, a school may also share leftover food with another school.

- Lemon Road Elementary School in **Falls Church, Virginia**⁶⁸ and DC Bilingual Public Charter School in **Washington, D.C.**⁶⁹ have both implemented policies allowing parents or students to take home leftover food at the end of the day.
- Goddard Public School in **Wichita, Kansas** sends excess food that its cafeteria has purchased but not served to another nearby school.⁷⁰

Donate surplus food. Surplus food can be donated to food banks or food recovery organizations that serve community members in need. USDA supports the donation of surplus food⁷¹ and the NSLSA explicitly allows schools to donate leftovers from the NSLP/SBP.⁷² The Act states that “[e]ach school and local educational agency participating in the school lunch program under this chapter may donate any food not consumed under such program to eligible local food banks or charitable

organizations.”⁷³ The Act defines “eligible local food banks or charitable organizations” as any food bank or charitable organization which is tax-exempt under section 501(c)(3),⁷⁴ which means school food acquired under the Act can only be donated to a 501(c)(3).⁷⁵ Additionally, schools receive liability protections for food donations. As discussed in Section I: Liability Protection for Food Donations, the federal Bill Emerson Good Samaritan Act grants liability protection to those who donate food.⁷⁶ In addition, the NSLA provides special immunity to schools that donate food to 501(c)(3) food banks or food recovery organizations.⁷⁷

Setting up a school food donation program is laborious, but schools can leverage resources, such as the Parent Teacher Association or a student organization such as a “Green Team” to round up volunteers to assist in donation.⁷⁸ When donating, schools may want to store food for donation in a separate refrigerator in order to save space in the cafeteria and allow staff to follow their normal food storage procedures.⁷⁹ A separate refrigerator can also help alleviate any concerns that state or local health inspectors may have about moving food from the dining area back to the kitchen.⁸⁰

Many schools and school districts operate food donation programs. These are just a few examples:

- For several years, **Wichita, Kansas** has operated a donation program in which a local food mission stops by each school twice a week to pick up leftover foods that the school kitchen prepared but never served.⁸¹ The schools may freeze leftovers to aid with their donation.⁸²
- Sanborn Elementary School in **Andover, Massachusetts** established a food donation program for food already served that students declined to eat.⁸³ Parent volunteers set up donation bins next to the trash and supervise students to ensure that only permissible foods are donated.⁸⁴ The volunteers then deliver the leftover food to local families.⁸⁵
- The **Los Angeles Unified School District** implemented a food donation policy that requires all schools within the district to donate excess or unused food to nonprofit organizations.⁸⁶ In addition to unserved food, schools may also donate food that was served but untouched.⁸⁷
- The nonprofit **Food Bus** works to promote nationwide donation of served but untouched food in schools.⁸⁸ Food Bus has seen such donation programs take multiple forms such as (1) bringing leftover food to a local food pantry once a week, (2) organizing a pop-up pantry at the school for local families, (3) sending leftover food home with students on weekends, and (4) bringing leftover food from one school to another nearby.⁸⁹

States, municipalities, and school districts can take action to support the creation of food donation programs. For example, states or municipalities can create guidance to encourage school food donation and explain liability protections and applicable food safety requirements. States or municipalities can also pass resolutions in favor of school food donation, which can ensure that schools know that donation is not only legal, but also encouraged.

- **Indiana’s** Department of Health⁹⁰ and **California’s** Department of Education⁹¹ created guidance documents on food donation best practices. The Indiana guidance document includes distinctions between opened and unopened packages as well as temperature control requirements.⁹²
- In **California**, The **Los Angeles** School Board resolved that it “supports the children, families, and community of Los Angeles, and shall direct the Office of the Superintendent to identify and partner with outside organizations and non-profits that will deliver leftover, non-reusable food to those in need at no cost to the District.”⁹³ The nearby **Anaheim City** School District also passed a resolution in favor of food donations.⁹⁴

Set up a pop-up pantry. Instead of delivering food to organizations outside the school, schools could open a portion of their buildings after school hours to operate periodic food pantries. This may be an easy option for schools that have existing pantries or back pack programs, which send food home with children with limited access to food during weekends or vacations.⁹⁵

- Lemon Road Elementary School in **Falls Church, Virginia** set up a pop-up pantry at the school, run by the school’s

Parent Teacher Association, to distribute leftover food from school lunch.⁹⁶ The school received support from Food Bus, including a special refrigerator for leftover lunch and items donated from parents, food donation bins, a scale, and a dolly.⁹⁷

- In **Washington, D.C.**, eight elementary schools have food markets where parents can receive free grocery items when they pick up their children from school.⁹⁸ These markets, called Martha's Markets, are run through Martha's Table, a nonprofit organization that provides educational and family support services.⁹⁹ Parents and students receive twenty-three pounds of food free of charge, with a 40% minimum of fresh produce.¹⁰⁰

Recommendations to Recycle Via Composting

Some food scraps are simply not suitable for donation. Rather than sending this food waste to the landfill, schools can recycle this excess food by turning it into compost. While the USDA encourages schools to compost food that would otherwise go in the trash, schools should treat compost as the last option, after reducing and recovering.¹⁰¹

States can provide guidance or funding to encourage on-site school composting. State and municipalities can produce guidance that supports and encourages schools to compost, while providing practical composting information. States and municipalities can also make funding available to schools that would like to begin composting programs. School budgets are often tight, and removing the cost barrier can make it possible for schools to move forward with creating composting programs.

- The **Connecticut** Department of Environmental Protection issued a comprehensive guidance document about school composting.¹⁰² The document provides detailed advice about how to get all the relevant stakeholders on board, as well as the tools and steps necessary to set up compost bins on campus.¹⁰³ The document also explains how composting can be incorporated into science classes and includes instructional guides for teachers.¹⁰⁴
- The **South Carolina** Department of Health and Environmental Control has similarly published thorough guidance on school composting.¹⁰⁵ The document gives instructions on how to set up a composting program and urges student involvement.¹⁰⁶ The document also discusses relevant state waste management rules (i.e., how food scraps should be added to the compost bin within 72 hours), rules regarding composting of classroom pet waste, and permitting exemption requirements for schools that compost less than 400 cubic yards of food scraps.¹⁰⁷ The Department also offers composting grants, which provide grant money for schools to buy composting supplies or educational materials on composting.¹⁰⁸
- **Chicago, Illinois** Public Schools published a guide to composting in public schools, which provides guidance and encouragement for on-site composting in Chicago schools.¹⁰⁹
- Cuyahoga County Solid Waste Management District in **Cuyahoga County, Ohio** provides various grants to local schools to begin or expand composting programs.¹¹⁰

Create composting programs at individual schools, district-wide, or municipality-wide. Schools or school districts can create on-site composting programs that utilize school food waste for the production of compost. The compost can be used on the school grounds or given or sold to nearby farms. On-site composting is not appropriate for all schools; however, where the school has the land and resources to manage a program, it can provide an excellent educational opportunity for students. Even if schools cannot compost on-site, schools can contract with a hauler to take their food scraps for off-site composting, or push their local or state government to make composting pick-up available.

- **San Francisco, California's** Food to Flowers Lunchroom Composting program has spurred 140 schools to implement food scrap collection programs that include education, outreach, and organics collection for off-site composting, and some vermicomposting.¹¹¹ The compost produced by the schools is sold to farmers and vineyards, used in school gardens, and sometimes given away for free to residents.¹¹²
- **New York City, New York** has a government-run, citywide school composting program.¹¹³ Currently, over 200

schools participate, and the program hopes to expand into all New York City public schools.¹¹⁴

- **Charleston County School District in South Carolina** saved \$58,000 in disposal fees with its district-wide composting program.¹¹⁵ The twenty-one participating schools sent food scraps off site to a local composting facility.¹¹⁶ The facility returned some of the completed compost to the schools for use in gardens.¹¹⁷
- **Mansfield Middle School in Mansfield, Connecticut** created an on-site composting program.¹¹⁸ The school also organized an after-school Compost Club¹¹⁹ and used presentations to students and adults to spread the composting message on campus.¹²⁰ The school integrated its composting lessons into Common Core curriculum requirements.¹²¹

Conclusion

States, municipalities, and school districts have a number of tools at their disposal to fight school food waste. By implementing these strategies to reduce the amount of excess food produced, recover excess food for others in the school community and beyond, and compost the remainder of the wasted food, schools can dramatically reduce their food waste in the immediate while educating future generations in order to reduce food waste over the long term as well.

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117 *Id.*
118 *Mansfield Middle School: Where Composting Happens*, MANSFIELD MIDDLE SCH., <http://www.mansfieldct.org/mms-compost/>.
119 *School Composting: A Manual for Connecticut Schools*, CONN. DEP'T OF ENVTL. PROT. 5–6, http://www.ct.gov/deep/lib/deep/compost/compost_pdf/schmanual.pdf.
120 *Id.*
121 *About: The Mansfield Middle School Composting Program*, MANSFIELD MIDDLE SCH., <http://www.mansfieldct.org/mms-compost/about.htm>.

Section VI: Feeding Food Scraps to Livestock

■ Many restaurants, grocery stores, food manufacturers, and small and large farms have food scraps that are no longer edible for humans but are still safe and wholesome for animals. Given the significant environmental and economic impacts of wasted food, there has been increasing interest and investment in growing the practice of feeding food scraps to animals. State and local governments can take various steps to help grow this practice in order to divert food scraps from landfills.

Overview

This section discusses the benefits of feeding food scraps to animals and the ways that state and local governments can encourage the practice. It provides a brief overview of federal and state statutes and regulations affecting the feeding of food scraps to animals. It then offers recommendations for states to strengthen their laws in order to encourage the practice, as well as recommendations of ways that state and local governments can support and grow the practice.

- 1. Introduction** Using food scraps as animal feed offers a safe, resource-efficient way to divert food scraps from landfills, with multiple benefits for both farmers and food waste generators, such as retailers, restaurants, and educational institutions. State and local governments can and should take steps to encourage and grow this practice.
- 2. Federal and State Laws Regulating Use of Food Scraps as Animal Feed** Both the federal government and state governments regulate the use of food scraps in animal feed by setting certain restrictions. These restrictions are based on two main elements: the type of animals that may be fed food scraps, and the kind of food scraps that can be fed to those animals. There are four main federal statutes and regulations that apply to feeding food scraps to animals. These federal regulations function as a floor, or base level of regulations, for the feeding of food scraps to animals. However, states can, and do, apply more stringent regulations.
- 3. Recommendations to Strengthen State Animal Feed Laws** Many state laws currently enforce more stringent regulations for feeding food scraps to animals than the federal requirements. State legislators should engage in a robust process of reviewing their state regulations and make the necessary changes to encourage the feeding of food scraps to animals, while still providing the necessary protections to animal and human health.
- 4. Recommendations for Supporting the Practice of Feeding Food Scraps to Animals** State and local agencies can encourage businesses to divert food scraps to animal feed by providing education about statutory and regulatory compliance in feeding food scraps to animals, helping to launch pilot food recovery programs in their communities to divert food scraps to local farms, and facilitating connections between businesses or other organizations and local farmers.

