

# **The Food Waste and Food Insecurity Crisis in America: Interweaving a Resolution**

Shailen Pathy

*Cite as:* Pathy, Shailen. **2024**. "The Food Waste and Food Insecurity Crisis in America: Interweaving a Resolution". *Food-Fueled*, **1**, e00010.  
doi:10.57912/25823986.

web address: <https://edspace.american.edu/foodfueled/issues/volume-i/the-food-waste-and-food-insecurity-crisis-in-america-interweaving-a-resolution/>

## **Introduction**

There is no shortage of crises in our country today. From healthcare to drugs to crime to the state of the economy, there is an overwhelming amount to tackle, and anything and everything is politicized. Solutions to these pressing issues are not always easy or convenient, but awareness is often the first step to ensuring that complex issues can ultimately be resolved.

The concerns of food insecurity and food waste are intimately intertwined, and developing complementary solutions that address both is ideal and possible.

## **Food Insecurity**

It has long been known that food insecurity is a challenge in the United States (U.S.). The United States Department of Agriculture (USDA) in 2022 estimated that 12.8% of US households qualified as food insecure at some point during the year, an increase from 10.2% in 2021, equating to 44.2 million individuals.<sup>1</sup> In Connecticut, the overall food insecurity rate at 10.5% was found to be lower than the national average per a 2021 report by Feeding America, but a report directly from Connecticut's Office of Legislative Research revealed an astounding food insecurity rate in New Haven County of 16.2%.<sup>2,3</sup> For reference, this is despite the United States Economic Development Administration noting that in 2022, Connecticut was the second-wealthiest state in the country, calculated by per capita personal income.<sup>4</sup>

Continuing with the Connecticut theme, a 2022 survey by DataHaven was even more stark, revealing that the percentage of Connecticut adults who reported not having enough money to buy food was 17% of adults.<sup>5</sup>

A Feeding America study surveyed food pantry and soup kitchen clients in Connecticut and uncovered that over a 12-month timeline, 69% of households had to choose between food and utilities, 66% had to choose between food and medical care, and 57% had to choose between food and rent.<sup>6</sup>

Food insecurity is thus a growing issue that does not have the same emphasis as other issues in the national news.

### **Food Waste**

At the same time, another issue that receives minimal public scrutiny is food waste. In the U.S., we waste almost 60 million tons (approximately 120 billion pounds) of food per year, essentially 30-40% of our food supply.<sup>7</sup>

Between 2010 and 2015, commercial and industrial food waste increased in Connecticut from approximately 183,000 tons to 272,000 tons for residential loose food waste and from 138,000 tons to 247,000 for business loose food waste—despite proposed legislation from back 2010 by the Connecticut Department of Energy and Environmental Protection (DEEP) that required recycling of organics such as food residuals.<sup>8,9</sup> In fact, the average restaurant wastes up to an estimated 75,000 pounds of food annually.<sup>10</sup>

Food waste does require a complex analysis, as the losses stem from a variety of steps along the way, including the manufacturing process, transportation, and spoilage, as well as losses related to overabundance of supply of certain crops.<sup>11</sup> Waste is also related to food that is discarded at home, consumer-related businesses, and elsewhere, and food that is thrown out simply because it is not cosmetically “acceptable”—also known as “ugly” fruits and vegetables.<sup>12</sup> Much of this wasted product unfortunately finds its way to landfills, where it can have a significant environmental impact.

Reduction in food waste can be difficult and requires a conscious effort. Chef Paul Barron, originally from Long Island, NY and now in Connecticut, operates catering and personal chef services, including cooking classes and prepared meals. Barron reports that when he first began his business, “there was waste because we had to figure out portion sizes and how much people would eat.” However, as he and his team began to “figure out portion sizes and how much people eat,” the level of food waste diminished. “Every day, we get better and better at that,” he explains. As a catering service, Barron notes that the advantage is in planning based upon specific, known numbers of individuals they will serve, and the exact menu that is requested. In his estimation, restaurants can be more unpredictable and tend to yield greater waste products. However, any leftover food in his catering establishment does not go to waste, as they “either eat [it themselves] as sort of a staff meal or give [the food] to all the people that are working to take home . . . because [they] can’t really re-serve it.”

