

WASTED FOOD
**FROM AWARENESS TO
ACTIONABLE CHANGE**

Achieving Source Reduction at Your Facility



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VICE PRESIDENT, FOOD WASTE PREVENTION

TURI Spring Conference
April 25, 2018





For the love of food.

What connects us to our world
more than food?

Yet We Waste It Away...



On the Frontlines of the Food Waste Fight



Reducing Food Waste Really Matters...

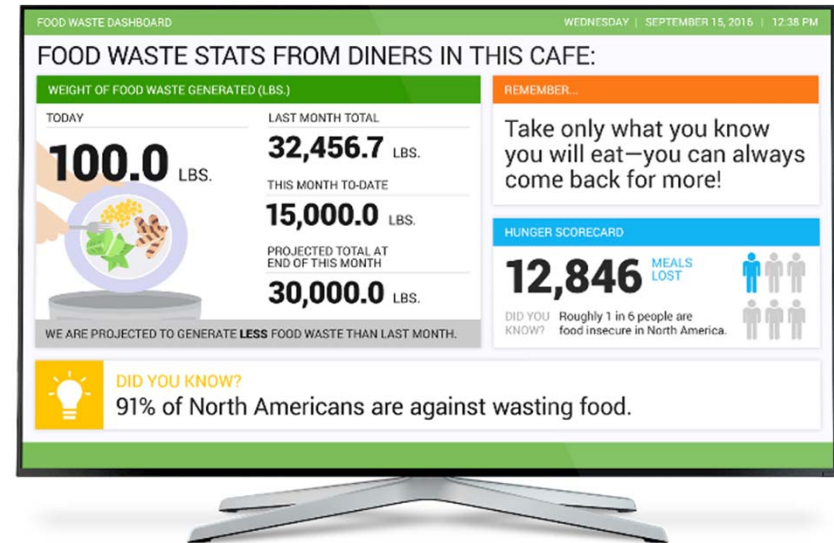
SUSTAINABLE DEVELOPMENT GOALS



14 years ago, we set out to solve a really big problem...



And We've Never Stopped Innovating





Our Vision:
Ensure a Sustainable
Future By Eliminating
Global Food Waste

We can take control.

It's far beyond tools, tech and software.

It's a **complete food waste strategy.**

What We Learned Early On

To solve this, we were going to need to roll up our sleeves and get in the kitchen.

To reduce food waste you need to change behaviors, and

Front line workers are the change makers.



We learned about the impact of food waste on climate change.

That was fuel on the fire.





LeanPath

Mission: To Make Food Waste Prevention Everyday Practice in the World's Kitchens

14 years of measurable industry impact

Creators of food waste tracking & analytics category

Client partners in 20+ countries around the globe

Experience with over 1,000 customer deployments

Advocates against wasted food

Dedicated to food waste prevention

A chef in a white uniform is working in a commercial kitchen. He is leaning over a stainless steel counter that is filled with various food items, including several trays of cooked chicken, a plate of green vegetables, and a bowl of yellow rice. The kitchen has a clean, professional appearance with stainless steel surfaces and overhead lighting. The text "Food Waste" is overlaid in large white letters on the left side of the image.

Food Waste

in the foodservice industry

= Opportunity

Two Key Food Waste Streams

Pre-Consumer Food Waste



“Kitchen Waste”

Controlled by kitchen staff

Post-Consumer Food Waste



“Plate Waste”

Controlled by customers



Pre-Consumer Food Waste

HOW MUCH OF THIS PROBLEM STEMS FROM U.S. FOODSERVICE OPERATIONS?

4–10% of food purchased is **THROWN OUT** before reaching a plate.



\$9–23 BILLION of pre-consumer waste generated by the U.S. out-of-home restaurant and foodservice industry every year.

Pre-consumer waste is the kitchen waste that occurs before the food even reaches a guest, from **OVERPRODUCTION, SPOILAGE, EXPIRATION** and **TRIMMINGS**. It's within the control of the foodservice operator and can be prevented!

