# Food Waste Tracking: What You Need to Know





Presented by: Andrew Shakman Co-Founder & President, LeanPath, Inc.

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# My perspective



- Co-founder of LeanPath, a technology company providing food waste tracking systems
- Food waste management consulting and education
- Co-author of Food Waste Focus blog
- Experience with volume foodservice across the US





# Why Track Food Waste?





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# Estimate: >.3 lbs per meal served

# Why focus on food waste?



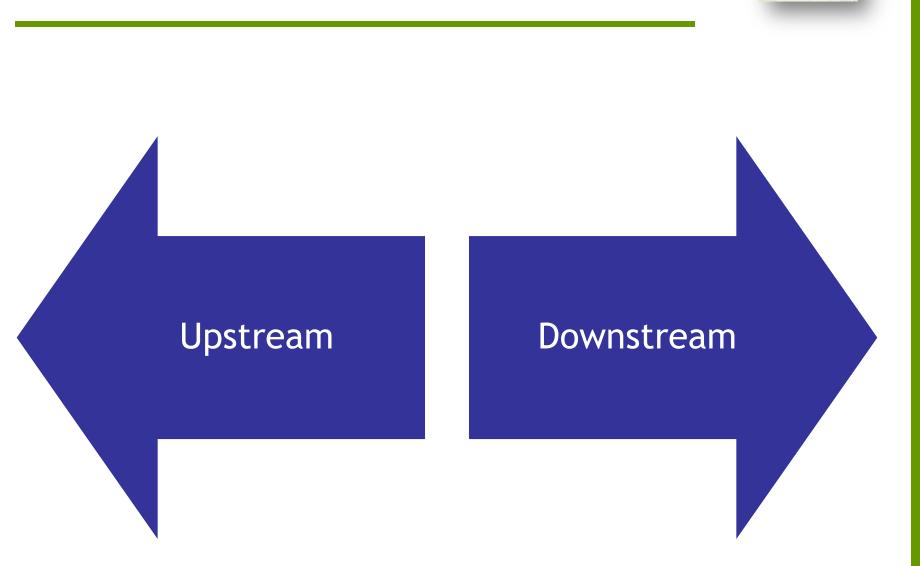
# The Case For Food Waste Reduction

Reduce Environmental Impacts Reclaim Financial Resources

Engage Staff



# **Environmental Impact**



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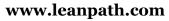


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## **The Real Cost of Waste**







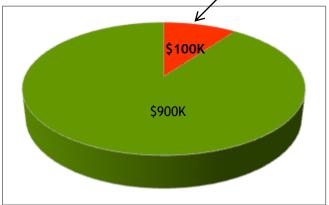






Food waste generated by the operator ("preconsumer waste") represents <u>4-10%</u> of the food purchased in volume foodservice

Up to \$100K in Food Waste!



Example: \$1.0M Food Purchases



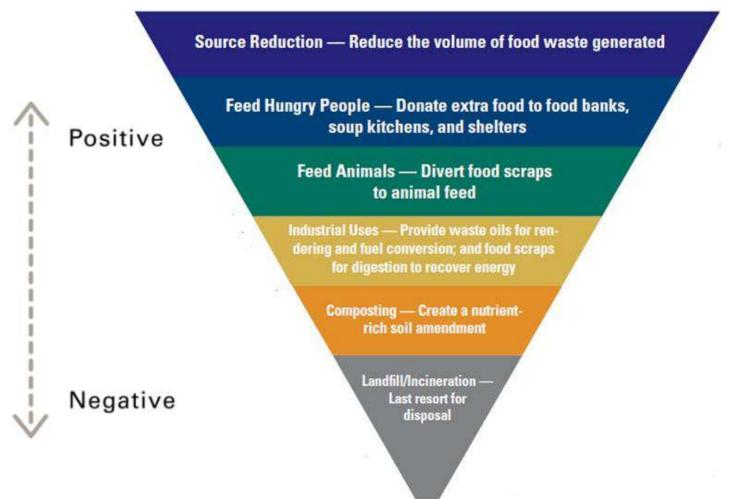


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# So where do we start?