Brian Parri, who has owned Café Routier in Westbrook, Connecticut for nineteen years, and whose additional exposure involved his mother owning a separate restaurant for twenty-eight years, reports that his particular establishment yields little excess, as “everything is cooked to scratch.” Additionally, because he does not

preserve foods in a freezer, daily deliveries are on a schedule. “Very little goes to waste [as the excess food] either goes into a stock pot or it goes into a family meal . . . [to] feed our own employees.” The restaurant also connects with local pig farmers, so that residual plate scrapings and scraps of food can be placed in slop buckets for the farmers to use.

### **Environmental Effects of Wasted Food**

Food that is wasted in landfills emits large amounts of methane gas as it decomposes.<sup>13</sup> Both methane and carbon dioxide are greenhouse gases that trap heat within the earth’s atmosphere and have been shown to lead to global warming. Per the Environmental Protection Agency (EPA), organic waste, including unused food, that winds up in a landfill produces approximately 50% carbon dioxide and 50% of methane.<sup>14</sup> But these gases are not equivalent. The United Nations Environment Program notes that because methane traps a greater amount of heat than carbon dioxide, it is over 80 times more potent than carbon dioxide over a 20-year span.<sup>15</sup>

Comparisons have been made to better understand the effect of food waste and the associated volume of consequences. The emissions from the food wasted in the US is equivalent to 37 million cars.<sup>16</sup> In another comparison, a 2021 article in *The Washington Post* found that food waste in the United States alone results in a larger carbon footprint than the airline industry.<sup>17</sup>

Additional after-effects of wasted food include the depletion of resources (i.e. water, land, energy) that were utilized in creating the unnecessary food that goes wasted, a loss of biodiversity where greater unnecessary production can result in increased use of chemicals that may be harmful to the ecosystem, and water and ocean pollution which can be seen with an unnecessary increased production and the use and disposal of fertilizers and pesticides.<sup>18</sup>

### **Legislation**

California has been a leader in the space, developing legislation to reduce food waste and encourage food rescue and donation. The state passed [Senate Bill 1383](#), which is now California state law, that went into effect January 1, 2022. This bill was supported, in part, by the hunger-relief and food rescue organization [Feeding San Diego](#) on the reduction of short-lived climate pollutants, such as methane gas.<sup>19</sup>

The law helps both the environment and those that are food insecure with surplus food recovery. It targets a decrease in organic waste disposed in landfills by up to 75% by 2025 and simultaneously aims to rescue at least 20% of edible food that would otherwise go to waste and redirect it to those with food insecurity, requiring food manufacturers such as restaurants and grocery stores to donate a portion of their edible food waste instead of discarding it.<sup>20,21</sup>

The California law requires every jurisdiction—city, county, or special district—to provide organic waste collection services, in addition to its solid waste collection services, to all residents and businesses. [California Department of Resources Recycling and Recovery \(CalRecycle\)](#) is the agency responsible for ensuring local jurisdictions have the appropriate programs in force.<sup>22</sup>

Particular targets of the law include large food distributors, such as grocery stores, which must donate edible food that would otherwise be disposed of *to instead* be redirected to food banks or other food rescue organizations—or else the distributors face fines. Food suppliers need to have a contract with a food rescue organization and similarly need to recover edible food that would otherwise go to landfills. In the near future, additional prime users of food and high-waste institutions, such as restaurants, hotels, and schools, will also be added to the list of targets that will need to be compliant with the law.<sup>23</sup> Up until passage of the law, there has been minimal repercussion for production of excess organic waste.