Cost of Pre-Consumer Food Waste: 5 payments = 0 value



Food



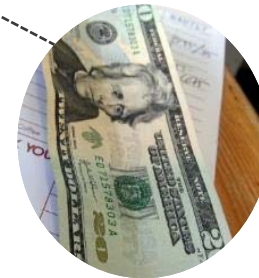
Disposal



Energy/Water

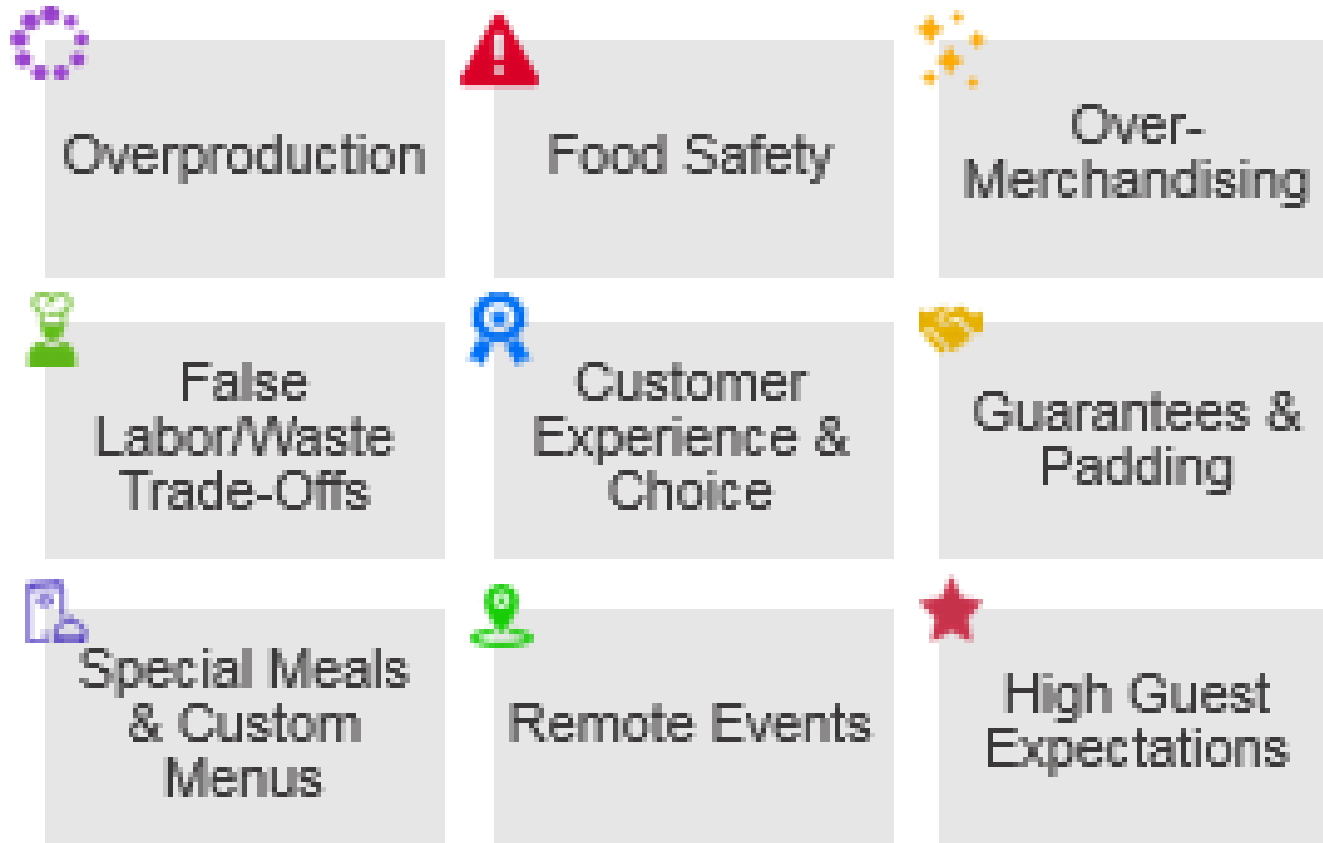


Labor



Lost Sales/Profit

Root Causes of Food Waste



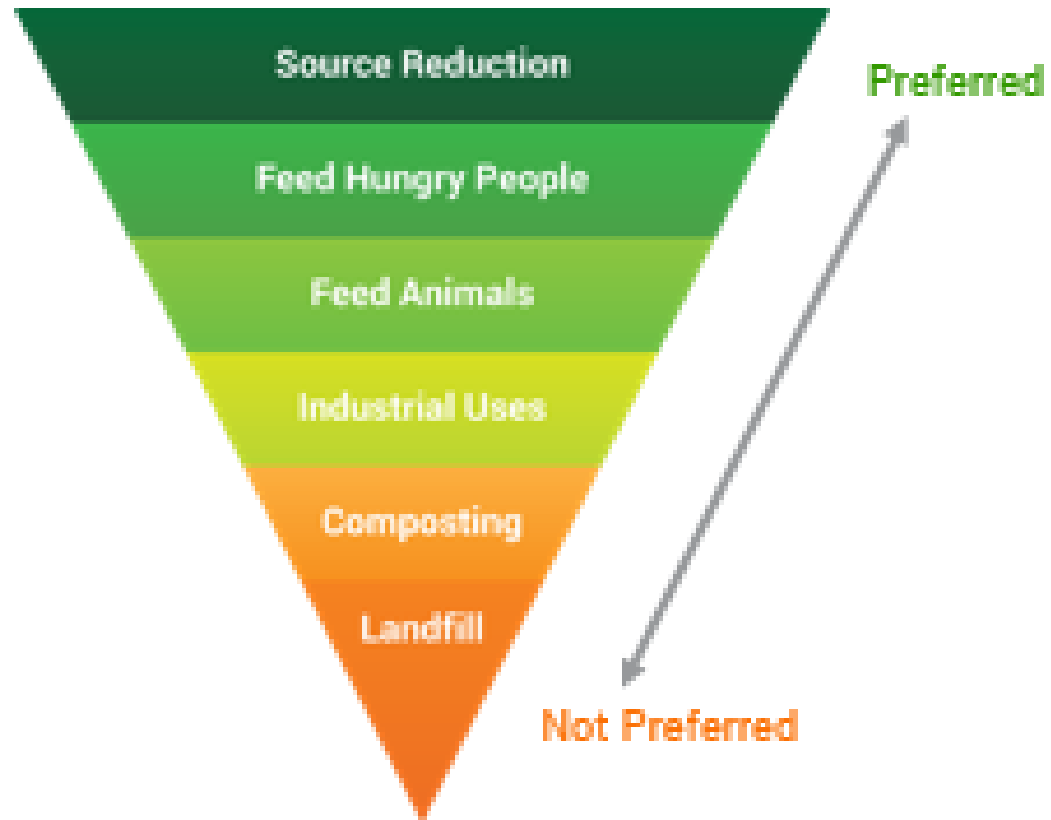
