

October 19th, 2016

Mr. Pete Pearson
World Wildlife Fund
1250 24th Street, N.W.
Washington, DC 20037

Dear Pete:

We are pleased to submit the results of our *Food Waste Opinion Leaders Study to the WWF, AHLA, and the Rockefeller Foundation*. We enjoyed working on this important project and appreciated your support and confidence.

Project Team

Dr. Steve Schein is a corporate sustainability strategist, organizational consultant, and sustainability leadership development specialist. His 2015 book *A New Psychology for Sustainability Leadership* was featured in US News & World Report, The Guardian, and Bloomberg News. He is a former CEO and business professor with more than 35 years of senior management, advisory, and business development experience in several industries including resort hospitality, consumer food, and agriculture. His research has appeared in numerous leadership and sustainability journals including the Journal of Corporate Citizenship, the Journal of Management of Global Sustainability, Leader to Leader, Environmental Values, and the New Global Citizen.

Dr. Schein was a member of the business faculty at Southern Oregon University from 2005-2015, where he founded the sustainability leadership program, and the sustainability expert-in-residence at the Presidio Graduate School in 2015-2016. Prior to this he was a director of consulting at Moss Adams, LLP and co-founder of an NYSE company ResortQuest International, where he served as a senior vice-president and corporate officer until 2004. Dr. Schein earned his PhD in Human Development and Organizational Systems from Fielding Graduate University and his BA in accounting from the University of Colorado.

Ben Bellinson conducts market research on behalf of companies in a wide range of industries including media and entertainment, energy and social sector organizations including non-governmental organizations. Over the last 14 years he has designed and administrated more than 70 research studies for companies and organizations including The Walt Disney Company, ESPN, CARE International, Save the Children, and Bonneville Power Administration.

Previously Ben held senior marketing, business development and account management positions at The Walt Disney Company, CareerPath.com, the J. Paul Getty Trust and Lifetime Cable Television. He is a graduate of the University of California, Berkeley and was a fellow with the CORO Foundation.

Research Objectives

The research objectives were to understand the dynamics of food waste at a property level across multiple brands; identify the key issues, challenges, and opportunities to reduce waste; and gain perspectives on levels of interest, knowledge and motivation of food waste from hospitality industry executives.

Survey Design

The survey was designed as a three-part process. First, pre-survey focus interviews were conducted with corporate sustainability leaders, regional and general managers, executive chefs, food and beverage executives and operations/engineering managers from Marriott, Hilton, Hyatt, IHG and Starwood. The American Lodging & Hotels Association assisted with focus interview recruitment. Bellinson & Company also solicited input from WWF staff. Next, based on the pre-survey interview, Bellinson & Company drafted a questionnaire that included six quantitative questions five qualitative questions were identified. The issues were consolidated into several categories: knowledge and priority, measurement, training, and operational challenges and opportunities. Finally, Bellinson & Company administered the questionnaire to participants.

Survey Vehicle

The survey was designed as a scheduled one-on-one telephone interview.

Sample

Interviews were completed with thirty-two participants. The participants were property level culinary, catering/food and beverage, and general management executives from Marriott, Hyatt, Hilton, and Starwood.

Survey Structure

The quantitative section of the survey included six statements to be rated by survey participants. Ratings ranged on a scale of 1 – 5, with 1 relating to the most negative or lowest opinion and 5 with the most positive or highest opinion. Participants were asked to rate the importance they placed on specific factors. Participants were then asked to rate the performance they placed on the same factors. The most substantive portion of the survey consisted of five open-ended qualitative questions along with follow-up probing questions that were completed with each participant.

Below is a copy of the survey instrument.

Survey Instrument

**World Wildlife Fund, Rockefeller Foundation, and American Hotel & Lodging Association
2016 Hospitality Industry Food Waste Survey Questionnaire**

Institution: _____

Name: _____

SERVICE

1. Your property's team understands the food waste issue.
2. Reducing food waste is a priority at your property (company).
3. Your property has the necessary resources and tools to measure, track, and report food waste.
4. The process to donate food waste is efficient and timely at your property.
5. Your company offers incentives to staff for minimizing food waste.
6. Your property's sales team has the necessary knowledge of food waste to talk about the subject in the event planning phase.