With this law, California is leading the way in decreasing greenhouse gas emissions through reduction of food in landfills, while simultaneously using otherwise wasted food to feed hungry mouths in an effort to reduce food insecurity.

The [Bill Emerson Good Samaritan Food Donation Act](#) provides federal liability protection, both civil and criminal, for food donors in good faith who donated to those in need through a non-profit organization.<sup>24</sup>

Importantly, the [California Good Samaritan Food Donation Act \(AB 1219\)](#) increases these protections to donors who provide food directly to end users, provided that the donor has made an evaluation in good faith that the food remains consumable and safe to eat. An important aspect of this legislation is that it covers perishable foods that may be beyond the manufacturer's posted date of use but may still be deemed appropriate for consumption.<sup>25</sup>

Vermont has similarly been at the forefront of these related issues. In 2020, their [Universal Recycling Law \(Act 148\)](#) went into full effect. This law requires the separation of food scraps from other waste, with the requirement to donate the excess edible food to an accepting food bank, forward the scraps to an appropriate facility for composting, or alternatively compost the scraps in-house. This law targets not only businesses but also residents.<sup>26</sup>

Under the law, the state provides support for composting privately while also providing support for seeking off-site, certified composting entities, encouraging such composting infrastructure throughout the state. In fact, the law bans food scraps from landfills in their goal to eliminate food waste and promote composting and recycling.<sup>27</sup>

Vermont's laws surrounding food donation offer enhanced Good Samaritan protection beyond the federal legislation.

Other states, such as Massachusetts, Rhode Island, New York, and Colorado, have made similar progress in the food waste arena as they are proactive in efforts to reduce both food waste as well as amplify food rescue and donation.<sup>28</sup>

Connecticut State Senator Christine Cohen, who represents the 12<sup>th</sup> District in the state and also owns Cohen's Bagel Company in Madison, Connecticut, says that the California law "solves a couple of problems.

"In Connecticut in particular, we have a waste issue. We have tons and tons of waste. And right now, we're exporting a bunch of that waste out of state to landfills; we don't have landfills active in the State of Connecticut anymore. And the other plants that . . . process this product to turn it into energy are at capacity, so we're taking a lot of waste and we're shipping it out of state. And as a result, we're adding to carbon emissions . . . We also have a large homeless population, a lot of folks that are ALICE, which means Asset Limited, Income Constrained, Employed . . . so they need different benefits when it comes to food."

States such as Connecticut are increasing their efforts, though these steps may be more sluggish to date than desired. The [Connecticut Commercial Organics Recycling Act](#) from January 1, 2022 notes that "each commercial food wholesaler or distributor, industrial food manufacturer or processor, supermarket, resort or conference center that is located not more than twenty miles from an authorized source-separated organic material composting facility and that generates an average projected volume of not less than twenty-six tons per year of source-separated organic materials [SSOM] shall: (A) Separate such source-separated organic materials from other solid waste; and (B) ensure that such source-separated organic materials are recycled at any authorized source-separated organic material composting facility that has available capacity and that will accept such source-separated organic material."

Thus, facilities that are deemed to qualify in this category that do not compost their SSOM on-site must recycle this waste at a certified composting facility.<sup>29</sup>

Cohen expands, "...much like California requires a certain percentage of food waste at the end of the day to be donated to food insecure folks, [Connecticut] has a law that restaurants around the Southington plant, which is the only plant in the area that is an anaerobic digester and it takes food waste from grocery stores and restaurants . . . and processes it and makes it into energy for the Southington area. We require restaurants and food establishments in that area, if you're within a certain circumference of that processing plant, to donate their food waste to the processing plant to be processed into energy."