**How do we
solve this?**



There Are Many Options



Use the Food Recovery Hierarchy

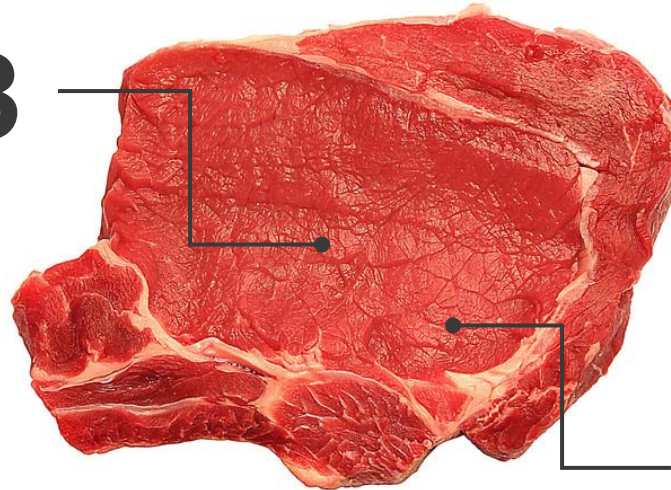


Benefits: Financial



Average Purchase Price
PER LB:

\$5.88

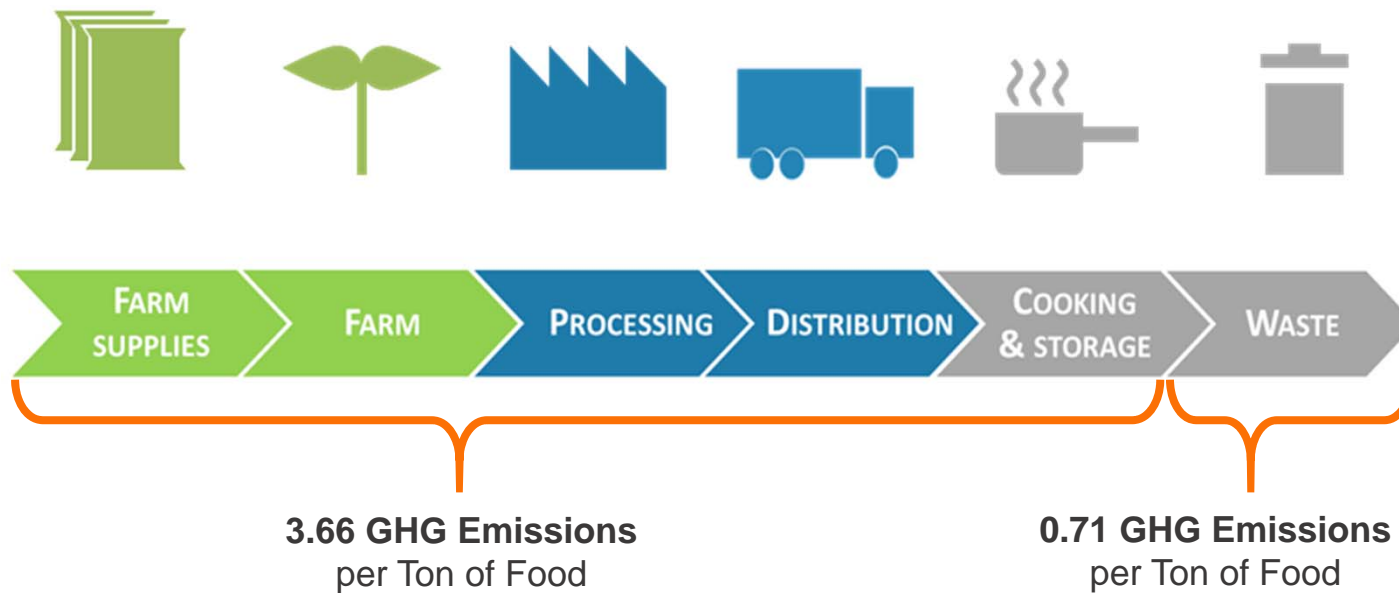


Average Disposal Cost
PER LB:

\$0.04

Source: US Bureau of Labor Statistics & Bucknell University

Benefits: Environmental



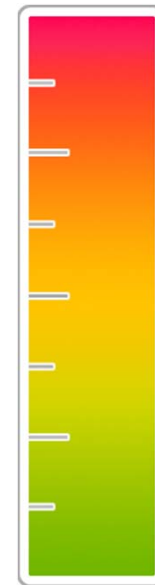
<http://www.lifecyclebqic.com.au/2013/11/ca-perspective-of-food/>

A professional kitchen scene featuring a stainless steel countertop. On the counter, there is a metal tray filled with fresh vegetables, including red and yellow bell peppers, a green cucumber, a purple eggplant, and bunches of green herbs. In the background, a chef in a white uniform is partially visible, working at a station. The lighting is bright, highlighting the freshness of the ingredients.

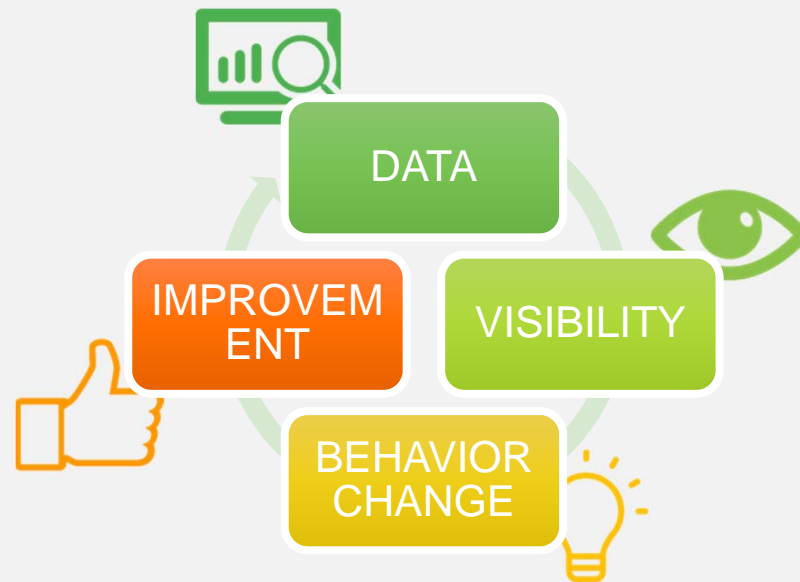
How to Deliver on the Promise of Prevention?

Food Waste Is a Critical Control Point

What can you learn
from your trash?



What Gets Measured Gets Managed



METRICS INFLUENCE BEHAVIOR

Measurement Works Two Ways

Find out what is being wasted and why, so teams can...

Understand & Improve

- Understand the waste
- Set goals
- Track improvement

Change Team Behavior

- Engage employees
- Raise awareness
- Celebrate progress



Food waste is a behavioral problem.
Successful prevention requires everyone to consistently repeat the right behaviors at scale.



Why Automation?

Save time and labor.



Reduce inconsistencies and bad data.

Collect more robust data, including photos.

Raise staff awareness by showing value and impact.

Transform data into analytical insights.

Prevent 3X more waste or more using systems over pen and paper.

	
X	✓
X	✓
✓	✓
X	✓
X	✓
X	✓
✓	✓
X	✓

LEANPATH FOOD WASTE PREVENTION PLATFORM

In 2004, LeanPath invented the world's first automated food waste tracking technology. Since 2014 alone, working in over 20 countries, LeanPath has empowered culinary teams to prevent 20 million pounds of food waste, an average 50% reduction per site. Our clients typically see 10-20X ROI and cut food costs by 3-8%.



Smart Meters Make It Easy

1-STEP
REAL-TIME



Fast, Simple, and Powerful

LEANPATH TRACKER

JANUARY 29, 2015 9:22 AM

ABBY D

Review & Send Your Report

WEIGHT	LB
27.6	

Value of Loss
\$31.00



Quantity:	1.0	EDIT
Event Order# (Optional):		ADD
Food:	Vegetables	EDIT
Reason:	Overproduction	EDIT
Container:	4-inch Plastic	EDIT
Station:	Salad Bar	EDIT
Daypart:	Dinner	EDIT

Send Report

0 MESSAGES 



Instant Impact

LEANPATH TRACKER ABBY D

YOUR REPORT WAS RECEIVED !

THANKS FOR TRACKING!

