

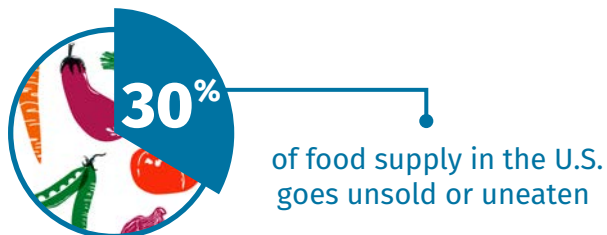
WISCONSIN

Food Waste Evaluation

The Wisconsin Department of Natural Resources (WDNR) has established a goal to reduce per-capita food waste disposal in landfills by 50 percent by 2030, compared to 2020 levels, as part of Wisconsin's commitment to waste reduction and responsible use of resources. To achieve this goal, Wisconsin recognizes the role of multiple state agencies, local governments, interested parties, residents, food waste generators, farmers, food manufacturers, private industries, and others.

The Food Waste Evaluation aims to support this goal by:

- Detailing the amounts, types, and sources of food waste in Wisconsin
- Analyzing existing capacity for food rescue and recycling
- Identifying opportunities and barriers for additional food waste diversion
- Providing recommendations for food waste diversion



3.05 million total tons of surplus food generated in 2023 in the Wisconsin Food Supply System



\$10.4 billion value of Wisconsin surplus food generated in 2023



1,033 pounds of Wisconsin surplus food per capita based on ReFED estimates

The Wisconsin Department of Natural Resources Food Waste Evaluation was funded by a Solid Waste Infrastructure for Recycling Grant for States and Territories through the U.S. Environmental Protection Agency.



The U.S. Environmental Protection Agency estimates that nearly 30 to 40 percent of food in the U.S. goes unsold or uneaten, with most of it ultimately going to waste. Food waste is the single most common material found in U.S. landfills, wasting the resources used to grow, harvest, process, transport, and distribute food. An estimated 900,000 tons of food waste were disposed of in Wisconsin landfills in 2024.



FOOD WASTE PREVENTION:

Wisconsin's goal is to reduce food waste throughout the entire life cycle of food, from production to transportation, consumption, and disposal. This includes improving manufacturing processes, food sales and consumption, and ultimately, recovery and disposal methods for food waste.

Approximately 4,500,700 tons of in-state waste were disposed of in Wisconsin's landfills based on DNR data in 2024, and of that total, an estimated 652,000 tons of wasted food (previously edible) and 270,000 tons of food scraps (peels, bones, shells, etc.) were disposed of. The estimated total of more than 900,000 tons of food waste represents 20% of all waste in Wisconsin landfills.



FOOD WASTE CAUSES:

Why and how food waste is generated identifies opportunities to prevent or divert it.

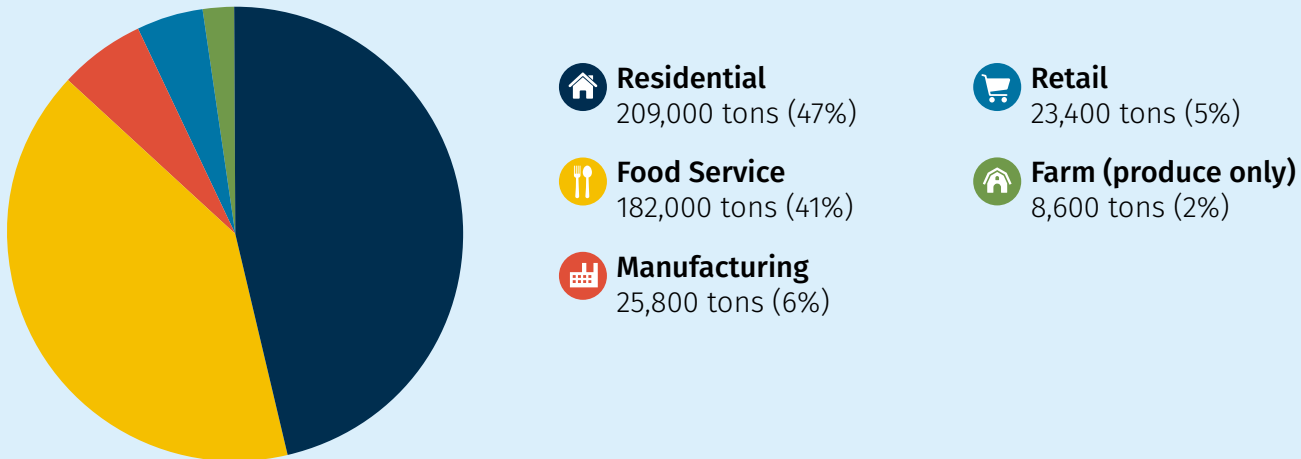
ReFED estimates that approximately 3.07 million tons of food waste were generated in Wisconsin in 2023 from various causes, such as food byproducts, excess, not harvested, and spoiled food.



