



USDA FOOD LOSS & WASTE ACTIVITIES

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Presentation to the EPA Farm, Ranch and Rural
Communities Federal Advisory Committee
Meeting

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Outline

- My role as USDA Food Loss and Waste Liaison
- Measurement:
 - USDA/ERS estimates of food loss in the United States
- USDA FLW Research
- USDA FLW tools and resources
- USDA's Agriculture Innovation Agenda



My role as the USDA Food Loss and Waste Liaison

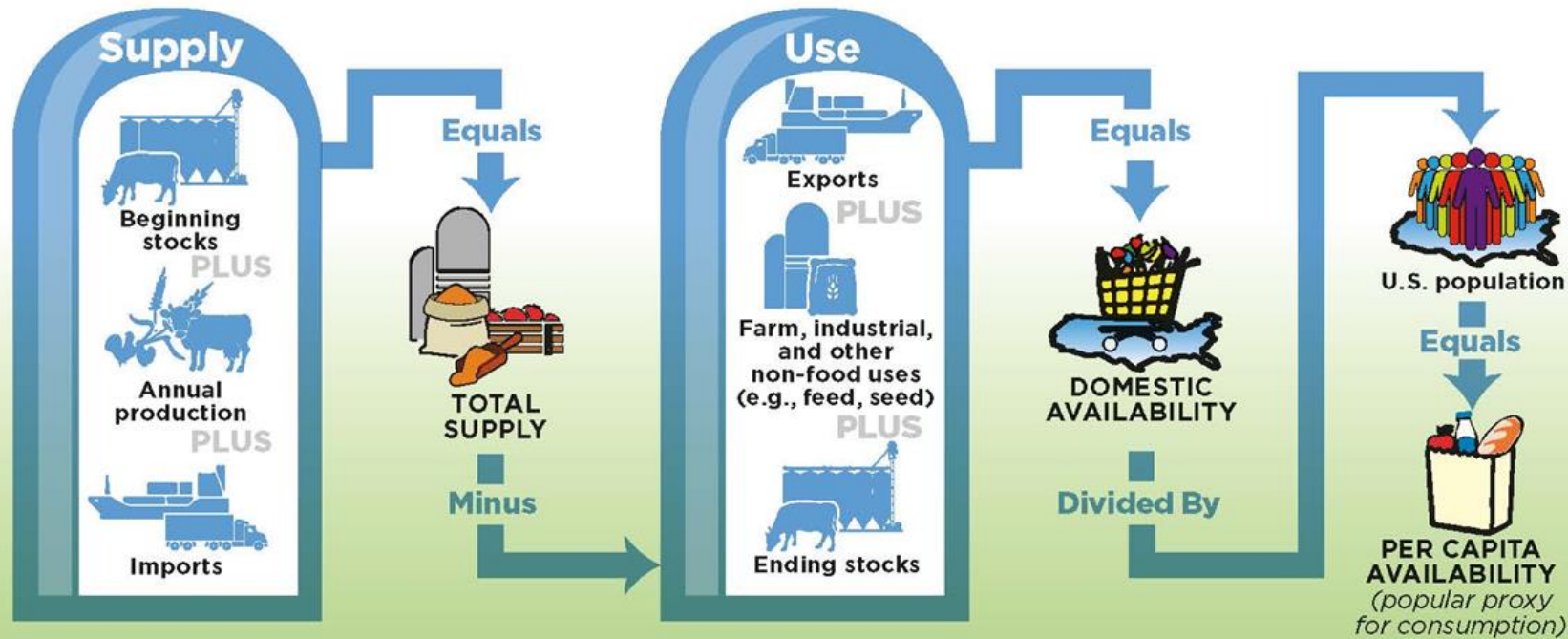
- 1) Coordinate FLW reduction efforts
- 2) Support and promote Federal programs to measure and reduce the incidence of FLW reduction and food recovery
- 3) Serve as a resource for entities engaged in food loss and waste reduction and food recovery
- 4) Raise awareness of the liability protections afforded under the Bill Emerson Good Samaritan Food Donation Act
- 5) Make recommendations with respect to expanding innovative food recovery models and reducing the incidence of FLW