FINANCIAL IMPACT

Item Value: **\$31.00**

If Wasted Daily for a Year: **\$11,315**

Abby D STATS




LAST 30 DAYS

Reports:	9
Team Rank:	3

[Create Another Report](#) [Finished Tracking](#)

Environmental Impact

Resources consumed if wasted daily for a year:

- 8979.0 bath tubs of water 
- 329.5 gallons of oil 
- 0.7 cars on the road 

Instant Data Transfer to the Cloud



Data Drives Behavior Change

LEANPATH TRACKER

JANUARY 29, 2015 9:21 AM

WEIGHT LB

000.0

Help Prevent Food Waste



Track
Record Food Waste

TOP WASTE WATCHERS

FOR LAST 14 DAYS

OPERATOR	Weighs	lb
★ Student Operator	50	373
★ Edwards M	14	41
★ Carson	9	202
★ Abby D	9	36
★ Lisa F	7	17
★ Frances G.	6	22
★ William B.	5	15
★ Melissa B.	0	0
★ John S.	0	0
★ JP	0	0

Gamification = Engagement

0 MESSAGES 

Data Motivates Action

FOOD WASTE ALERT

from LeanPath 



IMAGE:

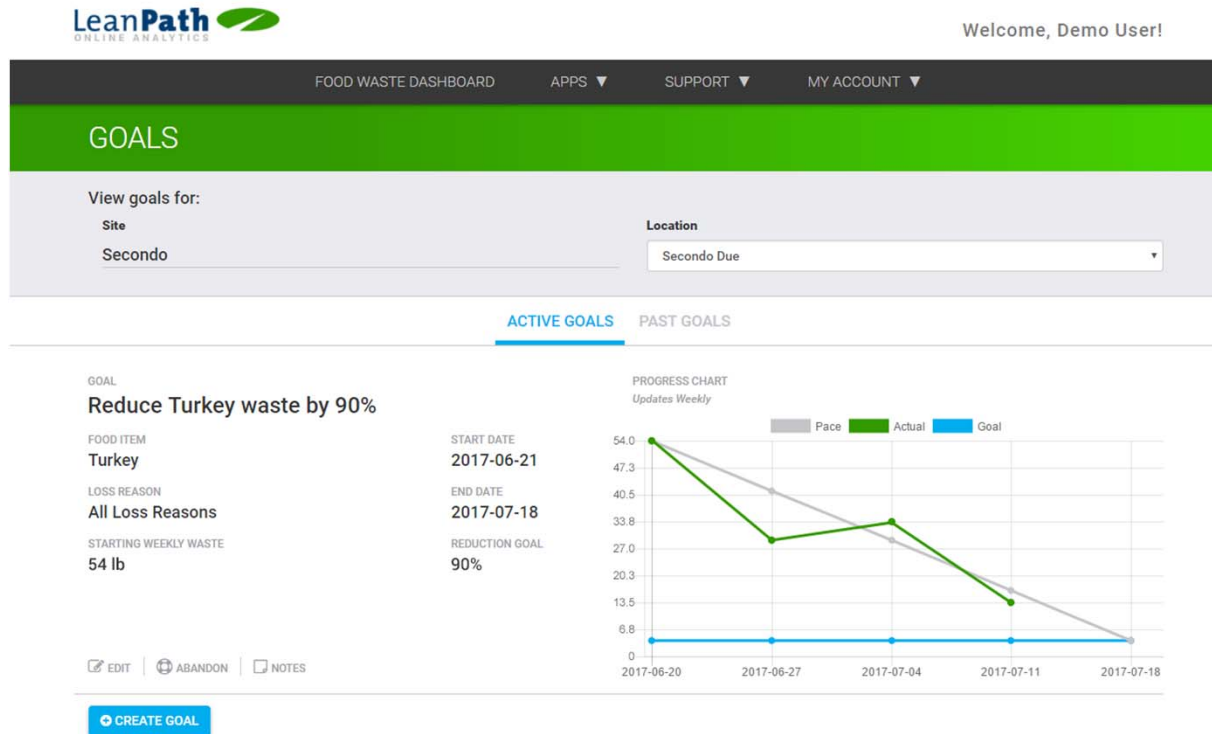


FOOD: Produce
WEIGHT: 52.7lb
COST: \$66.40
REASON: Pan Waste-Overproduced
LOCATION: ~~XXXXXXXXXX~~
OPERATOR: ~~XXXXXXXXXX~~
DAY/TIME: Jan 27, 2015 3:00 PM