Introduction

For centuries, using food scraps as animal feed was a common practice worldwide.¹ However, the practice declined precipitously in the 1980s, when several disease outbreaks were linked to unsafe animal feed, including foot-and-mouth disease in swine and bovine spongiform encephalopathy (BSE), commonly referred to as mad cow disease, in cattle.² In an attempt to prevent the spread of such diseases, federal laws and regulations were enacted to restrict what is often pejoratively referred to as “garbage feeding” to animals. Many states have added onto the federal requirements with their own more stringent regulations, and in some cases, outright bans on the practice.

Although recent decades have seen a decline in feeding food scraps to animals there has been rising interest in the practice of using a wider array of safe, properly-treated food scraps from a range of sources—including unsold retail food and post-consumer food scraps—as animal feed. The EPA’s Food Recovery Hierarchy recommends diverting food scraps to feed animals when food is no longer edible for humans but still safe and wholesome for animals.³ Feeding food scraps to animals ranks higher than anaerobic digestion or composting on the hierarchy.

Feeding food scraps to animals has several environmental and economic benefits for states and localities. As wasted food

breaks down in landfills, it emits methane, a potent greenhouse gas with 56 times the atmospheric warming power of carbon dioxide.⁴ It has been estimated that “feeding food waste to pigs saves 20 times more carbon than the next-best recycling method...”⁵ Diverting food scraps to animals could present opportunities for a range of environmental and economic benefits. Local and regional farmers could reap the benefits of lower costs for animal feed, food businesses can save money on hauling and garbage disposal, and the demand for commodity crops that are typically used for animal feed may be reduced, such that more land and natural resources will be available.

Building on the renewed interest in these practices, state and local governments can revisit and strengthen their “garbage feeding” laws to encourage the practice of feeding food scraps to animals on a wider scale. In addition to strengthening state laws, states and local governments can further encourage the feeding of food scraps to animals by providing educational resources and support to interested businesses and farmers. With practical regulations and clear guidance from government, feeding food scraps to animals can be done safely, as it was done for thousands of years, and become a common practice again.

Federal and State Laws Regulating Use of Food Scraps as Animal Feed

Both the federal government and state governments regulate the use of food scraps in animal feed by setting restrictions, which largely vary based on the type of animals that may be fed food scraps and the kind of food scraps they may be fed. The federal regulations function as a floor, and most state regulations go beyond them. This section will provide a brief overview of federal and state statutes and regulations for feeding of food scraps to animals. Detailed information and requirements about all of the federal and state laws and regulations can be found in the legal guide *Leftovers for Livestock: A Legal Guide for Using Excess Food as Animal Feed*, by the Harvard Law School Food Law and Policy Clinic and the Food Recovery Project at the University of Arkansas. *Leftovers for Livestock* provides a catalogue of the different federal and state regulations and requirements for feeding food scraps to animals, as well as advice to food waste generators and farms on feeding food scraps to animals.

Federal Laws and Regulations. The federal statutes and regulations on feeding food scraps to animals are encompassed in the Swine Health Protection Act, the Ruminant Feed Ban Rule, the Food Safety Modernization Act Rules on Preventive Controls, and the Food & Drug Administration (FDA) regulations regarding adulteration and misbranding. Each of these federal laws and regulations function as a federal floor for the feeding of food scraps to animals. Each is briefly described below.

- **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.⁶ SHPA requires that food scraps containing animal meat or animal by-products must be heat-treated in a manner that is sufficient to kill disease causing bacteria,⁷ which generally means that such food scraps must be heated throughout at boiling temperature (212° F or 100° C at sea level) for at least 30 minutes by a person who holds a valid license or permit to treat food scraps fed to animals.⁸ SHPA also includes requirements for safely storing treated and untreated food scraps.⁹
- **The FDA’s Bovine Spongiform Encephalopathy (BSE)/Ruminant Feed Ban Rule:** The Ruminant Feed Ban Rule aims to protect humans and “ruminant animals,”¹⁰ including cows, sheep, goats, deer, elk and antelopes, from transmissible spongiform encephalopathy (TSE), a group of fatal neurological diseases that includes BSE.¹¹ The rule prohibits the use of mammalian protein (i.e., animal tissue, such as beef or pork) in animal feed for all ruminant animals.¹² The rule also creates compliance requirements for the processing, inspection, labeling, and record-tracking of products that may contain mammalian protein.¹³
- **The Food Safety Modernization Act Preventive Controls for Animal Food:** The 2011 Food Safety Modernization Act (FSMA) created a comprehensive reform of U.S. food safety laws.¹⁴ The FSMA Preventive Controls for Animal Food Rule specifically focuses on feeding food scraps to animals.¹⁵ The rule is complex, but generally focuses on the type of feed being produced and the facility producing it.¹⁶ The Rule requires animal food processing facilities¹⁷ to implement necessary food safety controls such as Current Good Manufacturing Practices (CGMPs), Hazard Analysis and Risk-based Preventive Controls (HARPC), and the Supply Chain Program to prevent foodborne illness during food production and distribution.¹⁸ Facilities that are in compliance with the FSMA Preventive Control Rule for

Human Food and who hold and distribute human food by-products for use as animal feed do not have to follow the above requirements, as long as the facility is in compliance with all human food safety rules under the Food, Drug, & Cosmetic Act, CGMPs, and the facility does not further manufacture or process the by-products intended for use as animal food.¹⁹ FSMA includes certain exemptions for farms and small or very small businesses.²⁰

- **Regulations Regarding Labeling and Adulteration:** Under the federal Food Drug, & Cosmetic Act, any food, including animal feed, cannot be adulterated or misbranded.²¹ In order to avoid being adulterated, animal feed, like human food, cannot be filthy or decomposed, or packaged, or held in unsanitary conditions.²² Animal feed is considered misbranded if the information on the product label is false or misleading.²³ Animal feed products are also subject to both federal labeling laws as well as state labeling laws.²⁴

In summary, although there are several federal laws applicable to the feeding of food scraps to animals, and facilities will need to follow all permitting and processing requirements, under federal law food scraps can generally be fed to animals, so long as food scraps with animal derived by-products are heat-treated by a licensed facility before being fed to swine; and food scraps containing animal-derived by-products are not fed to ruminants.

State Laws and Regulations. States can choose to utilize only the federal standards mentioned above, or can go above the federal floor to develop stricter laws on feeding food scraps to animals. State regulations vary widely. In the states that are silent on feeding food scraps to animals or in those states that only regulate the feeding of food scraps to one type of animal, the practice is governed by the federal laws and regulations mentioned above. This section will briefly discuss the variations in state statutes and regulations.

The majority of states (48 plus Puerto Rico) regulate the feeding of food scraps to animals, focusing mostly on swine.²⁵ In general, state laws exclusively regulate the feeding of “putrescible” (that is, perishable) animal-derived waste (i.e., food scraps consisting of or containing meat or animal by-products) to swine. However, some states also regulate the feeding of vegetable waste to swine.²⁶ Several states also regulate the feeding of food scraps to other animals.

- Fifteen states (Alabama, Delaware, Idaho, Illinois, Kansas, Kentucky, Louisiana, Mississippi, Nebraska, North Dakota, Oregon, South Carolina, Texas, Vermont, and Wisconsin) prohibit individuals and facilities from feeding food scraps to swine that contain any animal parts or material.²⁷
- Nine of those states (Alabama, Illinois, Kansas, Kentucky, Louisiana, Mississippi, North Dakota, Oregon, and Wisconsin) go a step farther and ban even the feeding of vegetable waste to swine.²⁸

All other states generally allow food scraps to be fed to swine, but the majority require these food scraps to be heat-treated before. Thirty-one states, as well as Puerto Rico, mandate that animal-derived food scraps must be heat-treated before being feed to swine.²⁹ Twelve of the thirty-one states (Arkansas, Colorado, Iowa, Minnesota, Missouri, New Jersey, Oklahoma, Rhode Island, Tennessee, Virginia, West Virginia, and Wyoming) have taken a stricter approach, mandating that both animal-derived and vegetable food scraps must be heat-treated before using them as feed for swine.³⁰ In addition, most states require an individual or facility to obtain a license or permit prior to feeding food scraps to swine (or other animals).³¹

AAFCO Retail Food Donation Standard

The Association of American Feed Control Officials (AAFCO) is a voluntary organization comprised of local, state, and federal agencies responsible for establishing uniform standards for animal feed and feed ingredients through development of definitions of feed ingredients, model regulations, and policies. Although AAFCO lacks regulatory authority, many states have adopted AAFCO’s model regulations and definitions as the basis of their feed-control program.

In August of 2016, AAFCO’s Board of Directors recommended publishing a tentative definition for “Recovered Retail Food” which would allow “edible human food products safe and suitable for livestock feed [to be collected from] retail food establishments, domestic holding facilities, and domestic packing facilities” in order to be used as animal feed. Once finalized, states should adopt this definition to encourage the feeding of food scraps from food retailers to animals.

Most states only regulate the feeding of food waste to swine, but a few apply regulations to other animals. For example, South Dakota does not regulate the feeding of food scraps to swine, but it does ban the feeding of food scraps to cattle that are certified and enrolled in the Dakota Certified Beef Program.³² Illinois prohibits the feeding of both animal-derived waste and vegetable-derived waste to all animals.³³ California does not allow the feeding of non-pasteurized milk to farm animals.³⁴

It is important to note that most states have an exception for individuals who feed household food scraps to their own swine—food scraps used in such a way do not need to be processed or permitted like they do for animals that are being produced for sale. Before feeding food scraps to livestock, it is important to contact your state’s Department of Agriculture or Board of Health to ensure compliance with state heat-treatment, licensure, and commercial feed requirements.

Rutgers University Food Scraps for Animals Program

New Jersey allows the feeding of animal-derived and vegetable waste to swine, provided that it has been properly heat-treated and fed by a licensed facility. As a result, Rutgers University in New Jersey, home to the third largest student dining operation in the United States, has enjoyed a partnership with local Pinter Farms since the 1960s. Food scraps are pulverized in a pulper at the university’s dining hall, and are then deposited in barrels to be hauled to the local farm where they are used to feed the farm’s swine and cattle. The food scraps average 1.125 tons per day. Pinter’s services save Rutgers \$30 per ton in disposal costs, amounting to more than \$100,000 in 2007.