#### **EPA Food Waste Recovery Hierarchy**

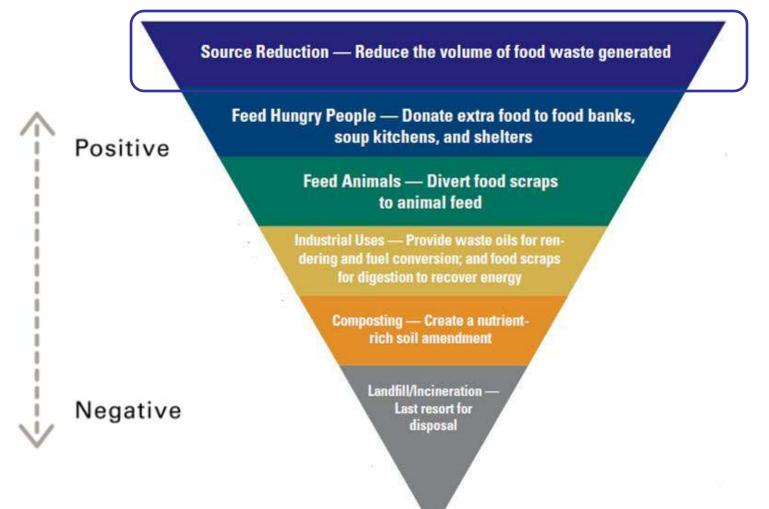


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#### **How To Tackle Source Reduction?**



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# As often practiced...







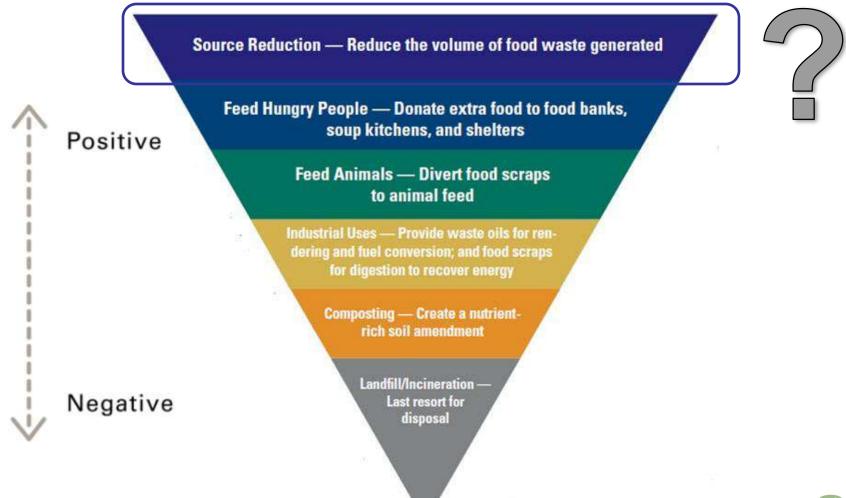


### Often overlooked

- Not as tangible as composting or food recovery
- Operators, consultants and government aren't sure what tools are available to address the problem



#### **How To Tackle Source Reduction?**



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# **Food Waste Tracking**

### **Frameworks Point to Measurement**







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### "We manage the things we measure"

If we don't track how much we throw away, how do we really know what and how to improve? If we don't measure, we're guessing.



# Feedback loops focus behavior and drive change



#### Tracking enables you to:

- Establish baselines
- Diagnose issues
- Raise employee awareness
- Raise guest awareness
- Create accountability
- Monitor & benchmark progress.







Reduction & tracking =

Two sides of one coin.





# **How to Track Food Waste?**

# **Two Types of Food Waste**

Pre-Consumer Food Waste (aka "Kitchen Waste")

#### Post-Consumer Food Waste (aka "Plate Waste")

**Different Tracking Approach for Each** 



# **Pre/Post Food Waste Dynamics**



	Pre-Consumer	Post-Consumer
Drivers	Overproduction, spoilage, expiration, trim waste, communication, adherence to forecasts/recipes	Guest awareness and behavior, portion sizes, self-service
Natural state?	Source-segregated	Commingled
Cost impact	Large, direct	Varies by op; indirect
Driven by:	Kitchen staff	Guests
Conclusion	Track it all, every day	Assess periodically (monthly, quarterly)





# How to Track Pre-Consumer Food Waste (aka Kitchen Waste) Continuously

# What To Track

- Overproduction
- Spoilage
- Expired/Dated Items
- Trim Waste
  - (i.e. fresh fruit rinds)
- Contamination
- Burned/Dropped Items