LOG IN TO LEANPATH ONLINE

support@leanpath.com // 877.620.6512 ext.2

Data Inspires Measurable Improvement

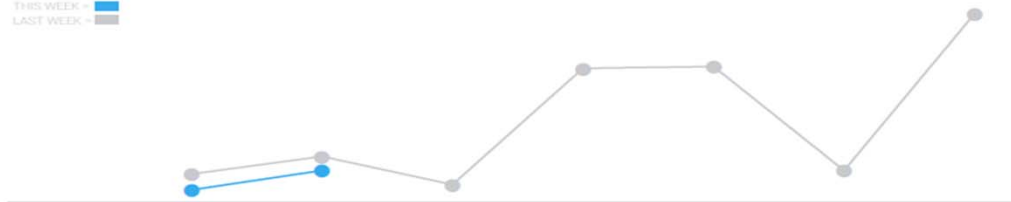


Detailed Reporting to Drive Operational Change

DAILY FOOD WASTE REPORT: EXAMPLE SITE WASTE OVERVIEW

TOTAL DAILY WASTE BY VALUE

THIS WEEK - ■
LAST WEEK - ■



DATE	MON 24 OCT	TUE 25 OCT	WED 26 OCT	THU 27 OCT	FRI 28 OCT	SAT 29 OCT	SUN 30 OCT
VALUE	\$199	\$247	-	-	-	-	-
WEIGHT	188.3 LB	188.7 LB	-	-	-	-	-
VS SAME DAY LAST WEEK	▼ \$39 ▼ 4.8 LB	▼ \$33 ▼ 14.1 LB	-	-	-	-	-

TOP ITEMS WASTED

ITEM	YESTERDAY	WEEK-TO-DATE	TRANSACTIONS
Deli Meat	\$45 12.5 LB	\$45 12.5 LB	1
Fruit	\$39 22.8 LB	\$85 49.2 LB	2
Vegetables	\$38 69.3 LB	\$99 169 LB	12
Mixed Protein	\$24 19.1 LB	\$24 19.1 LB	1
Chicken - Boneless	\$24 9.6 LB	\$46 18.9 LB	2

CHARACTERIZATION LEVEL

CHARACTERIZATION LEVEL: EXCELLENT



UNCHARACTERIZED TRANSACTIONS

	YESTERDAY	VS LAST TUESDAY
TRANSACTIONS	0	NO CHANGE
VALUE	\$0	NO CHANGE
WEIGHT	0 LB	NO CHANGE

TOP WASTE BY REASON CODE

REASON CODE	YESTERDAY	WEEK-TO-DATE	8 WEEK TREND
Expired	\$116 63.3 LB	\$141 79.4 LB	
Overproduction	\$85 74 LB	\$175 154.2 LB	
Quality	\$42 26.6 LB	\$63 54.1 LB	

WEDNESDAY | OCTOBER 26, 2016

TODAY'S WEATHER FORECAST:
Light rain starting tomorrow afternoon.

WASTE BY TIME OF DAY

12AM - 12PM - ■
12PM - 4PM - ■
4PM - 12AM - ■



We “Get” the Kitchen...

We have deep culinary and operational expertise.

We’re not just consultants; we’re former chefs, GMs, and operational experts. We get it.

We are the liaison between corporate executives, chefs, and front-line staff.



Adjust Production



Use knowledge of food types to adjust production levels

Change batch production methods

Use data to know how much to pad numbers for banquets and buffets

Purchase Differently



Adjust standing par levels

Consider alternate product options with less waste, such as pre-cut / pre-sliced

Adjust pack sizes

Adjust Order Guides & Menus

Create more accurate order guides based on waste trend data

Eliminate high-waste menu items

Reduce complexity and streamline inventories



Influence Front-Line Behavior

Ensure the execution matches the intended plan

Identify training needs through data, such as a knife skills course

Coach individuals to identify safe re-use opportunities



A photograph of a seafood restaurant table. In the foreground, there is a plate with mussels and a small aluminum cup of dipping sauce. To the right, a large white bowl is filled with a seafood salad, possibly containing lobster and shrimp. In the background, another plate features a lobster tail. A glass of water is visible in the upper center. The text "Changing Consumer Behavior" is overlaid in white on a semi-transparent dark grey rectangle in the center of the image.

Changing Consumer Behavior

Two Ways to Reduce Plate Waste

1. Influence consumer behavior

Implement measures to influence daily behavior of individuals to reduce food waste left on their plates.

e.g. communicate the issue; share data on plate waste; behavioral nudges

2. Optimize Menus

Make a small number of purposeful changes to the menu composition to reduce food waste left on plates.

e.g. reduce portion size; optimize item pairings; policies on extra servings, redesign serving workflow

Data Enables Both Approaches

Measure Baseline

- Measure current level of plate waste

Enable Consumer Change

- Data to inspire and change behaviors

Enable Menu Optimization

- Detailed analytics insight to drive menu changes and optimization

Measure Impact

- Measure and track the success of changes and progress toward goal

Industry Insights

Specific Strategies

- **Moving from trays to “trayless” dining** (Study by [Journal of Hunger & Environmental Nutrition](#); 32% reduction in food waste when trays are made unavailable)
- **Using right-sized serving utensils** to ensure correct portioning
- **Staffed service** rather than self-service models to control portioning