In a show of progress, Connecticut's initial laws were relegated to facilities that average two tons per week of SSOM, or one hundred four tons annually, before expanding to facilities that average one ton per week, to now the current one-half ton per week average, or twenty-six tons annually.<sup>30</sup> Further, beginning January 1, 2025, the current law that limits qualifying facilities to those within a 20-mile radius of an authorized composting service will no longer be a valid exemption, making the law more broad.<sup>31</sup>

However, like other states, the Connecticut laws do not require food donation, so the laws currently seem single-pronged in nature.

### **Legislative Obstacles**

The restaurant industry is a rigorous one. Studies reveal that over 60% of restaurants may fail within their first three years of operation. This high failure rate, while lower than the unsubstantiated 90% failure rate at one year purported at one time by American Express, remains daunting.<sup>32</sup> Though different types of restaurants may have variable associated factors, the National Restaurant Association estimates a profit margin of 5% for an average restaurant.<sup>33</sup>

There are a handful of states (Connecticut, Maine, New Hampshire, Rhode Island, and Vermont) in the U.S. that charge a statewide meals tax rate, in addition to the state's sales tax, when applicable. Connecticut, for example, has a sales tax of 6.35%, with an additional 1% tax added to meals, resulting in an effective meals tax rate of 7.35%.<sup>34</sup> Combining the added meals tax rate to the slim margins of restaurant operations can add to the further onerousness of the industry, even before imposing added legislative regulation and potential penalties in relation to food waste.

Senator Cohen explains that, as a food-related business owner, someone on staff must be ServSafe® certified to ensure that the food being placed for customers is appropriate for consumption. The staff is "always doing inventory in the store to make sure that your products are sellable and that nobody's going to get sick from improper food use."

Restaurant businesses clearly have many moving pieces that need to integrate seamlessly. As Parri explains, "the restaurant and food business is like riding a bike and fixing the tire at the same time." Yet, Senator Cohen believes that many "restaurant owners and food establishments, grocery stores . . . would really be amenable to [enacting measures that reduce food waste and focus on food rescue], because they're [currently] paying for waste removal. They have to pay to get rid of their old food." She believes that it would be welcomed by food establishments if a

solution allows for them to donate food waste that's otherwise usable food but close to that end date.

While some of the current legislation is well-intentioned regarding food waste with goals of limiting excess, tracking food waste is not standardized, and methods such as the internal logging of food waste at a restaurant are not inexpensive.<sup>35</sup> An issue with not standardizing tracking methods arises, for example, in Connecticut, where a business can transport its food waste across state lines without any restrictions and adequate tracking or repercussions.<sup>36</sup> While the movement of waste outside Connecticut may be beneficial locally, it does not solve the waste management issues of the greater population and instead displaces it to a new area.

As noted, while the [Bill Emerson Good Samaritan Food Donation Act](#) provides federal protection for food donation, this specific legislation does not protect donations outside of non-profit agencies.<sup>37</sup> This leaves food establishments outside of the law's protection, and expanding upon this law to include restaurants has not been done by a majority of states.

### **Potential Solutions**

As Senator Cohen, Barron, and Parri all agree, a vital first step is to increase awareness and promote education on the crises of food waste and food insecurity. But education alone is not sufficient.

By ensuring that all states develop food reduction goals, local governments can work with businesses to establish food recovery and donation options that target food waste. As Parri explains, "Most of the people are on board with making sure that if we can't use the product, it goes to somewhere that it can [be used]."

While donating excess or potentially wasted foods to those in need is a worthy cause, donations should be made thoughtfully. Food banks list items that are needed online so that well-intentioned donations will not go to further waste. However, calling the food bank directly can better ensure that appropriate products are donated without waste.<sup>38</sup>

Ensuring businesses in the food industry can adequately keep track of their food waste with clear methods may make it easier to enforce the donation of food that is not otherwise being reused by staff and families. Tracking of food waste is also ideal for business owners, as it can be used to improve the efficiency of business practices.<sup>39</sup>

Aside from standardizing food waste logs at food establishments, there are more current and precise methods of tracking food waste. New software, ticket tracking systems, and attention to detailed weighing of food items are methods of improving outcomes.<sup>40</sup> Yet, updating systems comes with a financial cost.

