

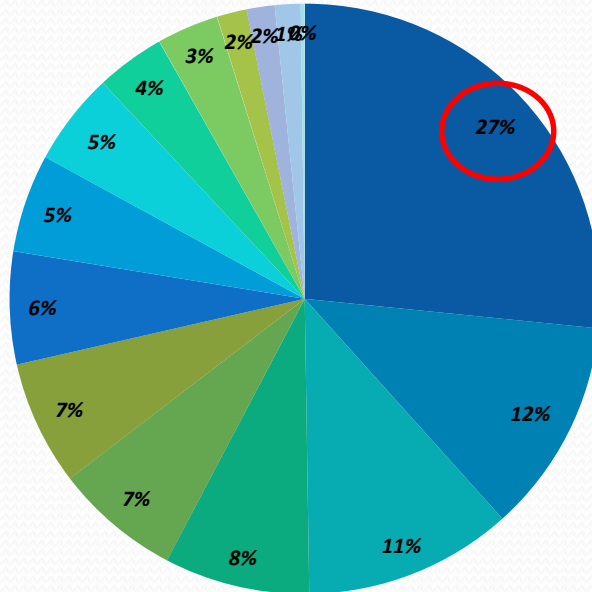
Putting Food Waste in the Garbage – So What is the Problem with That?

Kim A. Mote
City of Fort Worth
October 21, 2015

Fort Worth's Waste Audits

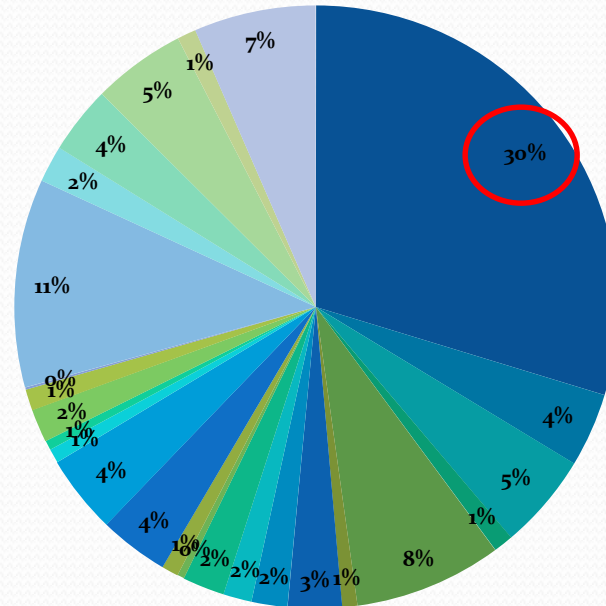
• March 2011

- Compostable
- Mixed Paper
- Yard Waste
- Glass
- Bath & Diapers
- Garbage
- Mixed Plastic
- Textiles
- Remodel
- Electronics
- Plastic Bags
- Aluminum
- Ferrous Metals
- Hangers
- Cartons