USDA's Economic Research Service (ERS) Food Loss Estimates

- 31% food loss at the retail and consumer levels in 2010:
 - 133 billion pounds
 - \$161 billion
 - 141 trillion calories



USDA Economic Research Service's Food Availability Data System (FADS)



Series 1:
Food Availability Data
(230 foods)

Provides estimates of:

- Quantities/year



Series 2:
Loss-Adjusted
Food Availability Data
(215 foods)
(preliminary series)

Provides estimates of:

- Loss-adjusted quantities/year
- Loss-adjusted calories/day
- Loss-adjusted servings/day
- Amount of food loss at the retail and customer levels



Series 3:
Nutrient Availability Data
(From USDA's Center for
Nutrition Policy and Promotion)

Provides estimates of:

- Nutrients and other components of the U.S. food supply (calories, protein, fats, 10 vitamins, 9 minerals)
- Nutrients from major food groups

USDA Economic Research on FLW

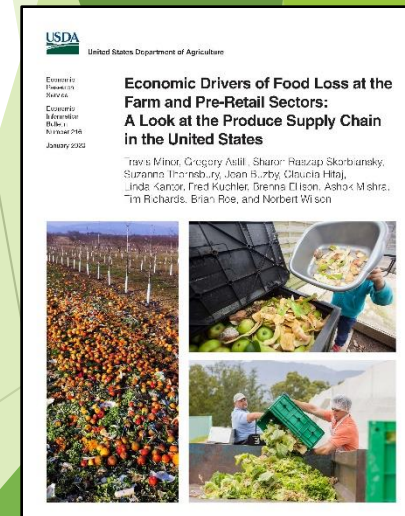
USDA's Economic Research Service (ERS) conducts two general types of FLW research:

- 1) Research to obtain underlying loss estimates at the retail and consumer levels
- 2) Other economic research, for example:

ERS report “Economic Drivers of Food Loss at the Farm and Pre-Retail Sectors: A Look at the Produce Supply Chain in the United States” (January 2020)

- Each action to reduce produce food loss comes at a cost. When reducing food loss is considered alongside goals like improving farm income, industry adoption of food loss initiatives may be more likely.
- Food may be left unharvested in a field or not sold by a distributor for a variety of economic reasons, including price volatility, labor cost, lack of refrigeration infrastructure, consumer preferences, quality-based contracts, and various policies related to produce.

(Source: <https://www.ers.usda.gov/webdocs/publications/95779/eib-216.pdf?v=4375.8>)





USDA In-house Scientific Research and Innovation

USDA's **Agricultural Research Service (ARS)**

>2,000 scientists at 90 research centers, \$1.4 billion fiscal year budget.

[ARS's National Program on Product Quality and New Uses](#)

- New and hardier cultivars (Keepsake strawberry)
- Automated in-field apple sorting system that separates low-quality from high-quality apples at harvest
- New clamshell container for fresh-fruit storage that maintains optimum humidity and prevents fruit weight loss in storage.

(See [USDA Blog](#) 10/29/20)

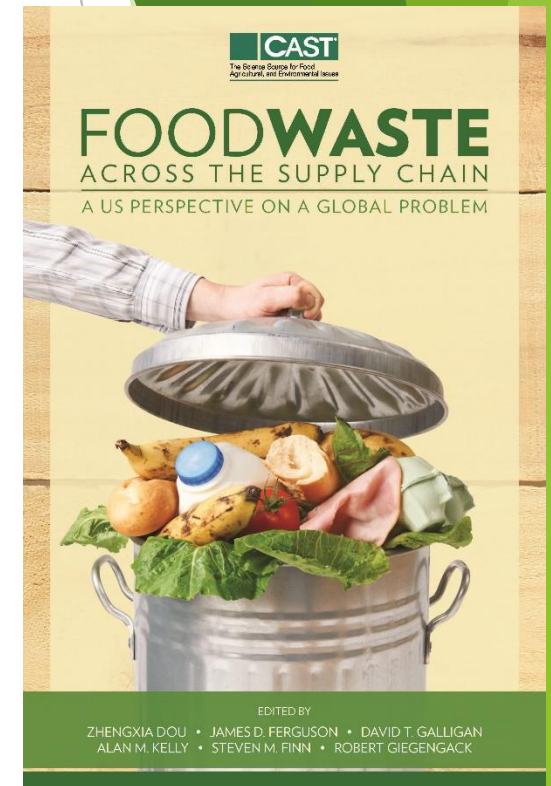
USDA Extramural Research Funding and Innovation