Sources: U.S. ENVTL. PROT. AGENCY, *FEEDING ANIMALS—THE BUSINESS SOLUTION TO FOOD SCRAPS* (2009), <https://www.epa.gov/sites/production/files/2015-08/documents/rutgers.pdf>; 4 N.J. Stat. Ann. §§ 2:2-4.11, 4:4-22-23, 4:5-106.1-.14 (2015).



Recommendations to Strengthen State Animal Feed Laws

Those states that go above the federal floor and enforce stricter laws on feeding food scraps to animals may prevent safe and wholesome food scraps from being fed to animals, leading to increased food waste in landfills, increased disposal costs for businesses, and increased feed costs for farmers. States can strengthen their state feed laws by making the necessary changes to encourage feeding food scraps to animals, while still ensuring necessary protections animal and human health.

Eliminate any laws that ban the feeding of food scraps to animals. Even though the practice of feeding food scraps to animals is safe for human and animal health, as noted above, several states either ban the feeding of all food scraps, animal-derived food scraps, and/or vegetable-derived food scraps to animals, specifically swine. These bans are unnecessary because animal and non-animal-derived food scraps can safely be fed to most animals. Animal-derived waste can safely be fed to animals (with the exception of ruminants) as long as it has been heat treated in accordance with federal law. Non-animal-derived waste is even less risky for animal and human health and is allowed, with no restrictions, under federal law.

As long as food scraps are properly handled according to applicable federal food safety laws and regulations, feeding food scraps to animals can be a safe and beneficial practice. There are several states that do not outright ban the feeding of food scraps to animals and state legislatures can use those laws as models for reforming their food scraps for animal feed laws.

- **Connecticut** allows the feeding of animal-derived waste to swine provided that it has been properly heat-treated and fed by a licensed facility. All other waste, including vegetable waste, may be fed to swine without heat-treatment. Individuals may feed household garbage to their own swine without heat-treating it and without obtaining a permit.³⁵
- **Indiana** allows the feeding of animal-derived waste to swine, provided that it has been properly heat-treated by a

licensed facility.³⁶ All other waste, including bakery waste, may be fed to swine without heat-treatment.³⁷ Individuals may feed household garbage to their own swine without heat-treating it.

- **Iowa**, the largest producer in terms of swine production, allows the feeding of animal-derived and vegetable waste to swine, but all such waste must be heat-treated.³⁸ The state also allows individuals to feed household garbage to their own swine without heat-treating it.³⁹

These states and many others allow food scraps including animal-derived food scraps, to be fed to swine. While most states do require that animal-derived food scraps be heat-treated before being fed to swine, these states show that the feeding of food scraps to animals can be done safely. At the very least, states that ban the feeding of non-animal-derived food scraps to animals should eliminate those bans. Federal law and the large majority of states allow the feeding of such food scraps to animals, and there are no reasons based in science to ban such practices. By eliminating any bans on feeding food scraps to animals, states can encourage the practice to grow and will help facilitate partnerships between generators and farmers.

Eliminate requirements for heat-treating non-animal-derived waste. Several states require the heat treatment of non-animal derived waste, yet most non-animal derived waste is generally safe for consumption by most animals. Requiring that this waste be heated may discourage farms from feeding food scraps to animals, due to the expense of having to get the necessary equipment to heat treat non-animal-derived waste or to pay another entity to do this heating.

- **North Carolina**, the second largest producer of swine, allows the feeding of animal-derived waste to swine provided that it has been properly heat-treated and fed by a licensed facility. However, all other waste may be fed to swine without heat-treatment.⁴⁰ This is the rule in the majority of states that allow food scraps to be fed to animals.

Given the rising interest in feeding food scraps to animals and pressing need to reduce food waste, states should be exploring all options to reduce food waste by eliminating unnecessary rules. States that require heat treatment of non-animal-derived waste should review their state regulations to make sure they are indeed needed, given current scientific knowledge and the rising interest in reducing food waste.

Replace the pejorative name of “garbage” to a more neutral term such as “food scraps.” “Garbage feeding” is a pejorative term used in both state and federal laws and regulations denoting food scraps used as animal feed. Calling food scraps used as animal feed “garbage” connotes trash and unsafe food and discourages individuals from partaking in the process altogether. Businesses and individuals concerned with animal welfare may not want livestock to be eating trash. Similarly, individuals who may later consume these animals may not want to eat animals that were fed “garbage.” Although such “garbage” is ultimately safe when properly handled, the term does not reflect this safety. Thus, states should change the term in their laws and use a different term like “food scraps” to connote the safety of such products. Many food manufacturers, such as beer producers and flour mills, classify waste as “by-products” or “co-products” due to their well-defined strategies of selling waste as commodities for livestock feed.⁴¹



Recommendations to Further Support Feeding Food Scraps to Animals

State and local governments can take an active role in encouraging the practice of feeding of food scraps to animals by providing guidance and education on the practice, encouraging partnerships with local farms, and helping to launch pilot food waste programs focused on diverting food scraps for animals. State and local support is vital to encouraging and expanding the practice of feeding food scraps

to animals. Support from states and localities can decrease the amount of food waste degrading in landfills while providing wholesome and safe food for animals.

Provide guidance and education on laws and regulations. Several federal and state laws and regulations bear on the practice of feeding food scraps to animals. The requirements can be daunting to a facility that is interested in using excess human food as animal feed. State and local governments can encourage the feeding of food scraps to animals by providing guidance, technical assistance, and education on applicable laws and regulations covering the practice of feeding food scraps to animals, outlining the benefits of this practice, while detailing the safe and proper handling of such products. This information can be aimed at farmers, food-waste-generating businesses, and all other involved parties, including consumers.

- The **New Mexico** Recycling Coalition produced a report directed at restaurants which outlined guidelines on feeding food waste to animals, including applicable state and federal laws and regulations, benefits and challenges of the practice, and contact persons for further information.⁴²
- The **California** Department of Food and Agriculture produced a fact sheet in Spanish and English on the requirements, risks, and benefits of feeding food scraps to swine.⁴³
- The **New York** Department of Environmental Conservation has a page on their website called “Food Scraps as Animal Feed,” which briefly mentions benefits and requirements for feeding food scraps to animals.⁴⁴

Encourage partnerships with local farms. State and local governments are in the best position to encourage partnerships between food waste generators and local farms, in order to facilitate the process of diverting food scraps to animal feed. State and local governments can help facilitate these partnerships by reaching out to local businesses and farmers to see if they are interested in collecting, receiving, or distributing food scraps for livestock and then supplying that information online or an easily accessible location. In addition to helping connect businesses with local farms, state and local governments can provide funding to businesses interested in starting this practice and partner with local recycling/garbage collection companies to develop a pilot program for collecting and delivering food scraps to local farms.

- The **New Hampshire** Pollution Prevention Program teamed up with the New Hampshire Lodging and Restaurant Association’s Sustainability Program to partner hospitality facilities with local farmers interested in collecting food scraps.⁴⁵ Farmers were notified through a posting in New Hampshire Department of Agriculture’s Weekly Market Bulletin, and were then listed in a database, leading to 10 farmers partnering with food service facilities to receive food scraps, and the diversion of 97,200 pounds of food waste from landfills.⁴⁶
- In **Gardner, Massachusetts**,⁴⁷ Gardner Ale House, a “family style brew pub and restaurant,” received a grant from the Massachusetts Department of Environmental Protection to increase food waste diversion, including diverting spent barley malt from its brewing operations to a local pig farm.⁴⁸ This diversion accounts for 15% of the restaurant’s waste.⁴⁹ The business trained their employees on how to separate food waste properly, and a hauler collects the organics three times each week to be sent to the local pig farm.⁵⁰
- The city of **San Jose, California** worked with a local recycling/garbage collection firm to launch a pilot food waste collection program that converted household food scraps into animal feed.⁵¹ 43% of the garbage generated from single-family households in San José was food waste.⁵² The one-year voluntary pilot program was available to 6,500 households.⁵³

Conclusion

As the practice of feeding food scraps to animals grows, so do the benefits, with less food emitting methane in landfills, lower disposal costs to businesses and organizations who partake in the practice, and lower feed costs to farmers, who can benefit from safe and nutritious food scraps. The federal law functions as a floor, providing necessary regulations in order to protect human and animal health. Unfortunately, most states further restrict or prohibit the feeding of food waste to animals, thereby discouraging the practice. However, with changes to current state laws and local and state support for food recovery programs, less food will be wasting away in landfills and will instead be put to a beneficial use as wholesome animal feed.