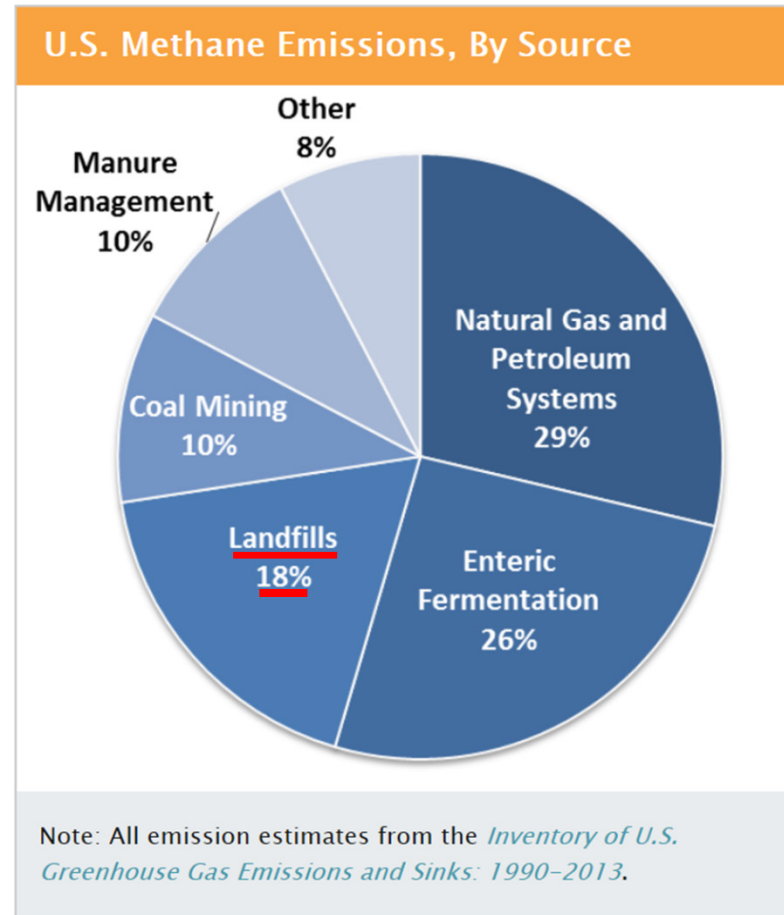


• March 2014

- Food/Putrescibles
- Food Contaminated Paper
- Grass Clippings/Small Brush
- OCC
- Mixed Paper
- ONP
- Chip Board
- Beverage Containers
- Other Glass
- PET
- HDPE (natural)
- HDPE (colored)
- Mixed Plastic
- Bags & Film
- Beverage Containers
- Other Aluminum
- Metal Cans
- Other Metal Items
- HHW
- Bath & Diapers
- Styrofoam
- Textiles
- C & D
- Electronics
- Other/Residue

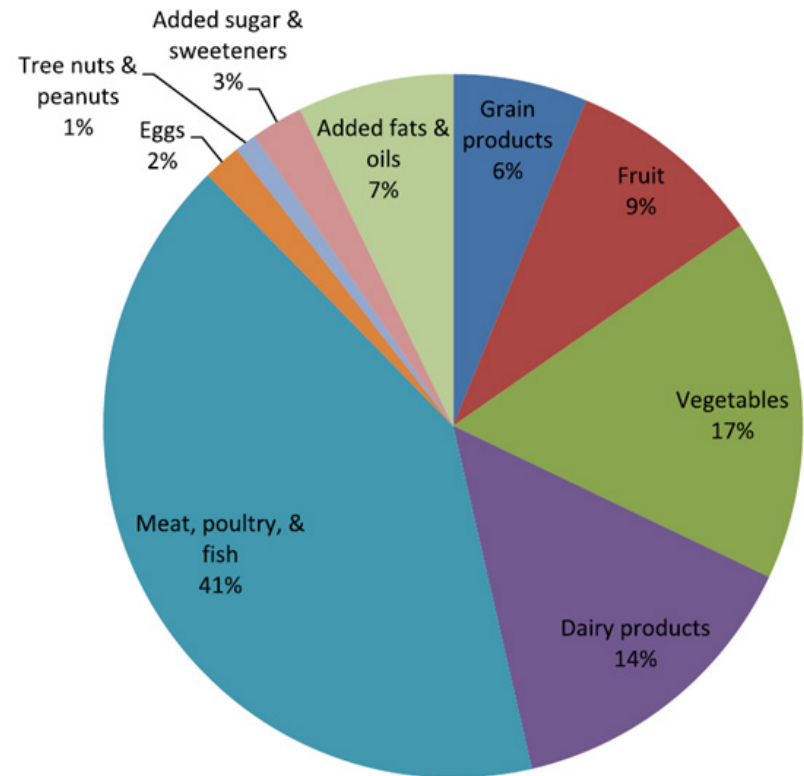


Landfill Generation of Methane as a GHG



Dollar Value Lost by Food Waste

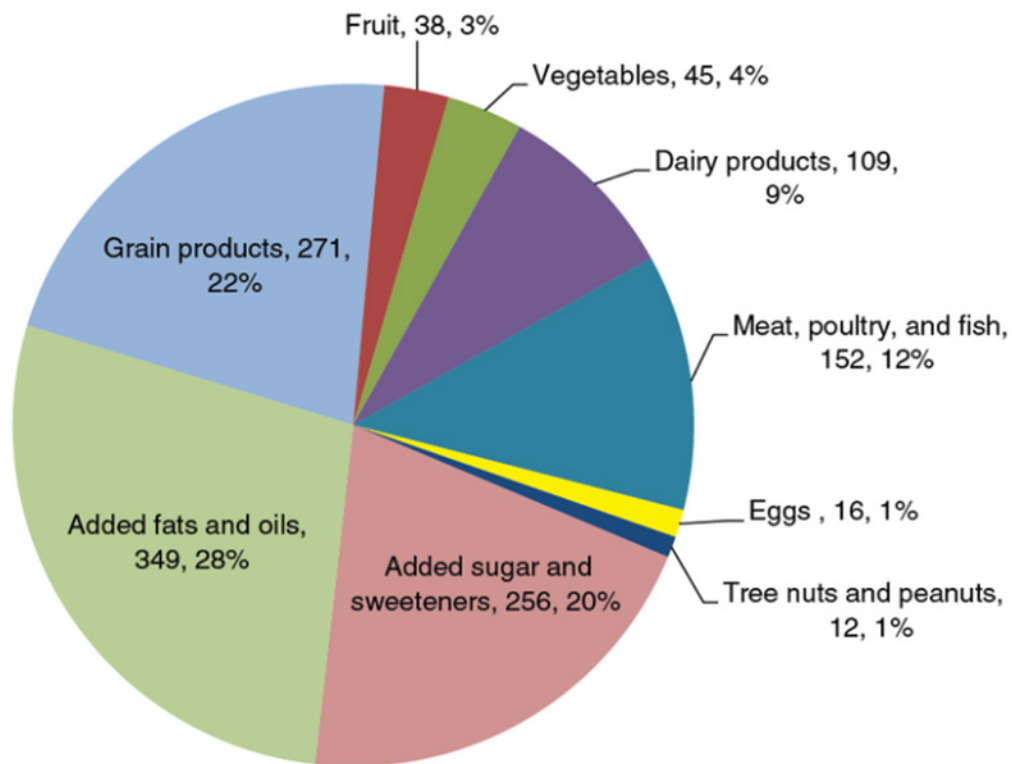
- Estimated Total of - \$165.6 Billion in 2008
- Each food group's contribution to the total value of food loss