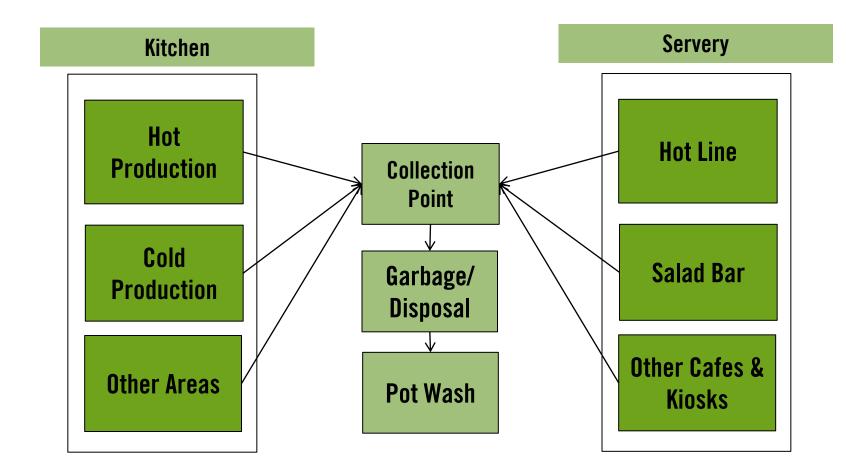






# Look at Workflow

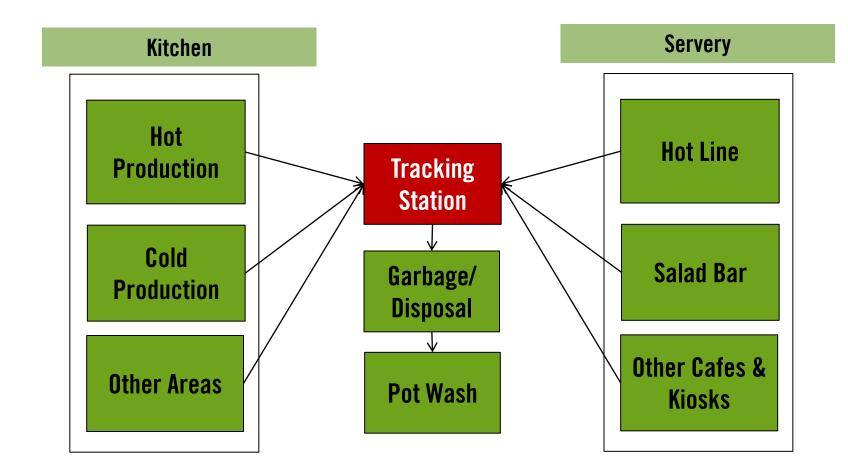






# **Centralize Tracking**







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# Policies

- Establish a review policy
  - With full attention to food safety
  - Appropriate staff involved
- Record what cannot be used on-site
  - Includes items to be donated, composted, or landfilled





# **Decide How Much Detail**



- The more detail, the greater opportunity to pinpoint savings
- Larger operations will usually benefit by savings pennies and nickels across massive footprints
- Smaller operations may choose to focus on less granular detail



# **Basic Information**



- Date & Time
- Recording Employee Name
- Food Item
  - by general category e.g "Produce"
  - Very specifically e.g. Apples
- Reason for Loss
- Unit of Measure

- Weight, Volume or Each/Count

# **Advanced Information**

- Container (for Tare Weight)
- Station/Source
- Disposition
- Daypart
- Banquet Event Order #
- Pre v. Post Consumer
- Overs / Not-Yet-Waste (NYW)
- Notes



# **Tool Options**



- Paper Sheets
  - Suited for lowest volume ops, no detail; lowest cost
- Software Tracking + Paper
  - Suited for low-medium ops, good detail.
- Full Automation
  - Suited for higher-volume ops, maximum detail
  - Easiest for staff to use, easiest for managers to run
  - Higher cost, but can deliver powerful ROI (~4%+ food cost savings)



### **Basic Paper Log Book**

Date: Notes/S	pecial Events Toda	Weath	er			10
Time	Recorded By	Food Type	Loss Reason	# of Portions	# of Quarts	# of Pounds
					PICK ONE	
						-
		-				
	•	•	÷	TOTAL		