Endnotes

- ¹ See Tristram Stuart, *Waste: Uncovering the Global Food Scandal* 243–44 (FIRST AM. ED. 2009).
- ² Emily Broad Leib et al., *Leftovers for Livestock: A Legal Guide for Using Food Scraps as Animal Feed 1* (2016), http://www.chlpi.org/wp-content/uploads/2013/12/Leftovers-for-Livestock_A-Legal-Guide_August-2016.pdf.
- ³ *Food Recovery Hierarchy*, U.S. ENVTL. PROT. AGENCY, <https://www.epa.gov/sustainable-management-food/food-recovery-hierarchy> (last visited Oct. 18, 2016).
- ⁴ *Global Warming Potentials*, U.N. Framework Convention on Climate Change, http://unfccc.int/ghg_data/items/3825.php.
- ⁵ Susan Daugherty, *Tristram Stuart: Waging War Against Global Food Waste*, NAT’L GEOGRAPHIC NEWS (Oct. 16, 2014), <http://news.nationalgeog.com/news/2014/10/141016-food-waste-tristram-stuart-emerging-explorer-hunger-charity-ngfood/>.
- ⁶ 7 U.S.C. § 3801 (2016).
- ⁷ See 9 C.F.R. § 166.2(a) (2016).
- ⁸ 9 C.F.R. § 166.7(a) (2016). Certain types of food scraps are exempt from the heat treatment requirements, including: “processed products; rendered products; bakery waste; candy waste; eggs; domestic dairy products (including milk); fish from the Atlantic Ocean within 200 miles of the continental United States or Canada; or fish from inland waters of the United States or Canada which do not flow into the Pacific Ocean.” 9 C.F.R. § 166.2(a).
- ⁹ 9 C.F.R. §§ 166.3–6 (2016).
- ¹⁰ 21 C.F.R. § 589.2000(a)(7) (2016). (“[R]uminant includes any member of the order of animals which has a stomach with four chambers (rumen, reticulum, omasum, and abomasum) through which feed passes in digestion.”)
- ¹¹ 21 C.F.R. § 589.2000 (2016). Transmissible spongiform encephalopathy is a fatal, progressive neurodegenerative disorder affecting both humans and animals. See *Prion Diseases*, CTR. FOR DISEASE CONTROL AND PREVENTION, <http://www.cdc.gov/prions/> (last updated Feb. 5, 2015). The disease can be transmitted between humans and animals, as happened when “mad cow” disease (a form of TSE) found in infected cattle meat caused an outbreak of Variant Creutzfeldt-Jacob disease (another form of TSE) in humans. See *Variant Creutzfeldt-Jacob Disease (vCJD)*, CTR. FOR DISEASE CONTROL AND PREVENTION, <http://www.cdc.gov/prions/vcjd/index.html> (last updated Feb. 6, 2015).
- ¹² 21 C.F.R. § 589.2000(a)(1) (2016). With very limited exceptions, including: “blood and blood products; gelatin; tallow containing no more than 0.15 percent insoluble impurities and tallow derivatives as specified in § 589.2001; inspected meat products which have been cooked and offered for human food and further heat processed for feed (such as plant waste and used cellulosic food casings); milk products (milk and milk proteins); and any product whose only mammalian protein consists entirely of porcine or equine protein.”
- ¹³ 21 C.F.R. § 589.2000 (2016).
- ¹⁴ Margaret A. Hamburg, *Food Safety Modernization Act: Putting the Focus on Prevention*, THE WHITE HOUSE BLOG (Jan. 3, 2011, 4:53 PM), <https://www.whitehouse.gov/blog/2011/01/03/food-safety-modernization-act-putting-focus-prevention>.
- ¹⁵ 21 C.F.R. § 507.12 (2016).
- ¹⁶ 21 C.F.R. § 507.1.
- ¹⁷ An animal food processing facility includes “a facility that manufactures, processes, packs, or holds animal food for sale in the United States.” 21 C.F.R. § 507.1.
- ¹⁸ 21 C.F.R. § 507.
- ¹⁹ 21 C.F.R. § 507.12.
- ²⁰ See 21 C.F.R. § 1.227 (noting detailed definition of “farm” includes two types of farms: primary production farms and secondary activities farms); 21 C.F.R. § 117.5(k) (2016); 21 C.F.R. § 507.5(a) (2016).
- ²¹ 21 U.S.C. § 342–343 (2015). If the food is found to be adulterated or misbranded, the offender faces a federal criminal sanction with a hefty fine, including a potential misdemeanor for a first offense, and potential subsequent offenses charged as felonies. See 21 U.S.C. § 333 (2016).
- ²² 21 U.S.C. § 342.
- ²³ 21 U.S.C. § 343 (2016).
- ²⁴ Animal Food & Feeds Product Regulation, U.S. FOOD AND DRUG ADMIN., <http://www.fda.gov/AnimalVeterinary/Products/AnimalFoodFeeds/ucm050223.htm> (last visited Oct. 18, 2016).

25 Emily Broad Leib et al., *Leftovers for Livestock: A Legal Guide for Using Food Scraps as Animal Feed* 8 (2016),
26 http://www.chlpi.org/wp-content/uploads/2013/12/Leftovers-for-Livestock_A-Legal-Guide_August-2016.pdf.
27 *Id.*
28 *Id.* at 1.
29 *Id.*
30 *Id.* at 8.
31 *Id.*
32 *Id.* at 9-10.
33 S.D. ADMIN. R. 12:79:03:06 (2016). (South Dakota repealed its ban on feeding food waste to livestock in 2013.)
34 720 ILL. COMP. STAT. § 5/48-7 (West 2016).
35 CAL. FOOD & AGRIC. CODE §§10901–90, 34006 (2016).
36 CONN. GEN. STAT. §§ 22-320a–g (2016).
37 IND. CODE ANN. § § 15-17-10-16 (2015).
38 IND. CODE ANN. § § 15-17-10-16.
39 IOWA CODE §§ 163.1 et seq. (2016).
40 IOWA CODE §§ 163.1 et seq.
41 N.C. GEN. STAT. ANN. §§ 106-405.1 (2016).
42 *See Best Practices & Emerging Solutions Toolkit*, FOOD WASTE REDUCTION ALLIANCE 17, http://www.foodwastealliance.org/wp-content/uploads/2014/04/FWRA_Toolkit_FINAL_0415141.pdf.
43 *Managing Food Waste in NM Restaurants*, N.M. RECYCLING COAL. 21–23 (2014), <http://www.recyclenewmexico.com/pdf/food-waste-management-restaurantsweb.pdf>.
44 *Swine Health*, CAL. DEP’T OF FOOD AND AGRIC., https://www.cdfa.ca.gov/ahfss/Animal_Health/pdfs/Final_SwineHealth_Feeding_English_Spanish.pdf.
45 *Food Scraps as Animal Feed*, N.Y. STATE DEP’T. OF ENVTL. CONSERVATION, <http://www.dec.ny.gov/chemical/98112.html>.
46 Cindy Kibbe, *Waste Not, Want Not*, N.H. BUS. MAG., May 16, 2014, <http://millyardcommunications.com/index.php?src=news&refno=4475&category=News>.
47 *Id.*
48 *Food Waste Diversion Program Case Study: Gardner Ale House, Gardner MA*, RECYCLINGWORKS MASS., http://recyclingworksma.com/wp-content/uploads/2012/01/RW_Case-Study-Gardner-Ale-House-Draft.pdf.
49 *Id.*
50 *Id.*
51 *See* Press Release, City of San José, San José Food Waste to be Converted into Animal Feed (Sept. 14, 2015), <http://www.sanjoseinfo.org/go/doc/1914/2597534/San-Jos-Food-Waste-to-be-Converted-into-Animal-Feed>.
52 *Id.*
53 *Id.*

Section VII: Organic Waste Bans and Waste Recycling Laws

- A growing number of states and localities created organic waste bans or waste recycling laws to restrict the amount of food waste an entity can dispose of in a landfill, in order to push businesses and consumers to reduce their food waste.
- State and local governments can implement organic waste bans or waste recycling laws, or strengthen their existing laws, in order to support food waste reduction and create viable alternatives for waste producers.

Overview

This section provides a brief overview of organic waste bans and waste recycling laws. Such laws take many different forms, but in general waste bans offer an effective way to encourage entities to reduce the amount of food waste they produce and to better handle food waste they are not able to eliminate. By limiting the amount of organic waste that entities can dispose of in landfills, organic waste bans and waste recycling laws compel food waste generators to explore more sustainable practices like waste reduction, donation, composting, and anaerobic digestion (AD). After describing existing state and local organic waste bans and waste recycling laws, this section discusses why these laws provide promising models for other states, and how these laws could be strengthened to increase diversion of food waste from landfills. It then presents additional steps states and localities can take to further ensure the success of their waste bans or waste recycling laws.

- 1. Introduction** Food waste is unnecessary, harmful, and costly. Uneaten food ends up rotting in landfills and creating greenhouse gas emissions instead of feeding hungry people. In order to address this issue, cities and states are taking steps to push food waste generators to divert their waste from landfills by passing organic waste bans and waste recycling laws. Organic waste bans prohibit certain entities from disposing of specified types of organic waste, including food scraps, in landfills. Waste recycling laws require businesses or individuals to divert organic waste to composting or anaerobic digestion.
- 2. Profile of State and Local Organic Waste Bans & Waste Recycling Laws** In recent years, five states have implemented state-level waste bans. Some have implemented organic waste bans that prohibit certain entities from disposing of organic waste, including food scraps, in landfills. Other states, and some localities, have implemented mandatory organic waste recycling laws, which require certain producers of organic waste to recycle organic waste through specific methods, such as composting.
- 3. Strengthening State and Local Organic Waste Bans & Waste Recycling Laws** This section describes best practices that states and localities that do not have a waste ban or waste recycling law can use as a reference in crafting such laws. It also describes ways to strengthen existing waste bans and waste recycling laws.
- 4. Supporting Organic Waste Bans or Waste Recycling Laws** State and local agencies can facilitate the success of their waste bans or recycling laws by providing education about compliance, using complementary policies to promote diversion higher up the food recovery hierarchy, and establishing unit-based pricing systems.

Food Waste in Landfills

40% of food produced in the U.S. goes uneaten. Over 97% of this wasted food ends up in landfills — in fact, food waste is the largest component of landfills in the U.S. Food waste in landfills produces large amounts of methane and 135 million tons of greenhouse gases each year. In 2008, the EPA reported that the cost of disposing of food waste in landfills was approximately \$1.3 billion. Organic waste bans can push businesses and residents to reduce the amount of food waste they send to landfills by requiring them to reduce and divert food waste.

Sources: *Shocking Statistics About American Food Waste*, NET IMPACT BOSTON (Jan. 14, 2015), <http://netimpactboston.org/2015/01/14/infographic-shocking-statistics-about-american-food-waste/>; *Facts, End Food Waste Now*, <http://www.endfoodwastenow.org/index.php/resources/facts>.

Introduction

Food is the single largest component of municipal solid waste in landfills, where it gradually decomposes and releases

methane, a greenhouse gas with at least 25 times the global warming potential of carbon dioxide.¹ Transporting waste to the landfill is costly and further enlarges the carbon footprint through increased traffic congestion and gas consumption. Additionally, landfills are low on space, and many states and municipalities are looking for ways to reduce the quantity of unnecessary materials entering their landfills.

Banning food waste from landfills can divert organics from over-crowded landfills and also reduce landfill-generated greenhouse gas emissions. Organic waste bans and waste recycling laws serve as possible solutions in the effort to reduce the volume of food waste disposed of in landfills and cut associated harmful effects. Organic waste bans and waste recycling laws are outcome-oriented, rather than process-oriented, which allows businesses or residents to choose how they will prevent food waste or keep food out of the landfill. Both types of laws require “food waste generators”—the businesses, institutions, households, and other entities that create food waste—to reduce their food waste and make sure it is not being sent to a landfill.

In addition to supporting outcomes of less waste and better landfill management, organic waste bans and waste recycling laws can help encourage food businesses to use their excess food as a resource by diverting it to higher uses. For example, after Vermont implemented an organic waste ban, the Vermont Food Bank saw food donations increase by 60 percent the following year.² State and local governments should implement or strengthen their organic waste bans and waste recycling laws in order to reduce food waste in their landfills and support food recovery.



Profile of State and Local Organic Waste Bans & Waste Recycling Laws

Five states and several localities have passed either waste bans or waste recycling laws for food waste. This section describes and compares the existing state laws, and then describes some of the local laws.

Four states—Connecticut,³ Massachusetts,⁴ Rhode Island,⁵ and Vermont⁶—structure their laws as organic waste bans, while one state—California⁷—has instituted a waste recycling law requiring commercial generators of organic waste to either compost or anaerobically digest organic waste. Each of the five states prohibits certain entities that generate specified amounts of food waste from sending this waste to landfills, subject to exceptions.