Disposal by Caloric Value

U.S. food loss at retail and consumer levels by food category, 2010

Daily calories per capita



Source: USDA, Economic Research Service, Loss-Adjusted Food Availability Data.

USEPA Goals

- I will Let them discuss their program.
- According to a recent report from the Danish government, Danes now throw away 25 percent less food than they did five years ago.
- Danes today throw out 104 pounds of food per year on average compared to an estimated 273 pounds per person per year in the U.S

NPR's News Articles on Food & Food Waste



Food for Thought Series

- NRDC – 80% of our water, 10% of our energy, 40% of our land is used to grow our food
- NRDC estimates 1% -30% of food grown by farmers doesn't make to the grocery store
- NRDC estimates 40% of the food produced never gets eaten
- Nearly half the U.S. seafood supply winds up uneaten - *Johns Hopkins Center for a Livable Future*

NPR's News Articles on Food & Food Waste



Food for Thought Series

- An estimated 133 billion pounds of food is wasted in the U.S. each year.
- The typical American family tosses out about \$1,500 of food yearly
- Sell by dates - a manufacturer's best guess as to when a product is at its freshest
- 55% of purchases made in grocery stores are unplanned
- CA, IA, MI, KY, NY, AZ, ME growers can receive a tax break by donating to Food Banks.

Causes of Food Loss

- At Farm or Production Level –
 - Damage by vectors or by unfavorable/extreme weather
 - Spillage and damage or inefficiencies during harvesting, transporting, or processing
 - Difficulty predicting number of buyers/customers leading to overplanting or over-preparing
 - Industry or government food safety regulations or standards may cause some products to be rejected for human consumption
 - Out-grading of *blemished, misshapen, or wrong-sized foods* due to minimum quality standards by buyers, a result of consumer demand for high quality and cosmetically-appealing foods
 - Sell by Dates/Best Before Date

Causes of Food Loss

- At Retail Level –
 - Dented cans and damaged packaging. Inappropriate packaging which damages produce
 - Sell by Dates/Best Before Date
 - Un-purchased holiday foods
 - Spillages, abrasion, bruising, excessive trimming, excessive or insufficient heat, inadequate storage, technical malfunction
 - Difficulty predicting number of customers leads to overstocking or over-preparing
 - Out-grading of blemished, misshapen, or wrong-sized foods in an attempt to meet consumer demand

Causes of Food Loss

- At Consumer Level –

- Spillages, abrasion, bruising, excessive trimming, excessive or insufficient heat, inadequate storage, technical malfunction
- Sprouting of grains and tubers, biological aging in fruits and vegetables
- Consumer confusion over “use-by” and “best before” dates
- Lack of knowledge about food date labeling, the importance of food waste as an issue, appropriate portion sizes, and strategies to reduce waste.
- Industry or government standards may cause some products to be rejected for human consumption (e.g., plate waste can't be re-used at restaurants)
- Psychological tastes, attitudes, and preferences, e.g., human aversion, such as “I don't eat that,” or refusal to eat a food for religious reasons.”
- Consumer demand for high cosmetic standards
- Socio-demographic factors: Younger people, single-person, larger, and higher income households tend to waste more
- Seasonal factors: More food is wasted in summer
- Uneaten or leftover holiday foods

Pope Francis and Food Waste

“Throwing away food is like stealing from the table of those who are poor and hungry” *June 5, 2013*

“I encourage everyone to reflect on the problem of thrown away and wasted food...” *June 5, 2013*



Beyond Waste Disposal

- Large Scale Composting – Soil amendment
- Anaerobic Decomposition
 - Compost & methane capture
 - Co-Digestion with biosolids at wastewater treatment plants
- Biofuels
- Animal Feed

Discussion