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# **Advanced Logbooks + Software**

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 Grouping by Food or Loss Categories

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 Designed for ease of input into reporting software package



#### **Advanced Logbooks + Software**

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		Each		Guarter	i texna	Soug/Sauce	Poultry	Spoilage	HAACP
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 Grouping by Individual Transaction Frames

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 Also designed for ease of input into reporting software package



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#### **Advanced Logbooks + Software**

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- Menu manifest approach
- Also designed for ease of input into reporting software package



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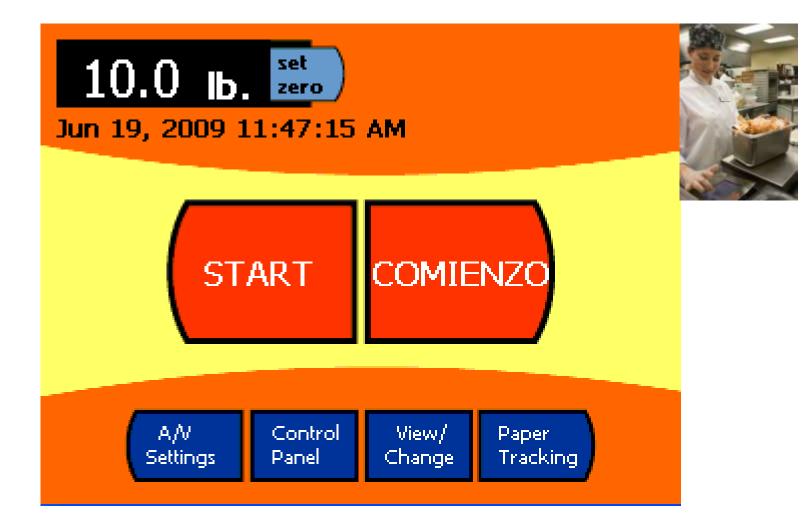
#### **Fully Automated Tracking**