		1	2	3	4	5	N/A
1.	I	1	2	3	4	5	N/A
	P	1	2	3	4	5	N/A
2.	I	1	2	3	4	5	N/A
	P	1	2	3	4	5	N/A
3.	I	1	2	3	4	5	N/A
	P	1	2	3	4	5	N/A
4.	I	1	2	3	4	5	N/A
	P	1	2	3	4	5	N/A
5.	I	1	2	3	4	5	N/A
	P	1	2	3	4	5	N/A
6.	I	1	2	3	4	5	N/A
	P	1	2	3	4	5	N/A

7 What obstacles and challenges do you experience when working to minimize food waste?

8 What specific things could your property do to improve its food waste program?

I = Importance P = Performance

**World Wildlife Fund, Rockefeller Foundation, and American Hotel & Lodging Association
2016 Hospitality Industry Food Waste Survey Questionnaire**

9 What specific training for culinary teams at the property level would you like to see?

10 What ideas do you have to make measuring food waste easier?

11 What is the number one issue that your property should address related to food waste in the coming year?

I = Importance P = Performance

Quantitative Findings

On a scale of one to five, participants' average importance score for the six items was 3.8 and performance score was 2.8. While the quantitative findings were not conclusive in themselves, they did lead to important follow-up probing questions that are reflected in the qualitative findings. Items #'s 4-6 in particular suggest significant opportunities for further exploration and development. These include opportunities for improvement around measurement, monitoring, incentivizing, and the sales process for meetings and events. Survey results for each item, both Importance and Performance, are detailed in the table below and further discussion follows in the qualitative section.

Question #	Description		Total Sample (29)		
			Average	Std Dev	Gap
1	Property's team understands the food waste issue	I	4.2	1.0	
		P	3.5	0.9	0.7
2	Reducing food waste is a priority	I	4.0	1.2	
		P	3.6	1.1	0.4
3	Property has the necessary resources and tools to measure, track, and report food waste	I	3.9	1.3	
		P	2.7	1.4	1.2
4	Donation process is efficient and timely	I	3.7	1.4	
		P	2.5	1.2	1.2
5	Incentives are offered to staff for minimizing food waste	I	3.1	1.4	
		P	1.8	1.0	1.3
6	Sales team has necessary knowledge of food waste	I	3.9	1.0	
		P	2.7	1.0	1.2
Importance Average:			3.8		
Performance Average:			2.8		

Qualitative Findings

The two researchers independently coded the interview transcripts and triangulated their findings. Ten major themes emerged from the qualitative data as presented below. Detailed interview quotations supporting each major theme follow on pages 7-11 and complete interview transcripts are presented on pages 12-43. A confidential list of the participants is included as Appendix A.

1. Few properties have a plan to address food waste and dedicated person responsible for coordinating communication and tactics
2. Active communication across functional areas and with vendors and municipalities positively impacts results
3. Changes in attitudes, expectations, and behaviors related to sales guarantees could lead to substantial reductions in food waste
4. Participants expressed a strong need for specific training and education
5. Measurement and tracking of food waste is limited and informal
6. Several executive chefs are leading comprehensive food waste reduction programs
7. Buffets offer the greatest opportunity to reduce waste
8. There is a wide range of opportunities and challenges related to recycling, composting, and donating
9. Awareness at the property level is growing but still in the early stages
10. Reduction in food waste could accelerate in the hospitality sector by implementing best practices from the cruise industry

Individual Themes with Supporting Quotations

1. Few properties have a plan to address food waste and dedicated person responsible for coordinating communication and tactics

“Managing food waste needs to be a strategic initiative from senior management or corporate. There needs to be a coordinated communication plan. Everyone needs to understand his or her roles and buy-in.”

“I would create a separate position that would be responsible for all food waste. I would call the position “Footprint”.

“I think it always comes down to culture and communication. You have to have the right culture and leadership at a property.”

2. Active communication across functional areas and with vendors and municipalities positively impacts results

“We’re working at all levels and across departments. With sales we’re talking about portion size and zero waste. Purchasing has strict guidelines in place. We encourage zero waste and we are working hard to educate our staff and guests. The city is helping us find local partners to meet our goals. We’re sharing the results with our guests.”

“It’s important that all teams related to meetings, banquets, and restaurants be involved in the food waste issue to make a difference.”

“I think the key is getting everyone involved. This includes stewarding, the chefs, the waste management company.”

“We need to work as a team – Food and Beverage and Culinary – to eliminate over production. When we book an event, we create a Banquet Event Order, a BEO.... The sales team has a daily BEO meeting each day that leads to a food waste discussion.”

3. Changes in attitudes, expectations, and behaviors related to sales guarantees could lead to substantial reductions in food waste

“We don’t get information in a timely manner from clients. Last week we had a banquet scheduled for 600 people and the client gave me an updated headcount of 450 less than 24 hours before the event.”

“We had a large group in the hotel and the group provided a guarantee for 900 people for dinner. Only 600 showed up.”

“We used to overproduce by at least 5%... years ago went into really measuring what the expected consumption would be but we got to the point where we were really cutting it close. I think we’ve gone away from that and are back to overproducing.”