For example, in 2012 Vermont passed the Universal Recycling Law, which bans disposal of food scraps, in addition to “blue bin” recyclables and leaf and yard debris.⁸ All residents and businesses must divert food scraps by 2020, with larger businesses and institutions subject to the ban even earlier depending on the amount of food waste generated annually.⁹ The main features of the Vermont law include the following:

- Parallel collection: waste haulers and drop-off centers for trash collection must also offer recycling and food scrap collection services;
- Unit-based pricing: fees for recycling and trash collection must be bundled into one fee for residential customers, so they cannot save money by opting out of recycling services;
- Public space recycling: public trash containers must also include recycling receptacles; and
- Phased-in food scrap ban: businesses and institutions that produce large amounts of food scraps must comply with the waste ban earlier than residents. The cap on food waste disposal ratchets down each year until all households and individuals are covered in 2020. Businesses and households are exempt from the ban if they are not located within 20 miles of a composting facility that accepts food scraps.

Waste bans in other states share many structural similarities with the Vermont law. However, each waste ban differs in important details. For example, they vary with regard to the types of entities covered under the law, how much organic waste an entity must produce in order to be covered, and whether exceptions exist for entities located far from a certified recycling or composting facility that accepts food scraps. These differences have a significant impact on the reach of these laws, and therefore on the amount of food waste diverted from landfills.

For example, the states differ widely in terms of the types of generators¹⁰ they cover. As of 2020, Vermont’s law will cover anyone, including residents that generates any amount of food waste.¹¹ In contrast, the other states’ bans cover only certain commercial, industrial, and institutional entities, with variation among the three states.

The states also vary with regard to how much waste an otherwise qualifying generator must produce in order to be covered by the law. The laws in Connecticut and Rhode Island only cover generators that produce 104 tons of food waste or more per year (although Connecticut’s threshold will decrease to 52 tons per year in 2020),¹² while Massachusetts covers generators that produce one ton per week or more.¹³ Vermont’s law began by covering entities generating 104 tons per year but will phase in smaller generators over time, until generators of any amount of food waste are covered in 2020.¹⁴

Similar variations exist among the laws with regard to exemptions for otherwise-covered generators, for example, based on proximity to a composting facility. While the Massachusetts law does not provide any exemptions for generators based on proximity to a composting facility, Connecticut and Rhode Island cover only generators located within 20 and 15 miles, respectively, of a processing facility that can accept food waste.¹⁵ Currently, Vermont’s law only covers generators located within 20 miles of a certified facility, but in 2020, it becomes a total ban on food scraps in landfills, with no exceptions for distance from a facility.¹⁶

As is clear from the above paragraphs, the states also vary with regard to whether the waste ban includes phased implementation, with requirements ratcheting up over time, as in Vermont, or not, as in Massachusetts.

The table on the next page breaks down the organic waste bans in effect in each state, and includes information on what type of waste generators are covered, what level of waste production is covered, and any exemptions based on proximity to an organics processing facility.

State Organic Waste Bans & Recycling Laws Currently in Effect

	Connecticut CONN. GEN. STAT. ANN. § 22a-226e	Vermont VT. STAT. ANN. TIT. 10, § 6605k	Massachusetts 310 MASS. CODE REGS. 19.017	Rhode Island R.I. GEN. LAWS ANN. § 23-18.9-17	California CAL. PUB. RES. CODE § 42649.81
Food Waste Generators Covered	Commercial food wholesaler or distributor, industrial food manufacturer or processor, supermarket, resort or conference center.	Any individual, partnership, company, corporation, association, unincorporated association, joint venture, trust, municipality, the State of Vermont or any agency, department, or subdivision of the State, federal agency, or any other legal or commercial entity.	Any individual, partnership, association, firm, company, corporation, department, agency, group, public body (including a city, town, district, county, authority, state, federal, or other governmental unit).	Commercial food wholesaler or distributor, industrial food manufacturer or processor, supermarket, resort or conference center, banquet hall, restaurant, religious institution, military installation, prison, corporation, hospital or other medical care institution, casino, and covered educational facility.	Any business, meaning a commercial or public entity such as a firm, partnership, corporation, or association organized as a for-profit or non-profit entity. Multifamily residential dwellings are exempted.
Waste Production Threshold to be Covered	2014: 104 tons/year 2020: 52 tons/year	2014: 104 tons/year 2015: 52 tons/year 2016: 26 tons/years 2017: 18 tons/year 2020: Food scraps banned from landfill completely	1 ton/week* *Generators are covered only for weeks during which they meet the threshold	2016: 104 tons/year 2018: 52 tons/year for covered educational facilities	2016: 8 cubic yards per week 2017: 4 cubic yards per week 2020: 2 cubic yards per week IF statewide organic waste disposal has not been reduced to 50% of the level in 2014.
Distance Exemptions	20 miles	20 miles	None	15 miles	None (but there are exemptions for rural jurisdictions)
Other				Waiver from the above requirements if the landfill tipping fee is less than the fee charged by an authorized composting or anaerobic digestion facility located within 15 miles of the business.	

Unlike the four New England states with organic waste bans, California's law takes the form of a mandatory organics recycling law, the first piece of which went into effect in April 2016. Unlike organic waste bans, which ban waste from going into landfills but leave the decision about what alternative action to take up to the individual entity, waste recycling laws require entities to take specific action with their organic waste (typically composting or anaerobic digestion (AD)). As of April 2016, businesses in California that generate at least eight cubic yards of organic waste per week are required to recycle organic waste on-site or subscribe to organic waste recycling services.¹⁷ The law will phase in businesses that produce at least four cubic yards per week in 2017,¹⁸ and if disposal of organic waste in the state has not been reduced to 50% of the disposal level in 2014, the law will phase in businesses that generate at least two cubic yards per week in 2020.¹⁹ California's law does not exempt businesses based on distance from a facility, although it does allow for some exemptions for rural jurisdictions.²⁰

At the local level, a number of municipal laws exist that seek to divert food from landfills. Some of these local laws function similarly to the state laws described above.

- **New York City, New York's** organic recycling mandate, which went into effect in July 2016, requires food service establishments in a hotel with 150 or more rooms, food service vendors in arenas or stadiums with seating capacity of at least 15,000 people, food manufacturers with a floor area of at least 25,000 square feet, and food wholesalers with a floor area of at least 20,000 square feet to source-separate their organic material and either arrange for the transportation of organic waste material, including food waste, to an appropriate processing facility, or to process the food waste on-site.²¹

What is Composting?

Composting is a widely recognized approach for diverting surplus food from the landfill. Composting is the process of transforming organic material, such as food scraps, into humus, a key component of healthy soil.

The major benefit of turning food waste into compost rather than throwing it into a landfill is that compost is useful — its organic matter content improves the chemical, biological, and physical properties of soil, reducing the need for chemical fertilizers. Compost also allows soil to retain nutrients for longer, increases the amount of macro- and micro-nutrients in the soil, suppresses plant diseases, binds contaminants like heavy metals which reduces their ability to leach, and allows for easier erosion control. In addition to helping turn food waste into useful products, building composting capacity can help create new jobs and businesses for local recycling/garbage collection companies and composting facilities. Composting can also take place at many different locations—backyards, community gardens, schools, farms, urban or rural areas—allowing this practice to be implemented all over the country.

The practice of using food scraps for composting is slowly growing, and several retailers, schools, restaurants and other institutions, as well as municipalities, are recovering food scraps for composting. However, the use of composting for food waste in the U.S. is far from reaching its full capacity. In 2014, there were 4,914 composting facilities nationwide, yet only 347 facilities accepted food scraps. In addition, many cities and states are not located in areas served by composting facilities.

States and localities can help composting reach its full capacity by:

- Implementing a tiered permitting system;
- Streamlining the permitting process for composting facilities;
- Educating and raising awareness about the importance of composting;
- Facilitating connections between food waste generators and composting facilities;
- Encouraging community composting;
- Supporting curbside composting programs; and
- Providing financial support for composting infrastructure.

Sources: *A Roadmap to Reduce U.S. Food Waste by 20 Percent*, ReFED (2016), https://www.refed.com/downloads/ReFED_Report_2016.pdf; *Institute For Local Self-Reliance, State of Composting in the U.S.: What, Why, Where & How* (July 2014).

- Similarly, **Austin, Texas** amended its organic waste recycling law, the Universal Recycling Ordinance, so as to require all restaurants 5,000 square feet and larger to compost food scraps by 2017.²² This amendment to the existing ordinance was passed as part of the city’s Zero Waste Initiative, which seeks to reduce the amount of trash sent to the city’s landfills by 90% by 2040.²³
- **San Francisco, California** and **Seattle, Washington** have both passed laws requiring businesses and households to sort their waste into separate categories. The separated organic materials, including food waste, are placed in appropriate composting bins rather than with the rest of the garbage.²⁴ In order to facilitate these laws at the residential level, property owners, including owners and managers of multi-family housing and commercial entities, are required to subscribe to appropriate collection services and provide proper containers to residents for disposing of compostable materials.²⁵ In San Francisco, individual residents can receive compost carts from the city at no cost.²⁶

Other states and municipalities are actively considering waste bans. New Jersey has pending legislation that would require restaurants, supermarkets, hospitals, and other food establishments that produce 104 tons of waste per year and are within 25 miles of an authorized food recycling facility to ship all food scraps to the facility.²⁷

Strengthening State and Local Organic Waste Bans & Waste Recycling Laws

The vast majority of states do not currently have an organic waste ban or waste recycling law in place. For states and localities looking to implement an organic waste ban, the existing state and local laws in other areas may serve as a good starting place. The following section analyzes these laws and identifies areas where improvements could keep more food and food scraps out of landfills. Implementing some of the recommendations may be a gradual process, with certain elements phased in over time.

Phase out exemptions based on distance from a processing facility. Three of the four state-level organic waste bans currently exempt entities located more than a certain distance, generally 20 miles, from a composting or processing facility. In practice, these exemptions make it so that entities in vast areas of a state do not have to comply with landfill diversion requirements. For example, much of central and eastern Connecticut remains exempt from the requirements of the state’s organic waste ban because there is no approved facility in those parts of the state.²⁸

While it may make sense to include exemptions based on proximity from a processing facility at the outset, phasing out such exemptions over time ensures that many more entities must comply with the law’s requirements, leading to increased food waste diversion from landfills over time. However, given the shortage of composting and AD facilities in many of these states—Connecticut, for example, lists only three approved composting facilities and three proposed AD facilities²⁹—these exemptions may be needed at the outset. Including language in the enacting legislation or regulations showing that the exemptions will be phased out over time can encourage the development of new processing facilities to meet future need.