In addition to business-focused methods of targeting food waste and insecurity, there should be convenient and efficient methods for people to give back via neighborhood composts. Expanding composting can directly address the high rate of organic waste ending up in landfills.<sup>41</sup> Educating people on the benefits of composting as compared to tossing organic scraps in landfills is the first step. Since composting involves the breakdown of organic waste through microbes with oxygen, the waste is converted to healthier and more nutrient-rich soil without the production of methane gas. Using a landfill to discard organic waste results in a combination of both organic and inorganic waste, and the organic waste decomposes in an anaerobic environment, resulting in the production of potent methane gas that worsens the risks of global warming.<sup>42</sup>

A lot of responsibility seemingly falls on businesses to ensure that waste is limited. While the incentive for a business owner to reduce waste is that it is simply good business practice, incentivizing the behavior may bring about more buy-in from the establishment owners.

Aside from new policies and education, state and local governments may be best served working in collaboration with businesses. At a local level, governmental bodies could provide tax incentives, other financial benefits, and food waste-related resources to achieve common goals.<sup>43</sup>

### **Tips**

While education, legislation, and public buy-in are required to make the needed changes in this space, there are also simple tips that can be performed to ensure good practices that will have the two-fold effect of waste reduction and reducing food insecurity.

Per the U.S. Food and Drug Administration (FDA), it is incumbent that consumers do not overbuy food, which can, in turn, limit food waste. Steps such as ensuring the temperature settings on the refrigerator are at or below 40°F and the freezer at 0°F can reduce spoilage. Freezing many foods until they are ready to eat can also prolong their life. In this era, apps are available that detail information about food storage that can promote freshness. Refrigerating vegetables that have already been peeled or cut can prolong their life.<sup>44</sup>

Organization matters, as an overly cluttered and poorly visible space makes it difficult to take inventory and increases the chance of food going to waste. Apps are available that can assist in creating an order to your food storage.<sup>45</sup>

Additionally, there needs to be a culture shift in which people become more cognizant about “purchasing what [they] intend to consume,” Senator Cohen



explains. This will lead to “a trickle effect, where because we’re purchasing less, the stores aren’t buying as much—so there wouldn’t be as much food waste.”

Being conscientious about grocery lists and what is actually needed, coupled with deliberate planning for meal preparation, can result in less waste and is a part of this culture shift around food consumption. Such a shift is easier said than done, but buying only what is necessary is the overall goal.<sup>46</sup> To adequately plan for the amount of food needed, reviewing recipes can ensure that the necessary alterations are made to facilitate the appropriate servings of food.<sup>47</sup>

Purchasing imperfect or “ugly” produce can sometimes not only save a consumer money as it is usually discounted but also can prevent food waste. Imperfect produce often goes to waste based solely on its appearance despite being edible still.<sup>48</sup>

Another food waste reducing tip is to inquire about portion size when dining out; then, ask to pack the uneaten portion to take home.<sup>49</sup>

When purchasing food at a grocery store, it is important to understand what the date labels mean. Aside from perishables such as milk, cheese, fresh vegetables, and fresh fruit, other foods may be safe to eat even past their “Best If Used By” date, provided no obvious evidence of spoilage is noted—though it may not have the freshest taste and texture. The date labels are simply present to indicate the ideal quality of the food, not the “expiration” of the food. The only food product for which the FDA requires an actual expiration date is infant formula.<sup>50</sup>

Making the most out of every edible food item can also drastically reduce food waste. For example, the peels of an orange can flavor water or be used for candy, and the bones of a chicken can make chicken stock.<sup>51</sup> If there is any food waste that cannot be repurposed in any way, make sure to compost the scraps to be used as fertilizer for growing plants. Do not place any organic waste in the garbage.