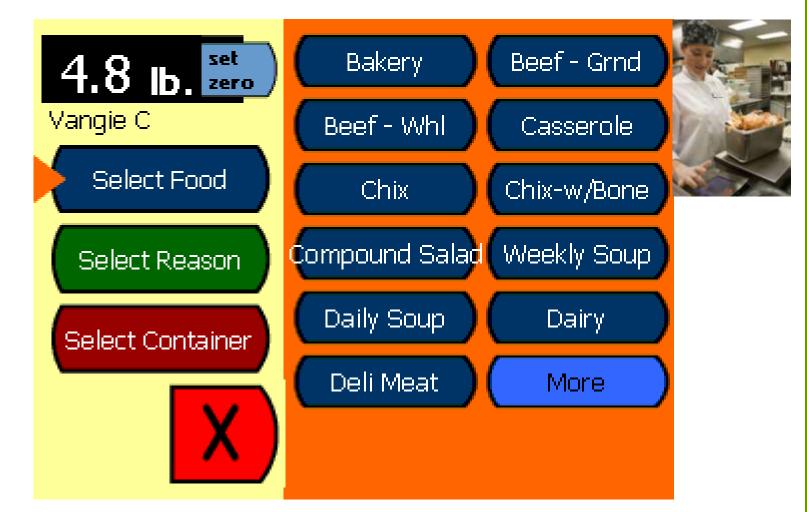






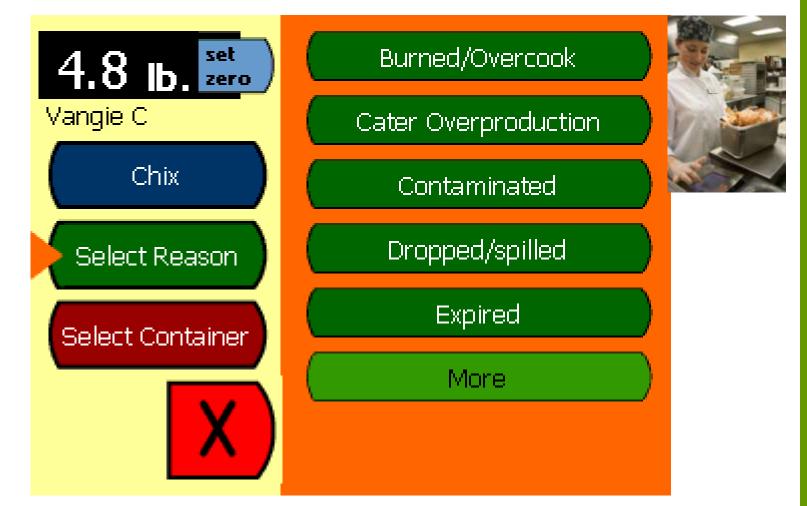






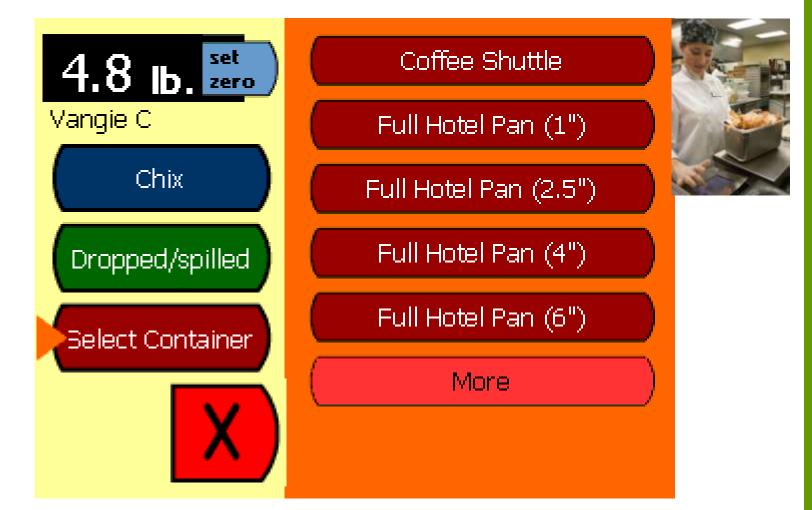












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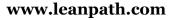














#### **After Data Collection**



- Collecting data is the first step
- Reviewing and using the data is absolutely critical to drive results
  - Compile the data to see opportunities
    - Many are hidden
  - Review trends
  - Set focus areas and follow progress
- Filing sheets after a quick scan= "no-no"
  Like revving your car's engine in neutral



#### How to Compile Data



- If using **paper**:
  - Use MS Excel or Access
  - Key in data
  - Calculate weekly and monthly totals
  - Break down by <u>either</u> food or loss reason
    - Difficult to do <u>both</u> unless you have database skills



#### How to Compile Data



#### • If using **software**:

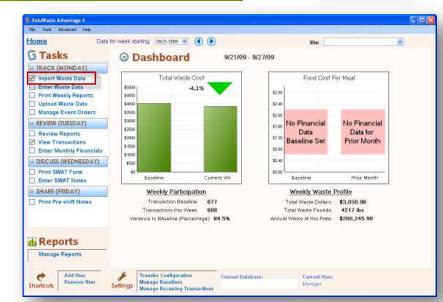
- Use specialized waste tracking application with a custom interface designed to make the data entry process easy
- Print memorized reports and review outcomes
- Much easier than paper + Excel!



## How to Compile Data

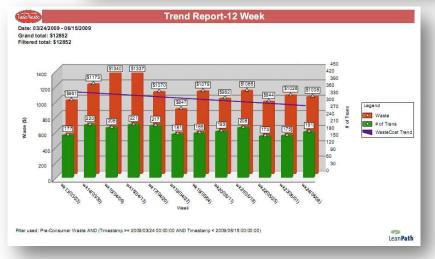
#### If using **full automation**:

- Import data automatically; no secondary dataentry/compiling step because it happens automatically
- Print reports & review outcomes
- Easiest approach



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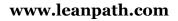
#### **Engage Staff**



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- Post reports
- Discuss in line-ups/pre-shifts
- Recognize engaged staff
- Set specific focus areas for improvement





#### Training



- All successful tracking programs require
  - Staff training
  - Expectations/standards for participation







## Post-Consumer Waste Tracking

#### **Post-Consumer**

- Same methods as pre-consumer:
  - Paper
  - Software+ Paper
  - Full automation
- Conduced only periodically
- Goal is not production & purchasing
  - Focused on menu analysis
  - Focused on guest education & engagement