States with well-developed composting or AD infrastructure

What is Anaerobic Digestion?

When food cannot be used for humans or animals, it can be used to create fuel or energy instead of being sent to the landfill. Anaerobic digestion (AD) is a recycling process that can turn biodegradable materials, such as food scraps, animal manure, fats, oils, etc., into biofuels through a series of biological processes. AD can be used to produce on-site heat, natural gas, vehicle fuel, electricity, biofertilizer, or compost. There are over 2,000 AD sites in the U.S. but only 40 to 50 of these facilities currently accept food scraps.

There is an increasing interest among generators, states, municipalities, and businesses to use AD to convert food waste into electricity, heat, or fertilizer. States and localities can help support the increased use of food scraps for AD by:

- Providing funding to support infrastructure for AD facilities;
- Reviewing permitting regulations for AD facilities to ensure they are not overly restrictive and burdensome;
- Educating and raising awareness about the importance of sending food scraps to AD instead of the landfill; and
- Providing technical assistance to generators and AD facilities.

Source: A Roadmap to Reduce U.S. Food Waste by 20 Percent, ReFED 61 (2016), https://www.refed.com/downloads/ReFED_Report_2016.pdf.

should not consider including an exemption based on proximity to a processing facility. Those states that need time to develop such infrastructure should pass regulations that gradually phase out such exemptions.

- States might model themselves after **Vermont** by including a proximity-based exemption at the outset—20 miles under Vermont’s law—while also setting a date by which all covered generators would be required to comply, regardless of distance (in Vermont, 2020).³⁰

These states should simultaneously work to encourage the development of new facilities through changes to permitting requirements and increased technical support and funding.

Phase in additional categories of waste generators. State and local food waste bans can divert larger quantities of waste by taking an inclusive approach in defining the types and sizes of generators that are required to comply with the laws. According to ReFED, 27 of the 63 million tons of food waste produced each year come from the home.³¹ However, with the exception of Vermont, state-level waste bans do not currently require individual households to divert their food waste, nor do they have provisions in place to begin doing so in the future. Instead, these laws cover only certain types of entities, such as commercial, industrial, and/or institutional waste generators. Further, many of the state laws only cover generators if they produce a large amount of organic waste per week, per year, or by volume.

States looking to implement or improve organic waste bans should eliminate distinctions based on generator categories, and should gradually phase in smaller generators, like individual households, over time. In order to facilitate compliance by these smaller entities, laws that cover residential and small generators could emulate **Vermont** by requiring trash haulers and collection facilities that offer trash services to also offer services for organic waste materials, including food scraps, by the time residential and/or small generators are phased in.

Eliminate exemptions based on the cost of composting. Across the U.S., composting can be more cost-effective than landfill waste disposal because composting facilities often charge a lower tipping fee (the fee charged by the waste disposal facility for disposing of waste). Tipping fees at U.S. composting sites average only \$36/ton,³² while the average landfill tipping fee in the U.S. was \$44/ton in 2014.³³ However, this may not be the case in all states or regions of the country, and this pricing may change over time.

As mentioned above, Rhode Island’s organic waste ban offers a waiver from the requirements of the law if the tipping fee for the landfill is less than the fee charged by an authorized composting or AD facility located within 15 miles of the business.³⁴ It is not clear whether this waiver is having a substantial effect in Rhode Island—the tipping fee at Rhode Island’s only commercial composting site is only \$30/ton, while the Central Landfill in Johnston, Rhode Island charges a tipping fee of \$75/ton.³⁵ However, the availability of this waiver has the potential to undermine the effectiveness of organic waste ban laws, particularly if used in a state or locality where privately owned landfills³⁶ seek to compete with composting facilities. As a result, states and localities should try to avoid exemptions based on the cost of composting relative to landfill costs. States should instead focus on making waste diversion a cost-saving option, as discussed later in this toolkit section.

Incorporate language encouraging diversion through methods other than composting. Organic waste bans are outcome-oriented, rather than process-oriented, meaning they allow businesses to determine on their own how to prevent food waste or keep food out of the landfill. While generators could find ways to prevent waste or to donate surplus to people in need, many of the state and local waste bans focus on composting and AD. Furthermore, waste recycling programs focus almost completely on composting. Composting, however, is relatively low on the Environmental Protection Agency’s Food Recovery Hierarchy. The Hierarchy prioritizes, in this order: food waste reduction at the source, feeding people in need, diverting food scraps to animal feed, industrial use, composting, and lastly, landfill disposal or incineration.³⁷

State and local waste bans or mandatory recycling laws should incorporate the Food Recovery Hierarchy into their laws. This way, even when many of the provisions of the law specifically require or encourage composting, it is clear to covered businesses or residents that there are other steps they can—and should—take to reduce and divert their waste before relying on composting.

- **Vermont’s** law provides a strong example of how to include language in a waste ban, stating: “It is the policy of the State that food residuals 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; (4) composting, land application, and digestion; and (5) energy recovery.”³⁸
- Several cities in California, including **San Francisco, California** and **Folsom, California** provide examples of incorporating such language in the mandatory recycling context. They have implemented educational campaigns that urge residents and businesses to follow the Hierarchy, and emphasize the importance of reducing food waste at the source and donating food before resorting to composting.³⁹

States and localities can also emphasize the importance of diverting food higher up the Hierarchy by incorporating a similar policy into their educational and guidance materials. At the very least, these laws should clarify that food donation is allowed and is a higher priority for wholesome surplus food than composting alternatives. States and localities can also use complementary policy mechanisms, like a tax incentive for food donations (See Section II: Tax Incentives for Food Donations), in order to promote waste reduction and food donation, so that generators have incentives to prioritize those methods over composting.

Supporting Organic Waste Bans or Waste Recycling Laws

This section discusses steps that state and local agencies can take to optimize the impact of organic waste bans, outside of changes to the laws themselves.

Provide guidance and education to covered generators. States and localities should provide guidance and education beyond specifying who must comply with organic waste bans or waste recycling laws and how to do so, but also on how covered businesses and residents can maximize their waste reduction and diversion under these laws. These laws require covered generators to change their practices and habits, and education can be used to help generators change in a way that has the greatest impact.

- For example, the **Massachusetts** Department of Environmental Protection (Mass DEP) provides extensive guidance on its webpage about the state’s commercial organic waste ban, including tips on how to estimate one’s food waste production, compliance guides for businesses and solid waste facilities, and case studies of successful food diversion and composting programs.⁴⁰

Mass DEP also works with RecyclingWorks Massachusetts, a recycling assistance program in the state, to provide direct technical assistance to covered generators as well as additional online resources—including an explanation of the Food Recovery Hierarchy—and online guidance, such as best practices for food donation and reducing food waste at the source.⁴¹ The RecyclingWorks Massachusetts page includes links to further guidance from outside organizations, including fact sheets produced by the Harvard Law School Food Law and Policy Clinic about tax incentives and liability protections for food donation.⁴²

States and localities should also provide targeted guidance based on the type of generator affected by the waste ban.

- For example, since the waste ban in **Vermont** applies to schools, the state produced guidance specifically geared toward schools, which includes the relevant timeline for compliance, assistance on estimating the amount of food waste being produced, and advice on speaking to students about waste.⁴³

States and localities can also provide resources that businesses and restaurants can use to help customers comply with sorting requirements at their establishments, such as uniform signs with instructions or images for each type of disposal bin.⁴⁴ If the waste ban or recycling law covers individual households, the state or locality should also provide information for individuals about how to sort household waste, or information for landlords about providing tenants with appropriate bins. This can help guide residents in confusing or uncertain food waste scenarios.

- For example, in **Seattle, Washington** food-soiled paper items, such as pizza boxes and food-soiled paper plates or

napkins can be disposed of in residents' food waste containers.⁴⁵ Localities should provide guidance on items like these, which individuals might not think of as food waste, in order to maximize compliance.

Facilitate connections between generators and recipients of surplus food. State agencies can encourage food waste diversion by making connections between generators of excess food and possible recipients of that food. These recipients can include organizations in need of wholesome surplus food as well as composting and AD facilities that can recycle food that is no longer edible.

Agencies in Vermont, Massachusetts, and Connecticut provide lists and maps of composting facilities, haulers, and collectors in the state.⁴⁶

- For example, the **Vermont** Agency of Natural Resources has created a particularly useful resource in its interactive Materials Management Map. This map plots the location of businesses and institutions that generate excess food and food scraps, composting facilities and transfer stations, as well as organizations such as food banks and food pantries that accept excess wholesome food for donation.⁴⁷ By including all of these different parties, the map can facilitate connections between entities that have surplus food and those that accept these materials. Moreover, by including organizations that accept food donations, the map can help facilitate diversion prior to composting.

Other states and cities can follow the examples of Vermont, Massachusetts, and Connecticut by creating helpful tools to facilitate connections between food waste generators and recipients of surplus food.

Provide funding to support the creation of composting and AD. Building composting and AD facilities can be very costly. For example, a large composting facility that processes up to 40,000 tons per year costs around \$5 to \$9 million to build and \$17 to \$28 per incoming ton to operate. A large anaerobic digestion facility that processes around 50,000 tons per year cost over \$20 million.⁴⁸ State and local governments can assist in the creation of these facilities by providing financial support.

Massachusetts' Strong Composting History

In Massachusetts, farm-based composting has long played a role in the state's organics processing environment, and the majority of the state's forty-nine permitted food waste processing sites in 2014 were small-scale, farm-based sites. An analysis by BioCycle noted that these farm-based sites are essential to the state's ability to reach its food waste diversion goals.

Source: Zoe Neale, *Assessing Organics Processing Capacity in Massachusetts*, BioCYCLE (Oct. 2014), <https://www.biocycle.net/2014/10/20/assessing-organics-processing-capacity-in-massachusetts/>.

- For example, in support of the **Massachusetts** organic waste ban, the Massachusetts Department of Environmental Protection (Mass DEP) administers a Sustainable Materials Recovery Program (SMRP) which offers grants for cities, towns, regional entities, and nonprofits.⁴⁹ SMRP grants have been used to fund recycling and composting equipment, school recycling, and organics capacity development projects.⁵⁰
- The **California** Department of Resources Recycling and Recovery (CalRecycle) offers a number of grant programs to help the state reach its goal of reducing 75% of its solid waste by 2020.⁵¹ CalRecycle's Greenhouse Gas Reduction Organics Grant Program granted \$14,521,000 during the 2014/2015 grant cycle to five projects aimed at reducing greenhouse gas emissions by expanding or creating facilities to reduce green materials, food materials, and organics-derived alternative daily cover.⁵² Projects included expanding and creating AD and composting facilities.⁵³ This funding is expected to result in an additional 83,000 tons of organic waste diverted from landfills each year.⁵⁴

States and localities can follow these models and the models identified in the government support section (Section VIII: Government Support for Food Waste Reduction) to provide funding to assist in the creation and expansion of composting and AD facilities.