FOOD WASTE GENERATION:

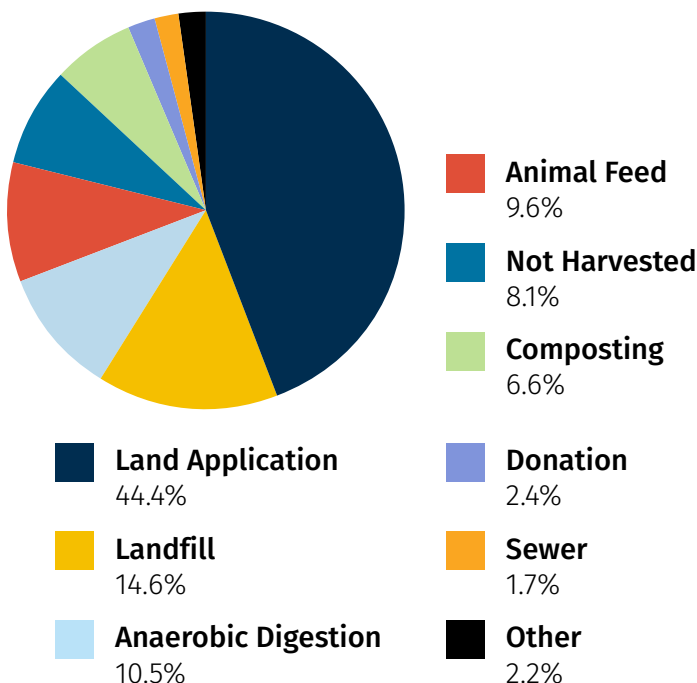
ReFED estimates the percentage of food waste sent to landfills by sector. In Wisconsin, 88 percent of the food waste going to landfills is from residential and food service sources, with residential contributing the largest share at 47 percent.

TONS OF FOOD WASTE SENT TO WISCONSIN LANDFILLS BY SECTOR



In addition to landfills, food waste goes to other destinations across the State. In Wisconsin, approximately 44 percent of food waste goes to land application.

REFED ESTIMATE OF FOOD WASTE DESTINATIONS



FOOD RESCUE: Includes donating food to people and using food waste for animal food.

Food donation represents an opportunity to use food in its intended way—to feed people. ReFED estimates that 72,300 tons of food were donated in Wisconsin in 2023, accounting for approximately 2 percent of the statewide food waste. Wisconsin is home to more than 50 food donation outlets that collect and distribute food, with locations that align with densely populated areas.



Feeding food waste and food byproducts to animals accounts for an estimated 9 percent of all food waste in the state (approximately 295,000 tons of food waste in 2023).



FOOD WASTE PROCESSING: Includes composting and anaerobic digestion, methods used to recycle food waste into beneficial usable end products.

Composting Facilities: Wisconsin is home to 286 facilities licensed for composting, of which 30 are approved to accept food waste. In 2023, these facilities accepted more than 34,000 CY (approximately 7,800 tons) of food scraps, representing less than one percent of all food waste generated in Wisconsin.

Anaerobic Digestion (AD) Facilities: There are 122 AD facilities currently operating, and 37 of those facilities accept food waste. Of these 37 digestors, 16 operate on farms, 13 operate at wastewater treatment plants (WWTPs), and 8 are stand-alone digestors (not on farms).