#### **Mechanics are Different**

- Staff Tracks Post-Consumer
  - Dish room staff scrapes into totes for weighing
- Guests Self-Track
  - Scrape & weigh station
  - Best for non-commercial (e.g. schools, colleges)

#### **Education & Review**



- Post results publicly
- Communicate actions guests can take to reduce waste
- Assess menus to avoid high-waste items





## **Evaluating Tracking Data**

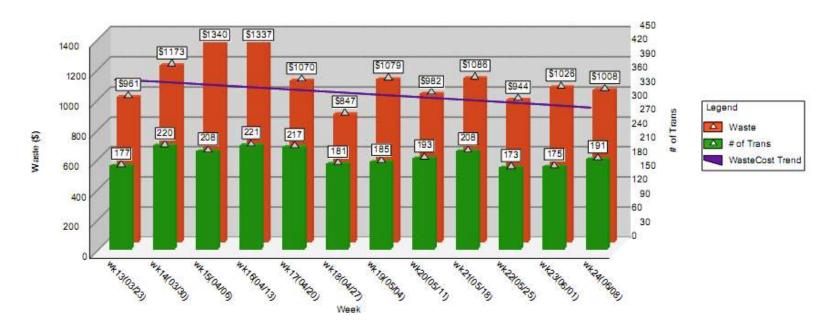
#### Trends

alallaste



#### Trend Report-12 Week

Date: 03/24/2009 - 06/15/2009 Grand total: \$12852 Filtered total: \$12852

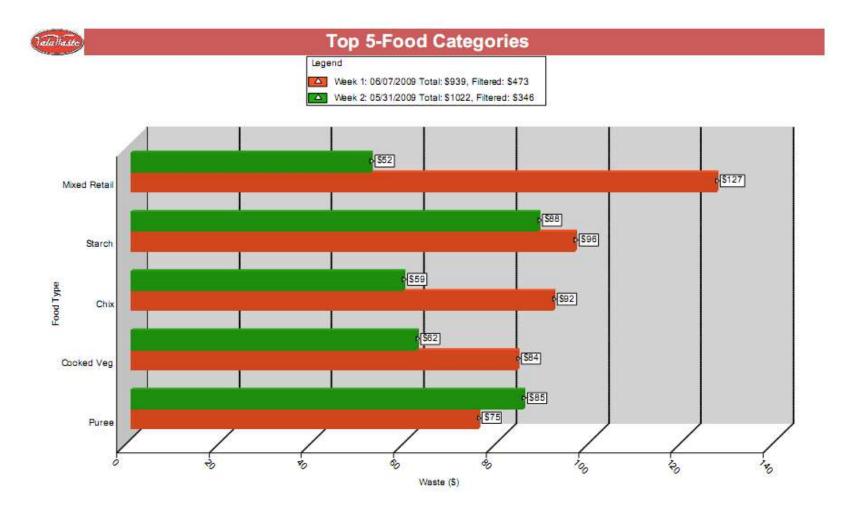


Filter used: Pre-Consumer Waste AND (Timestamp >= 2009/03/24 00:00:00 AND Timestamp < 2009/06/15 00:00:00)





#### **Top 5's and Comparisons**



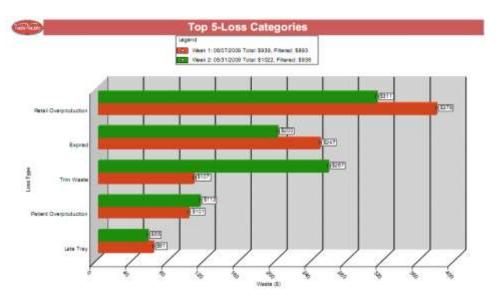


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## Others

- High Items - Big \$\$'s
- Focus Items Areas you select
- Data quality – Missing items
- Close-ups
  - Stations
  - Most Overproduced Items









# Food Waste Focus

# blog.leanpath.com



## **Notes**

# leanpath.com/notes



## Q&A

#### Andrew Shakman Co-Founder & President, LeanPath, Inc.



#### Contact:

Phone: (503) 620-6512 x100 E-mail: ashakman@leanpath.com Web: www.leanpath.com Blog: blog.leanpath.com Twitter: twitter.com/leanpath