Encourage small farms to become organic waste sites. In many states, a lack of available composting facilities poses a barrier to compliance with organic waste bans. Connecticut, for example, has only three approved composting facilities

that accept food scraps,⁵⁵ while as of 2014, Rhode Island had only one.⁵⁶ Because these laws have exemptions for entities not located near an appropriate facility, this lack of facilities has a significant impact on how many entities are subject to the organic waste ban. Although Rhode Island has begun work constructing large AD facilities in the state,⁵⁷ and Connecticut is in the process of permitting three similar facilities,⁵⁸ these projects are expensive and time-consuming undertakings.

In addition to supporting the development of larger facilities and providing funding for such facilities, states can also encourage the development of small-scale composting sites, for example, on small farms.

- **Massachusetts**, for example, provides a model for using small-scale farms to support its organic waste ban. Massachusetts has an exemption that allows farms with composting activities and that receive less than 105 tons/week of organic material to avoid the more stringent permitting requirements applied to sites that receive more than 105 tons/week of organic material.⁵⁹

Other states and cities can follow Massachusetts' example by encouraging the development of small farm-based composting sites through the creation of exemptions. States and cities can also offer similar permitting options for other non-farm-based small-scale composting facilities to encourage the development of small facilities with fewer start-up costs and administrative burdens.⁶⁰

Offer curbside composting programs. Over 150 communities, from Cambridge, Massachusetts to San Francisco, California, have implemented municipal curbside composting programs to divert food waste.⁶¹ Curbside composting programs are voluntary or mandatory programs allowing residents to separate and dispose of their compostable waste, as they would with garbage and recycling.⁶² Curbside composting programs allow for households to reduce their environmental impacts by diverting their food waste from landfills.

- **Seattle, Washington's** curbside composting program can serve as a model for states and localities that want to require curbside composting. As of January 1, 2015, all residents and commercial establishments in Seattle must either have a composting service pick up their waste, take the waste to a processing site themselves, or personally compost their organic waste at home or at a facility. This law applies to food products as well as paper with food on it.⁶³
- **Cambridge, Massachusetts'** pilot program can serve as a model for states and localities looking to fund a pilot program. After a successful one year pilot program, the city of Cambridge, Massachusetts expanded its free weekly curbside pickup of food scraps from 600 to 5,000 households, and expects to expand compost collection citywide in subsequent years.⁶⁴ During the first year of the pilot program, over 600 participating households collected over 170,000 pounds of food scraps using free curbside bins, in-house containers, and compostable bags. Participating residents' food waste bins were picked up for free on the same day as trash and recycling. The average amount of organic waste collected was 6.6 lbs per household per week, reducing trash by nearly 35%.⁶⁵

States and localities that already have municipal composting programs for businesses and organizations should examine the feasibility of expanding those programs to residential areas. In areas that do not have municipal composting, policymakers and advocates can partner with composting businesses to start a curbside composting program.

Utilize financial incentives to divert food waste. States and localities that are not ready to implement a waste ban or waste recycling law can instead start by providing financial incentives to encourage households and businesses to reduce and divert their food waste. The methods described below could also be used to promote diversion by additional generators in states where certain types or sizes of generators, or generators located far from food waste processing facilities, are exempt from the ban.

One incentive method is unit-based pricing (UBP) systems, also known as pay-as-you-throw (PAYT), variable-rate pricing (VRP), user pay, or SMART.⁶⁶ Under these systems, a person pays for waste collection (if they receive curbside collection through their municipality or a private subscription) or drop-off (if they haul waste to facilities themselves) by volume or weight. Because of the increased costs of disposing of larger amounts of trash, UBP systems are effective at incentivizing

waste reduction and diversion of recyclable and compostable materials, and have been found to reduce residential waste disposal by up to 17%.⁶⁷ Vermont, Massachusetts, and Connecticut instituted UBP systems, which have led to decreases in overall waste production, increases in source reduction, composting, and recycling, and cost savings for municipalities.⁶⁸

Similar programs could be implemented to incentivize the diversion of food waste. The **Vermont** Universal Recycling Law, for example, required all municipalities in the state to put in place a UBP system for residential trash by 2015.⁶⁹ States could consider including a similar provision requiring individual municipalities to develop their own UBP systems in their organic waste laws or as a stand-alone first step in reducing waste. Particularly in states where waste bans cover only larger commercial generators, such a system could incentivize smaller generators, like individual households, to keep food scraps out of their trash, laying the groundwork for possible expansion to a residential food waste ban down the road. Alternatively, states could incentivize municipalities to develop UBP programs, without requiring them to do so, through funding and grant programs.⁷⁰ **Connecticut** awarded grants for communities to implement UBP as part of their Municipal and Regional Recycling Assistance Program.⁷¹

Conclusion

Most food scraps currently end up in landfills, where they take up space and harm the environment. Organic waste bans and waste recycling laws not only facilitate composting and AD over landfill disposal, but can also encourage reduction and diversion of food waste higher up the food recovery hierarchy. States and localities can utilize organic waste bans and waste recycling laws, as well as a host of other supportive laws mentioned in this section, to press commercial entities and even households to reduce their food waste.

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Section VIII: Government Support for Food Waste Reduction

■ Two major barriers to food recovery are the costs of building and maintaining programs and infrastructure and the lack of wide-spread information on food recovery. State and local governments can break down these barriers by funding food recovery and by taking on the task of food recovery education.

Overview

This section provides an overview of existing state and local government support for food waste reduction through grants and direct allocations. It then highlights strategies for encouraging food waste reduction, focusing on resolutions and food waste challenges. Lastly, this section examines effective educational resources on food waste reduction created and maintained by state and local governments. The examples provided in this section can serve as models for state and local governments looking to support food recovery within their communities.

- 1. Introduction** State and local governments can help keep food out of the landfill by alleviating some of the financial burden of food waste reduction, encouraging food waste reduction by rewarding successful endeavors through food waste challenges, and promoting and educating their citizens about reducing food waste. Not only will state and local governments make their jurisdiction more sustainable and food efficient, but they will also alleviate food insecurity affecting their constituents.
- 2. Providing Funding for Food Recovery** State and local governments can provide a variety of funds for food recovery programs and infrastructure. This funding can take the form of competitive grants or direct spending. Such funding can go towards supporting food recovery organizations, starting food waste prevention programs, building composting facilities, purchasing transportation equipment, shoring up the operating budget of local food banks, or a host of other projects to support increased food recovery.
- 3. Encouraging Food Waste Reduction** State and local governments can challenge waste producers in their communities to divert waste that would otherwise be thrown away. Challenges draw attention to on-going waste production, create space for businesses to experiment with waste reduction techniques, and give credit to those who meet the challenge goals. Challenges are a useful method of highlighting good work being done to reduce waste by businesses and inspiring others to join. State and local governments can support food waste challenges through technical assistance and publicity. With the goal of food waste in mind, state and local governments can also encourage all government agencies and their contractors to donate excess food to food recovery organizations that provide assistance to food-insecure individuals.
- 4. Public Education** State and local governments can increase awareness of food waste and food recovery opportunities by providing educational and informational resources to the general public. Some government entities have developed comprehensive web-based resources for those interested in food recovery. Some agencies host seminars, summits, and trainings to encourage interested parties to participate in food recovery and equip them to easily navigate the many pieces of food recovery.

Introduction

Food is the largest contributor to solid waste, causing states and municipalities concern over dwindling landfill space. While in the landfill, food waste also causes significant environmental harms through its methane emissions. The growing, processing, packaging, and transporting of food that will eventually end up in the landfill also wastes a significant amount of time, energy, money, water, and oil. Food waste is a drain on the environment, economy, and communities. The incredible social harms caused by food waste make any governmental investment in food waste reduction money well-spent. With a small financial investment, states and localities can significantly reduce the amount of food waste in its communities.

Food recovery program infrastructure, composting capacity, and anaerobic digestion facilities can be expensive. The costs of running food recovery programs, buying equipment, and building infrastructure often act as a barrier to food waste reduction, despite the significant amount of surplus food and the widespread demand for that food. State and local governments can

break down cost barriers by providing financial support to organizations via competitive grants and direct appropriations. Funding can create programs that will address the needs of the food waste reduction landscape.

State and local governments are well-positioned to encourage food waste reduction and educate their constituents about food waste and food recovery. According to a report by ReFED, over 80% of food waste occurs at consumer-facing businesses (food distributors, food retailers, food service providers, restaurants, and institutions) and in homes.¹ State and local governments can inspire and encourage consumer-facing businesses and consumers to divert food waste by hosting business competitions, conducting awareness campaigns targeting key stakeholders, and educating consumers about food waste. State and local government support for food waste reduction is vital to minimizing the significant amount of food wasted each year.

Providing Funding for Food Recovery

State and local governments can allocate financial resources to improve and expand the food recovery systems at work in their communities. Depending on the needs of the community, resources can be allocated to specific entities, such as food recovery organizations or food banks, or can be structured as competitive grant programs. Grants and direct appropriations can support the development of food recovery programs and the creation and maintenance of necessary food recovery infrastructure.

Offer grant programs. Several state and local governments administer grants aimed at reducing food waste. Eligible grant recipients compete to receive funding on the merits of their proposed use and applicability within the grant program goals. When states and localities administer grant programs, they not only fund impactful programs and build new food recovery infrastructure, they also incentivize nonprofits or private companies to develop innovative and effective mechanisms for increasing food recovery. The competitive aspect of a grant program ensures that organizations strive to develop productive and compelling programs. Grant programs may also foster new collaborations amongst competing organizations.

The below offers a few examples of ways that states can implement grant programs to spur food recovery efforts.

- The **California** Department of Resources Recycling and Recovery (CalRecycle) is working towards the state's goal of reducing 75% of its solid waste by 2020.² Included in this 2020 initiative are multiple grant programs administered by CalRecycle to move organics, like food waste, out of landfills.³ CalRecycle's Food Waste Prevention Grant Program allotted \$10 million for a three-year grant program starting in 2016/2017 to promote a variety of food waste reduction initiatives focused on reducing food waste through source reduction or food rescue for people in need.⁴
- In **New York City, New York**, the Manhattan Solid Waste Advisory Board funded and administered small-scale composting projects.⁵ These small grants (\$100-\$700 per awardee) are geared towards funding community, small-scale organic diversion programs in the five boroughs of New York.⁶
- In **Tennessee**, the Tennessee Department of Environment and Conservation allocated \$1,000,000 for waste reduction grants, which includes composting units and organics collection bins.⁷
- The **Michigan** Department of Environmental Quality (DEQ) has a grant program specifically targeted at reducing and diverting food waste.⁸ The grant program encourages nonprofits, local health departments, and local and tribal governments to develop replicable food waste prevention projects. The grant program stems from Michigan's goal of doubling the residential recycling rate.⁹ Michigan DEQ offered a total of \$250,000, with individual grant amounts

EPA's Solid Waste Project Grants

The Environmental Protection Agency (EPA) administers grants to local, state, and tribal governments, as well as nonprofits, to promote waste reduction and the best possible management of solid waste. These grants can be used by recipients to increase food recovery. For example, the City of Santa Monica, California received an EPA grant to create a marking to distinguish compostable plastics from recyclable plastics in order to increase composting and to create cleaner food waste feedstock to boost anaerobic digestion.