USDA's National Institute of Food and Agriculture (NIFA) provides leadership and funding for programs that advance agriculture-related sciences

- Partnerships with the Land-Grant University System and government, private, and non-profit organizations
- Three main funding mechanisms: competitive grants, capacity grants and non-competitive grants

FLW examples:

- 1) "The Last Food Mile: A Conference on Food Losses and Food Waste In the United States" 2-day conference held by the Univ. of Pennsylvania in 2014 and resulted in a FLW book.
- 2) ['Functional Ice' Shows Food Industry How to Keep Cool and Reduce Loss](#)
- 3) Highly sensitive and specific test strip for the major foodborne pathogens that significantly reduces the time required to test pathogens in foods from 24-72 hours to approximately 30 minutes. The time saved to test pathogens may reduce the spread of pathogens and minimize food waste.



Liability Protection for Donating Food



- Businesses that wish to donate food have protections under the [Bill Emerson Good Samaritan Food Donation Act of 1996](#). The Act removes liability for “persons and gleaners” who make good faith donations to nonprofits that feed the hungry. Here, the term “person” includes farmers, grocers, wholesalers, hotels, manufacturers, restaurants, caterers, and more.

Resources:

- [Frequently Asked Questions about the Bill Emerson Good Samaritan Food Donation Act](#)
- [USDA Blog](#) “Good Samaritan Act Provides Liability Protection For Food Donations”



Date Labeling on Food Packages

Manufacturers provide date labels to help consumers and retailers decide when food is of best quality. Except for infant formula, dates are not an indicator of the product's safety, and are not required by federal law. With the exception of infant formula, if the date on a food product passes during home storage, it should still be safe and wholesome if handled properly, until spoilage is evident.

- There is consumer confusion about the different date labels.
- USDA [Fact Sheet on Food Product Dating](#) clarifies the use and meaning of food product dating and encourages the “Best if Used By” phrase to convey quality dates

FoodKeeper App

- FoodKeeper provides guidance on safe handling, preparation, and storage of more than 650 food and beverage items.
- With the app, you can track storage times for different foods, learn cooking tips, watch helpful videos, and get information on food recalls.
- Users can set up calendar reminders for when products are nearing their recommended storage date.
- The USDA, the Food Marketing Institute, and Cornell University jointly created FoodKeeper, which is available free at the [Google Play](#) or [iTunes](#) stores, or via desktop at [FoodSafety.gov](#).



Photo credit: Lance Cheung, USDA

Looking ahead...

...USDA Agriculture Innovation Agenda (AIA)

- The AIA is a department-wide effort to align USDA's resources, programs, and research to provide farmers with the tools they need and to position American agriculture as a leader in the effort to meet the food, fiber, fuel, feed, and climate demands of the future.
- USDA will stimulate innovation so that American agriculture can achieve the goal of increasing U.S. agricultural production by 40% while cutting the environmental footprint of U.S. agriculture in half by 2050.
- One target is for FLW—to advance our work toward the goal of reducing FLW by 50% in the U.S. by 2030.
- USDA agencies are developing implementation strategies for internal USDA recommendations on FLW metrics. In general, this involves improving current data and estimation methods and exploring alternative approaches to track FLW.



Three Resources on Cost-Effective FLW Solutions

[The Business Case for Reducing Food Loss and Waste](#), a report from Champions 12.3, an international food waste reduction coalition.

[Best Practices and Emerging Solutions](#), a guide by the Food Waste Reduction Alliance, an industry collaborative.

[An Economic Analysis of Food Waste Solutions](#), a roadmap for cost-effective methods and resources to scale up food waste solutions, by ReFed, a multi-stakeholder nonprofit.



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General FLW information:
[USDA.GOV/foodlossandwaste](https://www.usda.gov/foodlossandwaste)