## **Conclusion**

There are clearly different perspectives on the lifespan of food depending on where one is involved in the food process, from regulators to consumers to restaurants to manufacturers to farmers. Yet to truly target food waste, daily habits need to change before laws can be enacted with true success and effectiveness. This education can come at early stages as well, including health classes and economics courses, as there is a tremendous multi-disciplinary overlap in this field.

The “Seat Belt Law” requiring front seat vehicle seatbelts went into law in many states in the mid- 1980s and early 1990s, but the law now seems obvious to many as it has been part of the public’s consciousness for so long. The CDC estimates that for drivers and front-seat passengers, the risk of fatality is reduced by 45% by the usage of seat belts, with a 50% reduction in serious injury. Further, the National

Highway Traffic Safety Administration reports that in 2017 alone, seat belts in passenger vehicles saved nearly 15,000 lives.<sup>52,53</sup> Legislation is needed at times to begin movement of the public good in the proper direction at times.

According to Senator Cohen, legislation can make a positive change in the communities. "I see no reason why we couldn't move forward [in Connecticut] with something like [a bill that limits food waste with a component of edible food waste donation to the food insecure] and really have some good policy discussions, post a public hearing on something like this, and understand what problems there might be and how to overcome them as we go forward."

With proper collaboration between the government, business owners, and individuals, tackling the two separate but related issues of food waste and food insecurity is possible and positive, lasting outcomes will be achieved.

**About the Author**

Shailen Pathy is a high school student in Connecticut. Having cooked from a young age in various environments, including professional facilities, he has witnessed firsthand food waste and the difficulties in limiting the excesses. He has also witnessed the impact of food insecurity in his community and abroad. He hopes to shed more light on and contribute to the resolution of these two growing and connected issues.

## Bibliography

- 1 Rabbitt, Matthew P. et al. October 2023. "Household Food Security in  
the United States in 2022." *USDA Economic Research Report, #325*.
- 2 "Map the Meal Gap," Feeding America, 2024,  
<https://map.feedingamerica.org/county/2021/overall/connecticut>.
- 3 Proto, Jennifer. 18 December 2020. "Food Insecurity in Connecticut."  
Connecticut General Assembly, Office of Legislative Research.
- 4 "2022 Per Capita Personal Income," StatsAmerica, March 2024, Data  
Source U.S. Bureau of Economic Analysis,  
[https://www.statsamerica.org/sip/rank\\_list.aspx?rank\\_label=pcpi1](https://www.statsamerica.org/sip/rank_list.aspx?rank_label=pcpi1)
- 5 Siena College Research Institute. "2022 DataHaven Community  
Wellbeing Survey." August 1-28, 2022.
- 6 Weinfield, Nancy S., PhD et al. August 2014. "Hunger in America  
2014: National Report Prepared for Feeding America."
- 7 "Food Waste in America in 2024," Recycle Track Systems, March,  
2024. <https://www.rts.com/resources/guides/food-waste-america/>.
- 8 "2015 Statewide Waste Characterization Study," Connecticut  
Department of Energy and Environmental Protection, 15 March 2016.
- 9 "Timeline of History of Organics Recycling in Connecticut,"  
Connecticut Department of Energy and Environmental Protection, 10  
December 2014. [https://portal.ct.gov/-  
/media/DEEP/compost/compost\\_pdf/OrganicsRecyclingHistoryTimelin  
e.pdf.pdf](https://portal.ct.gov/-/media/DEEP/compost/compost_pdf/OrganicsRecyclingHistoryTimeline.pdf)
- 10 Tehrani, Minoo et al. 24 July 2020. "Green Cities and Waste  
Management: The Restaurant Industry." *Sustainability*, 12, 5964.
- 11 Ishangulyyev, Rovshen et al. 29 July 2019. "Understanding Food Loss  
and Waste – Why Are We Losing and Wasting Food?" *Foods*, 8, 297.
- 12 Han, Zheng et al. 11 March 2024. "Seeing Beauty in Ugly Produce:  
Do Ugly Produce Retailers Reduce Food Waste?"  
<http://dx.doi.org/10.2139/ssrn.4349504>
- 13 Krause, Max et al. October 2023. "Quantifying Methane Emissions  
from Landfilled Food Waste," U.S. Environmental Protection Agency,  
Office of Research and Development.
- 14 "Basic Information about Landfill Gas," 12 February 2024. Landfill  
Methane Outreach Program (LMOP).  
<https://www.epa.gov/lmop/basic-information-about-landfill-gas>.
- 15 "What's the deal with methane?" 18 October 2022. UN Environment  
Programme. [https://www.unep.org/news-and-stories/video/whats-  
deal-methane](https://www.unep.org/news-and-stories/video/whats-deal-methane).
- 16 "Food Waste in America in 2024," Recycle Track Systems, March  
2024. <https://www.rts.com/resources/guides/food-waste-america/>.