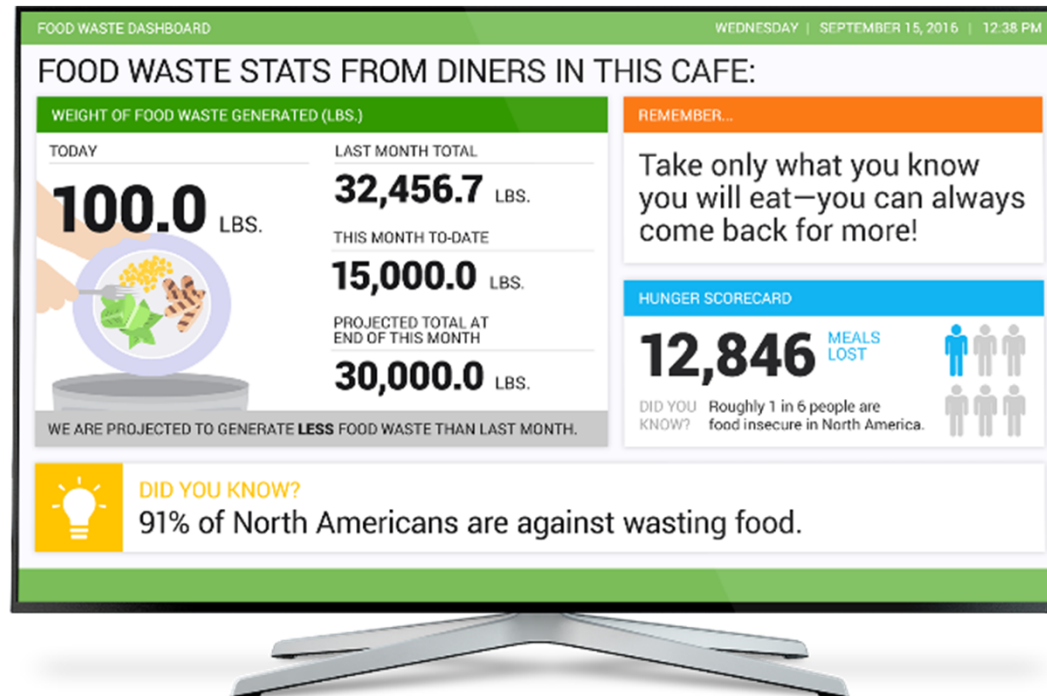
Educational Signage

- **Signage matters** ([Kansas State US study](#) found simple signs reminding people not to waste food resulted in 15% reduction of wasted food)
- **What’s on the sign matters too** ([Ohio State US study](#) found that when diners know scraps go to compost they waste more)

Messages that Change Behaviors

- **Injunctive norms to imply the approved behavior** (Ex: 95% of our customers care about not wasting food)
- **Loss aversion to highlight what’s lost by not taking action** (Ex: Wasted food today could have fed 500 hungry people)
- **Clear calls to action** (Ex: Take only what you will eat; come back for seconds)
- **Vivid presentation of data** showing how much food was wasted in a staggering way

