### **Upstream Food Waste Prevention at Boston College**

22,000+ meals per day

**Self-operated** 

14 operations open to public

250+ FTEs and several hundred part-time employees

14,000 undergrad and grad students

All retail, à la carte menu





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### Source Reduction Habits

#### **Food Recovery Hierarchy**

Source Reduction Reduce the volume of surplus food generated

Feed Hungry People Donate extra food to food banks, soup kitchens and shelters

> Feed Animals Divert food scraps to animal feed

Industrial Uses Provide waste oils for rendering and fuel conversion and food scraps for digestion to recover energy Composting Create a nutrient-rich soil amendment

Landfill/ Incineration Last resort to disposal

- Compare purchasing inventory with customer ordering
- 2. <u>Modify menus to increase customer satisfaction and prevent</u> and reduce uneaten food
- 3. <u>Examine production and handling practices</u> to prevent and reduce preparation waste.
- 4. Ensure proper storage techniques.

1.

- 5. <u>Be creative</u> with your kitchen excess.
- 6. Reduce serving sizes as appropriate and avoid use of garnishes that don't get eaten.
- 7. For buffet-style service, encourage customers to take only what they will actually eat.
- 8. For colleges, go trayless in the dining halls.



Source: EPA "Food Recovery Hierarchy"

Most Preferred

### Challenges to Source Reduction

#### 'Don't Run Out' Policy

 $\rightarrow$  Number customers varies each meal period

 $\rightarrow$  Maintain appearance of full at all times

#### Time Scarcity

 $\rightarrow$  Repurposing food scraps takes time and labor

 $\rightarrow$  Conflicting priorities for managers

#### Rigid Allergy Restrictions

 $\rightarrow$  Labels limit scratch cooking with scraps





#### > Set a baseline

 $\rightarrow$  what we measure, we can manage



# Lean**Path**

JULY 26, 2017 2:45 PM	Reason	1-1 🗸 🔰
WEIGHT L	.B	
7.0	Overproduction	Overcooked
	Expired	
Food: Chicken - Boneless	> Trim Waste	
Reason:	> Spoiled	
	Catering Guarantee	
	> Equipment failure	
	Handling	
	Misorder	
		0 MESSAGES 🔯

#### LeanPath waste tracking system

- $\rightarrow$  <u>Weighs, tracks</u> and <u>divides</u> unutilized food into:
  - Trash
  - Donation
  - Compost
- → Baseline measures week-over-week "savings"





#### > Foster staff buy-in

- $\rightarrow$  Assigned 'Champions'
- $\rightarrow$  Staff instantly saw value and impact



RAINING: LEANPATH T	RACKER	🌡 MICHELLE C
YOUR REPO	ORT WAS RECI	EIVED !
		THANKS FOR TRACKING!
FINANCIAL IMPACT		Environmental Impact
Item Value:	\$12.50	Resources consumed if wasted daily for a year:
If Wasted Daily fo	or a Year: \$4,563	
Michelle C STATS	LAST 30 DAYS	1861.5 bath tubs of water
Reports:	0	68.3 gallons of oil
Team Rank:	6	
Create Another Report	Finished Tracking	0.1 cars on the road



 $\succ$ 





#### Foster staff buy-in

- $\rightarrow$  Front-line workers has best solutions
- $\rightarrow$  Create a culture of food waste prevention

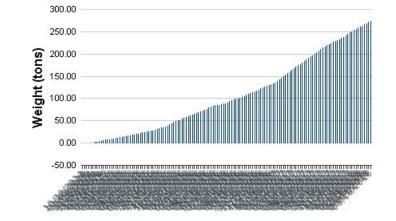
Within two weeks, **salad bar** waste was down 50%.



Food Waste Avoided (Tons)

## Food waste reduced by 60.7%

= 263 tons of food waste =197 tons CO2



#### How it helps with food waste prevention:

- Sets a baseline
- Helps management improve practices
- Engages staff with environmental issues on individual level



### Lessons Learned

- Set a baseline: measurement forms the basis for actionable change
- Assign waste reduction 'champion
- Manager buy-in is crucial to success
- Listen to the front line workers
- > Start with low hanging fruit





