Framing the Issue: Hunger & Food Waste

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Food Waste
Any food that is grown and produced for human consumption but ultimately is not eaten; including food residuals, and food manufacturing byproducts.
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**Wasted:** How America Is Losing Up to 40 Percent of Its Food from Farm to Fork to Landfill

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**Figure Source:**
Advancing Sustainable Materials Management: 2014 Fact Sheet
EPA Sources from left to right:
Greenhouse Gas Emissions by type: https://www.epa.gov/ghgemissions/overview-greenhouse-gases
Methane Emissions by source: https://www.epa.gov/ghgemissions/overview-greenhouse-gases

Total Emissions in 2014 = 6,870 Million Metric Tons of CO₂ equivalent.

A FAMILY OF FOUR SPENDS $1500 A YEAR ON FOOD THEY DON’T EAT

COOK IT, STORE IT, SHARE IT. JUST DON’T WASTE IT.

SAVETHEFOOD.COM
How much is edible?
How much are you paying to dispose of excess food?
13.8% 131,800 people are food insecure in Wake County.

33.9% 44,730 children under 18 are food insecure in Wake County.

66.1% 87,070 adults over 18 are food insecure in Wake County.

Sources: http://www.foodbankcenc.org/site/PageServer?pagename=hunger_counties
2012 Wake County

Estimated 107,100 tons of MSW food waste
952,143 (2012 population)

225 lbs food waste/Wake County resident/year

How much is edible?

Source: NC DEQ North Carolina 2012 Food Waste Generation Study
Figure 16 – 2015 Food diverted from the landfill through food rescue/donations, anaerobic digestion, animal feeding, and permitted commercial composting facilities (total 99,704 tons diverted).

- Food Rescue, 15,202 tons, 15%
- Anaerobic Digestion, 18,242 tons, 18%
- Animal Feeding, 19,647 tons, 20%
- Composting, 46,613 tons, 47%
Excess Food

Reduce First

Donate Edible Food

Freeze, Can, Drinks, Other Industrial Uses

Animal Feed

Compost

Anaerobic Digestion

Wastewater Treatment Plant

Landfill Gas
MARGINAL FOOD WASTE ABATEMENT COST CURVE

PREVENTION & RECOVERY SOLUTIONS ARE THE MOST COST-EFFECTIVE

- Standardized Date Labeling
- Consumer Education Campaigns
- Packaging Adjustments
- Donation Matching Software
- Standardized Donation Regulation
- Donation Liability Education
- Value-Added Processing
- Donation Storage & Handling
- Spoilage Prevention Packaging
- Donation Transportation
- Waste Tracking & Analytics
- Trayless Dining
- Smaller Portion Sizes
- Cold Chain Management
- Manufacturing Line Optimization
- Donation Tax Incentives
- Improved Inventory Management
- Produce Specifications
- Secondary Resellers
- Home Composting
- Commercial Greywater

RECYCLING SOLUTIONS ARE THE MOST SCALABLE

- WWRF with AD
- Centralized AD
- Centralized Composting
- Other*

* Other: Community Composting, Animal Feed, In-Vessel Composting

Economic Value per Ton ($/ton)

Diversion Potential (M Tons)
Freshspire connects people with their grocers, rerouting food that would otherwise be wasted.

FOOD COWBOY
USES LOCATION-BASED TECHNOLOGY TO ROUTE FOOD "WASTE" TO ITS HIGHEST AND BEST USER

"LIKE MATCH.COM FOR FOOD WASTE"
– MODERN FARMER

FOOD RESCUE US
formerly community plates

Donate  Deliver  Feed
NORTH CAROLINA FOOD RECOVERY PLAN?

- 8% recovery rate in 2015
- 50% Reduction Goal by 2030!