- 17 Kaplan, Sarah. 25 February 2021. "A third of all food in the U.S. gets  
wasted. Fixing that could help fight climate change." *The Washington  
Post*.
- 18 Jaglo, Kirsten et al. November 2021. "From Farm to Kitchen: The  
Environmental Impacts of U.S. Food Waste," U.S. Environmental  
Protection Agency, Office of Research and Development.
- 19 "Organics Recycling in California (SB 1383)," Republic Services, 2022.  
<https://www.republicservices.com/organics-sb-1383>.
- 20 "Short-lived Climate Pollutants (SCLP): Organic Waste Reductions,"  
November 2020. CalRecycle.
- 21 Senate Bill No. 1383, Chapter 395. 19 September 2016.  
[http://www.leginfo.ca.gov/pub/15-16/bill/sen/sb\\_1351-  
1400/sb\\_1383\\_bill\\_20160919\\_chaptered.htm](http://www.leginfo.ca.gov/pub/15-16/bill/sen/sb_1351-1400/sb_1383_bill_20160919_chaptered.htm).
- 22 "New Statewide Mandatory Organic Waste Collection," March 2024.  
CalRecycle. <https://calrecycle.ca.gov/organics/slcp/collection/>.
- 23 "Food Donors: Fight Hunger and Combat Climate Change," March  
2024. CalRecycle.  
<https://calrecycle.ca.gov/organics/slcp/foodrecovery/donors/>.
- 24 "Bill Emerson Good Samaritan Food Donation Act," 1 Oct 1996. Public  
Law 104-210. [https://www.govinfo.gov/content/pkg/PLAW-  
104publ210/pdf/PLAW-104publ210.pdf](https://www.govinfo.gov/content/pkg/PLAW-104publ210/pdf/PLAW-104publ210.pdf).
- 25 Assembly Bill No. 1219, Chapter 619. 9 October 2017.  
[https://legiscan.com/CA/text/AB1219/id/1652064/California-2017-  
AB1219-Chaptered.html](https://legiscan.com/CA/text/AB1219/id/1652064/California-2017-AB1219-Chaptered.html).
- 26 No. 148 An act relating to establishing universal recycling of solid  
waste. 16 May 2012.  
[https://dec.vermont.gov/sites/dec/files/wmp/SolidWaste/Documents/  
Universal-Recycling/ACT148.pdf](https://dec.vermont.gov/sites/dec/files/wmp/SolidWaste/Documents/Universal-Recycling/ACT148.pdf).
- 27 "Vermont's Universal Recycling Law," Agency of Natural Resources,  
Department of Environmental Conservation, March 2024.  
[https://dec.vermont.gov/waste-management/solid/universal-  
recycling](https://dec.vermont.gov/waste-management/solid/universal-recycling).
- 28 "Food Waste in America in 2024," Recycle Track Systems, March  
2024. <https://www.rts.com/resources/guides/food-waste-america/>.
- 29- "Connecticut General Statute, Section 22a-226e Recycling of source-  
31 separated organic materials," casetext. 29 June 2023.  
[https://casetext.com/statute/general-statutes-of-connecticut/title-  
22a-environmental-protection/chapter-446d-solid-waste-  
management/section-22a-226e-recycling-of-source-separated-  
organic-materials-report](https://casetext.com/statute/general-statutes-of-connecticut/title-22a-environmental-protection/chapter-446d-solid-waste-management/section-22a-226e-recycling-of-source-separated-organic-materials-report).
- 32 Parsa, H.G. et al. "Why Restaurants Fail," August 2005. Cornell Hotel  
and Restaurant Administration Quarterly. Vol 46, No 3.
- 33 "Bottom line impact of rising costs for restaurants," 24 August 2022.  
National Restaurant Association. <https://restaurant.org/research-and->