Consumer Side: “Spark” Behavior Change

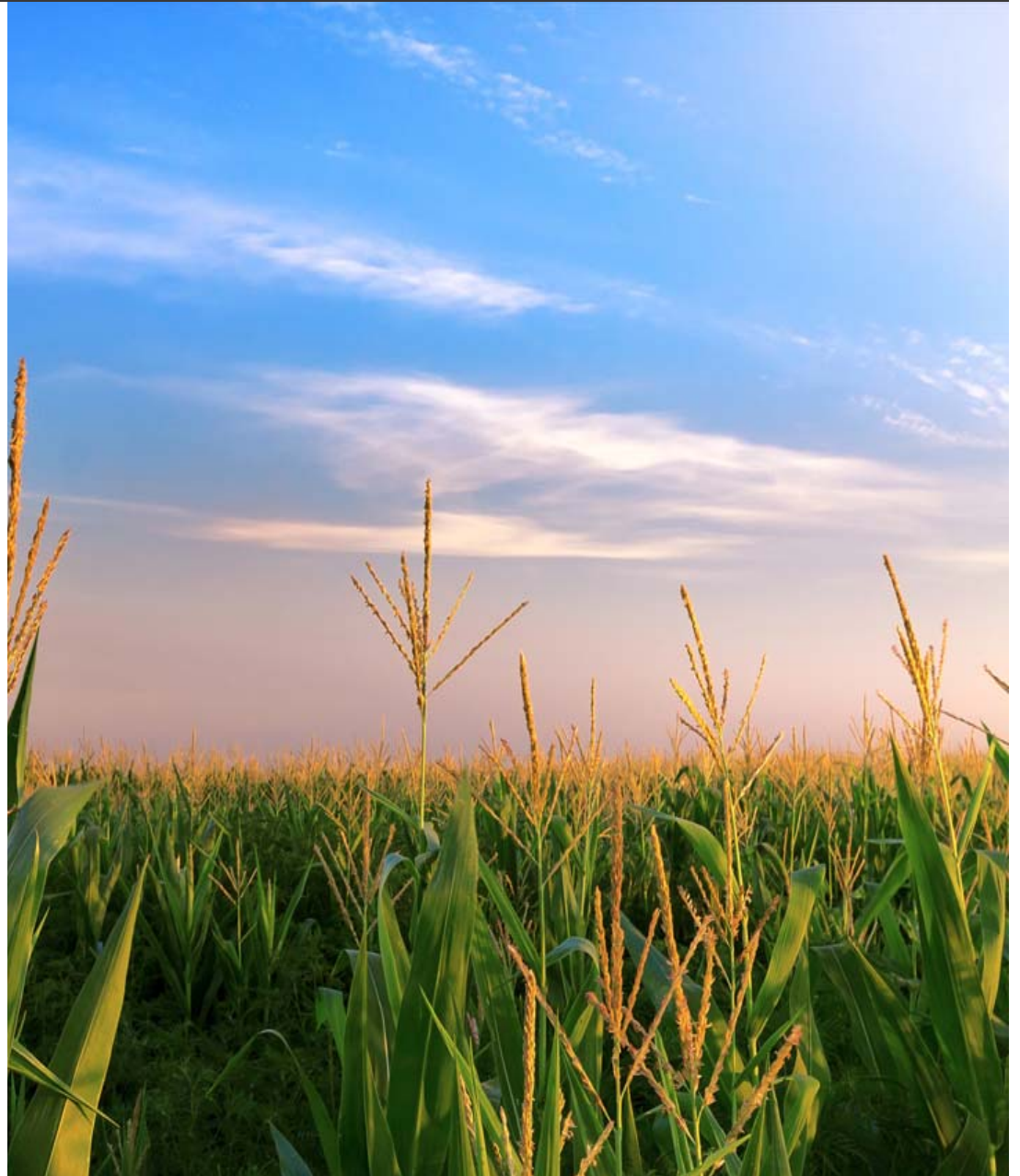


The Power of Why...

So Why Track Your Food Waste?

- Environmental
- Financial
- Social
- Demonstrated Impactful Results
- Meeting Changing Expectations
- Inspirational
- Helping to Drive Global Change!

It's the *Right Thing to Do!*



Environmental...

Top 10 solutions to climate change

Total gigatons of CO₂-equivalent emissions that could be reduced by 2050

SOLUTION		PLAUSIBLE SCENARIO		DRAWDOWN SCENARIO		OPTIMUM SCENARIO
Refrigerant Management	1	89.74	2	96.49	3	96.49
Wind Turbines (Onshore)	2	84.60	1	146.50	1	139.31
Reduced Food Waste	3	70.53	4	83.03	4	92.89
Plant-Rich Diet	4	66.11	5	78.65	5	87.86
Tropical Forests	5	61.23	3	89.00	2	105.60
Educating Girls	6	59.60	7	59.60	8	59.60
Family Planning	7	59.60	8	59.60	9	59.60
Solar Farms	8	36.90	6	64.60	7	60.48
Silvopasture	9	31.19	9	47.50	6	63.81
Rooftop Solar	10	24.60	10	43.10	13	40.34

DRAWDOWN
THE MOST COMPREHENSIVE
PLAN EVER PROPOSED TO
REVERSE GLOBAL WARMING
EDITED BY PAUL HAWKEN

Source: Project Drawdown

Vox

Measurable Financial Impact

Save **2-6% or more** on annual food purchases.

Reduce pre-consumer food waste by **50% or more**.

Save **\$14 for every \$1** spent on food waste measurement programs.



T'pvsdf;Dpn n po MfboQbui. kngfoulsftvnt/

Case Study: Google Food

“In 2015, Google cafés in the Bay Area saved 440,540 pounds of food from going to waste. So far in 2016, that figure is more than 1 million pounds, and the number is rising.”

From the Google Environment Blog



A photograph of a person's hands holding a white plate of food. The plate contains a variety of items including a fried fish fillet, a potato, sliced tomatoes, green peas, and a yellow rice-based dish with a fried bread roll. The background is a blurred canteen or dining area with other people and food trays. A semi-transparent yellow rectangular box is overlaid on the left side of the image, containing white text.

Fire up your people

to prevent food waste



Food waste measurement and reduction has emerged as a standard of excellence.

We Can Make Huge Impact!



Sustaining our world
Food. Climate. Environment.




Key Impact #1:

Shift the food waste conversation
upstream to prevention



Key Impact #2:

Engage businesses in responsible production (to avoid overproduction)



**For the love
of food,
let's solve
this!**



Questions?

Steven Finn
VP, Food Waste Prevention
LeanPath, Inc.



www.LeanPath.com