Wastewater Treatment Plants: There are 106 licensed industrial WWTPs that process animal and food waste, and the majority are permitted to landspread byproduct solids, sludge, and liquid waste.

Landspreading: ReFED estimates approximately 1.4 million tons of food waste were land-applied in Wisconsin in 2023, accounting for approximately 44 percent of all food waste generated in the state.

Existing facilities may be able to process more materials, but overall, Wisconsin lacks the necessary capacity to divert significant amounts of additional food waste from landfills at this time.

Survey Insights



A survey was distributed to gain insights into current practices, opportunities, and challenges from industry groups, food donation outlets, the food-to-animal industry, local government, waste transporters, the landspreading industry, and food waste processing facilities.

Survey responses from industry groups, municipalities, and processing facilities highlight a strong interest in improving diversion but also note barriers such as limited funding, equipment

needs, regulatory challenges, limited time and staff, financial constraints, and limited access to food waste processing and collection infrastructure.

Strategies for Diverting Food Waste: Regional Approach

Regions of Wisconsin differ significantly in terms of population density, industries, and associated food waste generation. Tailored regional approaches to food waste diversion from landfills are key.

- Areas with denser populations and commercial businesses may be more suitable for collecting and processing food waste at composting and AD facilities, with more convenient and cost-effective options for landfill diversion.
- Areas with lower population density and fewer commercial businesses face more challenges collecting and transporting food waste for processing, including higher costs. Smaller, local programs may be more beneficial.
- Institutions, food service, and retail statewide may benefit from on-site management, food donation opportunities, technical assistance and staff training to reduce food waste.

Recommendations

Wisconsin has unique geographic and cultural factors that impact the type and quantity of food waste generated, locations of food waste generation, and how food waste is processed or disposed. Wisconsin's existing programs and infrastructure are not currently sufficient to divert all food waste from landfills. There are opportunities to expand and replicate existing programs and facilities across the state to reduce food waste.



Food Waste Prevention and Reduction

- Create and implement education and consumer behavior change campaigns
- Consider date labeling changes to reduce food waste
- Collaborate and partner to promote food waste reduction with state agencies, environmental groups, and the waste management industry

- Allocate funding for grants to support prevention and diversion
- Implement inventory tracking tools and audits to reduce food waste
- Provide training resources for food waste generators



Next Steps: Prioritizing Actions

Near-term actions identify immediate opportunities without significant costs, time, or regulatory requirements.

- Implement educational programs and communication campaigns to prevent food waste
- Expand food rescue programs
- Identify opportunities to expand existing landfill diversion practices, specifically land application in the manufacturing sector
- Explore new or expanded composting capacity

Medium-term actions identify opportunities that require more effort, funding, or partner support.

- Consider regulations to support increased food donation
- Provide grants and technical assistance to food waste generators to increase efficiencies and reduce food waste
- Offer technical support for manufacturing and agricultural industries
- Implement regional approaches to food waste processing facilities and hauling operations

Long-term actions identify opportunities for significant diversion through regulations, infrastructure, and private industry.

- Consider siting new or expanded processing facilities near areas of dense population or significant food service and retail sectors
- Create financial support for diversion through higher landfill tip fees to support food waste processing facilities
- Implement requirements for food waste diversion, including recycling or donations
- Implement additional policies and programs to divert food waste from landfills



Food Donation

- Promote and expand food rescue and food donation
- Implement policies to encourage or require food donation
- Connect community-level food rescue operations
- Support expanded capacity of existing food donation outlets
- Allocate funds or offer grants to encourage food donation



Feeding Animals

- Expand the use of food waste for animal feed
- Reduce barriers for businesses interested in providing food waste for animal feed
- Promote resources available from the Wisconsin Farm Bureau Federation



Food Waste Processing Infrastructure

- Review siting, zoning, and permitting for organics processing facilities to address barriers
- Implement policies to use landfill tipping fees to provide financial incentives for diversion
- Support strong end markets for byproducts like finished compost and digestate
- Expand waste hauling of food waste to composting and AD facilities
- Promote on-site management of food waste
- Implement food waste recycling or donation requirements for large generators
- Consider a landfill food waste ban