- [media/research/economists-notebook/analysis-commentary/bottom-line-impact-of-rising-costs-for-restaurants/](https://www.epa.gov/sites/default/files/2017-01/foodcost3.xls).
- 34 Poole, Heather. 19 July 2019. "State and Local Meals Taxes." Connecticut General Assembly, Office of Legislative Research.
- 35 "Food Waste Management Cost Calculator," March 2024. Environmental Protection Agency.  
<https://www.epa.gov/sites/default/files/2017-01/foodcost3.xls>.
- 36 "Governor's Bill No. 6664 An Act Managing Waste and Creating a Waste Authority," 2023 January.  
<https://www.cga.ct.gov/2023/TOB/H/PDF/2023HB-06664-R00-HB.PDF>.
- 37 "Bill Emerson Good Samaritan Food Donation Act," 1 Oct 1996. Public Law 104-210. <https://www.govinfo.gov/content/pkg/PLAW-104publ210/pdf/PLAW-104publ210.pdf>.
- 38 "Food Banks: What They Really Need and What They Don't," April 2022. AIP Marketing Alliance. <https://aipma.com/media/aipma-blogs-articles/food-banks-what-they-really-need-and-what-they-dont/>.
- 39 "Why Measure Food Loss and Waste? – Why and How to Measure Food Loss and Waste," 2024. Commission for Environmental Cooperation. <http://www.cec.org/flwm/checklist-item/why-measure-food-loss-and-waste/>.
- 40 Speck, Anna. 6 December 2023. "Research Roundup: Food Waste & Technology," Hunter College New York City Food Policy Center. <https://www.nycfoodpolicy.org/research-roundup-food-waste-technology/>.
- 41- DeBoni, Annalisa et al. 2022. "Community composting: A  
42 multidisciplinary evaluation of an inclusive, participative, and eco-friendly approach to biowaste management." *Cleaner Environmental Systems*, 6.
- 43 Plekenpol, Regan et al. October 2021. "Promoting Food Donation: Tax Law and Policy." *The Global Food Donation Policy Atlas*.
- 44- "FDA Fact Sheet, What You Can Do, Tips to Reduce Food Waste." May  
50 2019. U.S. Food & Drug Administration.  
<https://www.fda.gov/media/101376/download>.
- 51 "Can We Reuse Leftover Orange Peels?" 27 July 2022. Food Finders. <https://foodfinders.org/tag/whywastewednesday/>.
- 52 "Primary Enforcement of Seat Belt Laws." 22 February 2022. CDC Transportation Safety.
- 53 Kahane, C.J. January 2015. "Lives Saved by Vehicle Safety Technologies and Associated Federal Motor Vehicle Safety Standards, 1960 to 2010 – Passenger cars and LTVs – With Reviews of 26 FMVSS and the Effectiveness of Their Associated Safety Technologies in Reducing Fatalities, Injuries, and Crashes." (Report No. DOT HS 812

069). Washington, DC: National Highway Traffic Safety Administration.