Source: Solid Waste Projects, U.S. ENVTL. PROT. AGENCY, <http://www.sandiegocounty.gov/content/sdc/dpw/recycling/Food.html> (last visited Aug. 11, 2016).

capped at \$100,000, to recipients who match at least 25% of the grant amount.¹⁰ Four projects, including Feeding America West Michigan and the Delta Institute, received funding through this grant program for 2016.¹¹

- **San Francisco**, California has been working towards becoming a zero waste community by 2020.¹² As part of its Zero Waste Initiative, the San Francisco Department of the Environment offers Zero Waste grants for 2015-2017 to nonprofit organizations that reduce, reuse, recycle, or compost waste.¹³
- **Two counties in Washington** have food waste grant programs:
 - **King County's** Solid Waste Division awarded four Commercial Food Waste grants in 2016 and plans to award more in 2017.¹⁴ The 2016 projects focus on reducing food waste produced by the commercial sector, demonstrating the commercial value of anaerobic digester digestate field testing, and enhancing existing commercial food waste outreach projects.¹⁵
 - **Thurston County's** Food Recovery Enhancement grant takes proposals from organizations with existing projects in order to enhance the countywide capacity of food donation, collection, and distribution.¹⁶ Eligible organizations include food pantries, churches, and feeding programs.¹⁷ There is a total of \$230,400 in available funding, to be awarded to multiple organizations across the county.¹⁸
- In **Maryland**, the **Montgomery County** Department of Health and Human Services and the Mead Family Foundation support the Community Food Rescue Mini-Grants Program for organizations looking to expand their food recovery initiatives.¹⁹ The Community Food Rescue Mini-Grants Program awards small grants (\$5,000 – \$20,000) to organizations looking to increase the capacity and infrastructure for food recovery.²⁰

Provide direct funding. State and local governments can directly allocate funds to food recovery organizations and projects. This direct allocation allows legislators to fund targeted programs or projects for food recovery. Direct funding works particularly well when the government wants to respond to a specific need or gap in infrastructure. Many states have passed laws or allocated funds in their budget for direct funding of food recovery initiatives and organizations. The below examples represent a few of the ways in which states can directly allocate funds.

- **Pennsylvania** offers the State Food Purchasing Program (SFPP), which provides cash grants to counties for the purchase and distribution of food to low income individuals.²¹ SFPP is used to supplement the efforts of food pantries, soup kitchens, food banks, feeding programs, shelters for the homeless, and similar food organizations dedicated to reducing hunger.²² Grants are allocated to the County Commissioners to purchase food at wholesale, competitively bid prices, or better.²³
- Through the Department of Community and Economic Development, **Pennsylvania** also offers a tax credit program, called the Neighborhood Assistance Program (NAP), to encourage businesses to invest in projects designed to improve distressed communities.²⁴ Within NAP, Pennsylvania offers the Charitable Food Program (CFP), which is designed to help regional food banks or emergency food providers. Funding is provided through tax credits of up to 55 percent given to businesses making a contribution to approved food providers.²⁵
- In May 2016, the **Iowa** legislature passed a law that included a \$100,000 appropriation for the Iowa emergency food purchase program, allocating funds to Iowa food banks to purchase nutritional food for those in need.²⁶ This type of direct fiscal support can enable food recovery organizations, such as food banks, to function more effectively. The funds were allocated through the Iowa Department of Agriculture and Land Stewardship and will be distributed to the Iowa

Save the Food

In April 2016, NRDC and the Ad Council launched the “Save the Food” national public service campaign to help combat food waste. The campaign includes commercials, billboards, and an interactive website on ways to reduce food waste. State and local governments can partner with the Save the Food campaign to help increase awareness of food waste in their communities.

Source: NRDC and Ad Council Launch New “Save the Food” National Public Service, *SAVE THE FOOD*, <http://www.multivu.com/players/English/7808251-ad-council-save-the-food/>.

food bank association with matching funds.²⁷

- The city of **Cambridge, Massachusetts** allocated funds to a local food recovery organization, Food for Free, to purchase a freezer van. Food for Free delivered 2 million pounds of food through their Prepared Meal Program in 2015, and acquisition of a delivery van will allow them to double that amount by giving them access to additional parts of the community.²⁸ This allocation occurred through the Cambridge Participatory Budget Process, where Cambridge residents vote directly to fund projects in their community.²⁹ The money is not specifically set aside for food recovery projects, but by capturing sufficient community votes, this food recovery organization was able to procure direct government funding for its expansion.³⁰



Encouraging Food Waste Reduction

In addition to direct funding, state and local governments can encourage food waste diversion by organizing food waste challenges to inspire waste producers to reduce their amount of food waste. By challenging businesses to reduce their waste and quantify it publicly, governments can both promote the issue of food waste and reward those taking steps to reduce their waste. State and local governments can also encourage food waste reduction by passing a law or resolution to encourage food recovery. The below examples represent just a few models of states and localities encouraging food waste reduction.

- Under Mayor Bloomberg in 2013, **New York City, New York** launched a Food Waste Challenge for restaurants as a voluntary effort to reduce greenhouse-gas emissions from landfill waste.³¹ Over 100 restaurants participated, and in the first six months, diverted over 2,500 tons of food waste from landfills.³² In 2016, Mayor de Blasio built upon

the food waste reduction work with the Zero Waste Challenge, which challenged businesses to cut food waste by 50 percent.³³ Several businesses like Whole Foods, the Waldorf Astoria, and the Barclays Center participated, and thus far diverted 36,910 tons of food waste (including 322 tons donated for human consumption).³⁴

- **Rhode Island** implemented a Food: Too Good To Waste program to help residents reduce food waste.³⁵ The program offers four strategies: (1) Smart shopping: buy what you need; (2) Smart storage: keep fruits and vegetables fresh; (3) Smart prep: prep now, eat later; and (4) Smart saving: eat what you buy.³⁶
- In 2010, **Los Angeles, California** adopted a policy that requires all city departments and elected officials to donate surplus food to area food banks and other food rescue organizations.³⁷ Although only presently applied to the public sector, the policy can be expanded to the private sector to further eradicate hunger and reduce food waste.
- Similarly, in 2016, **Tennessee** passed a resolution encouraging all state agencies and their contractors to donate excess food to local nonprofit organizations.³⁸ Such a resolution can show businesses and government agencies that food donation is allowed and encouraged, as well as offers the chance to highlight other relevant laws, such as liability protections and tax incentives.
- The **City of Boulder, Colorado** paid Boulder Food Rescue to conduct a city food waste audit and to determine how the city can reduce waste and commit to a zero waste goal.³⁹ Through the use of this government expenditure, Boulder was able to identify the most opportune areas for further development of food recovery programs.⁴⁰

Public Education

In addition to funding and encouraging food recovery, state and local governments can provide educational information on food waste and food recovery. Most consumers are unaware of the amount of food being wasted. State and local governments can disseminate information about food waste and donation by publishing on their websites, hosting educational seminars and conferences, providing training sessions, and running media campaigns. Potential food donors often have questions about aspects of food donation that can be easily explained online. State and local governments can provide answers to Frequently Asked Questions (FAQs) on a wide-range of topics, including food safety, liability protections, how to establish a food recovery program, and how to find potential food recovery partners. Online resources can include legal fact sheets, best practice guides, background information on the food waste landscape, answers to common questions, and contact information for food recovery organizations. Additional resources can be shared via in person trainings or online webinars. Below are some examples of states and localities that offer examples of how government agencies can leverage their resources to provide key information and raise awareness.

- The **Washington County, Oregon** Department of Health and Human Services has a section on its website called “Food Scraps Management” with information on preventing food waste, contact information for food recovery organizations, and a description of what types of foods are and are not allowed in the county’s food scraps collections program (which processes the scraps through composting or anaerobic digestion).⁴¹
- The **San Diego, California** Department of Public Works hosts a website modeled after the EPA’s Food: Too Good to Waste program.⁴² For more information on the EPA’s Food: Too Good To Waste, check out the text box above.
- The **Ohio** Environmental Protection Agency has a section on their website about the Ohio Food Scraps Recovery Initiative. The site details facts about food waste and food scraps both in Ohio and nationally, and gives suggestions for how to reduce food waste. There is information on how to donate, tips for reduction, funding opportunities, home composting tips, information about composting regulations, and more.⁴³

Food: Too Good To Waste

The EPA created the Food: Too Good To Waste program to reduce wasteful household food management practices across the country. The program consists of an Implementation Guide, designed to teach local governments and community organizations how to implement the campaign, whereas the Toolkit provides behavior change suggestions and outreach tools. Local and state governments can use the EPA’s program to create their own awareness campaign.

Source: *Food: Too Good To Waste, Implementation Guide and Toolkit*, U.S. ENVTL. PROT. AGENCY (Fed. 2016), <https://www.epa.gov/sustainable-management-food/food-too-good-waste-implementation-guide-and-toolkit>

- The **North Carolina** Department of Environment and Natural Resources (NC DENR) helps support periodic food recovery convenings in the southeastern U.S. Region. This included a Food Recovery Summit, held in partnership with the EPA in 2015.⁴⁴ These educational events are intended to generate interest and momentum in eliminating food waste in the area, and to accelerate food waste reduction and diversion.⁴⁵
- The **South Carolina** Department of Agriculture and South Carolina Department of Health and Environmental Control collaborated with a number of private and public stakeholders to launch “Don’t Waste Food S.C.”⁴⁶ This collaborative campaign educates consumers, businesses, and communities about the environmental impacts of food waste and provides resources on how to prevent, reduce, donate, and compost food waste.⁴⁷

Conclusion

State and local governments can increase the amount of food diverted in their community by funding food recovery programs and infrastructure, encouraging food waste reduction, and educating the public and private sectors about food waste. Providing funding, encouragement, and education will help build a supportive landscape and entice consumers, food donors, and food recovery organizations to do the work of reducing food waste and encourage those not yet participating to become involved.

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