4. Participants expressed a strong need for specific training and education

“Shame on me because I’m in charge. Managing and minimizing food waste hasn’t been part of my education or skillset. We don’t know how to create a food waste system. It starts with me and I’m not equipped. I would love to train and delegate food waste tasks and jobs. It needs to start with an expert.”

“I would love to have an education program about food waste.”

“I would do more training with the culinary team but I’m not an expert. I need to be better trained and educated, or we need to hire experts. We’re not even equipped to do some pretty basic things today...”

“...It’s critical to train the staff. The staff needs coaching and mentoring to build confidence.”

“We don’t have any specific training for the culinary team on food waste....I can’t think of any corporate programs related to food waste.”

5. Measurement and tracking of food waste is limited, informal, and inconsistent

“We don’t have food waste logs or actively monitor or measure waste. We know our monthly trash tonnage but that’s about the extent of our tracking and measuring.”

“When you compost, you have a measure of what’s being wasted. Getting an infrastructure or solution in place to compost would be helpful. If we had a good solution to measure our waste, I think we could do more closely monitor food costs. There’s a correlation but I don’t know how to prove it at a P & L level.”

“Internally we don’t have any reports to track food waste, cardboard and plastic recycling or composting. The main way we track waste is by looking at food costs.”

“We need to start by consistently tracking and reporting waste. We have an eco-initiative but in my opinion it isn’t credible. We aren’t consistent and it isn’t monitored regularly.”

6. Several executive chefs are leading comprehensive food waste reduction programs

“A well-organized prep station is the main factor in controlling waste and we focus on preparation. Being organized equates to being more efficient.”

“We calculate needs based on the number of quests and the menu. The formulas are all calculated. We constantly ask ourselves, are our quantities appropriate or are we ordering too much?”

“When we donate food to shelters or food banks we’re not saving costs. When we donate wet waste to pig farms we don’t improve the bottom line. When we compost more, we don’t become more profitable. When we produce less food for an event, we’re more efficient and it affects profitability.”

“At my last hotel we recycled water runoff. We recycled soap and we had a chart where we would track month over month. Our sales team and catering team would take pictures of the chart every month and tell our customers and the sales team would show the pictures to meeting planners as a way of winning business.”

“Our chefs have it down to a science to limit the food waste on buffets. We only produce about 101%. We keep the cold food cold and the hot food hot.....I like my chefs to meet my meeting planners”

7. Buffets offer the greatest opportunity to reduce waste

“Guests expect buffet stations to be abundant and full from the opening of an event until we close the line. In my opinion buffets are the biggest source of food waste at my hotel and in the United States. We’re contributing to people over-eating. Buffets should be illegal.”

“The main source of food waste is over-production following a buffet event.”

“We have strategies to reduce our waste at buffets. For example we try to downsize the number of buffets we are offering as the hours go by. From 4 to 3 to 2 to 1. We also use smaller size vessels towards the later part of the buffet.”

“Once you pull the plastic wrap on the new tray then the rest is waste. What we started doing was to insure that the backup is in a significantly smaller platter size so that we have a lot less left over.”

“In terms of banquets, we tend to do too much. We don’t want to disappoint the guest, so we tend to over-serve. We don’t have the structure to reduce at events. We put out too much food in large containers.

8. There are a wide range of opportunities / challenges related to recycling, composting, and donating

“We are willing to segregate food waste and recyclables, but believe it or not it is difficult to find businesses and government agencies here. We don’t have a local company for compost. There just aren’t local or state resources.”

“If you don’t make it easy on your team it is never going to happen.”

“I think it relates to infrastructure. We can recycle aluminum cans and glass bottles but we don't have a local infrastructure to compost here. That waste goes directly in the landfill.”

“Dishwashers need to segregate the trash and compost. That doesn’t happen now. Waste all goes to the same place. We don’t have any equipment or system for composting. I don’t have a sense if food waste is even a topic that’s discussed...I come from a cruise background. If you don’t recycle and work to reduce waste on a ship, that’s the end.”

9. Awareness at the property level – and with clients and guests is growing but still in the early stages

“The food waste issue has only come about during the last 3 months. I think that the banquet side of the house could double the reduction in food waste.”

“Creating greater awareness of food waste as an issue amongst all hotel staff members, in all departments of the hotel, it is the biggest opportunity for us.”

“In terms of staff, there needs to be more awareness of the food waste issue and education... We need to make people more aware of how food waste impacts our lives. If we raise awareness we will be able to do more.”

“I do think our customers are more aware of the food waste issue and that’s good. Our customers will push us to do more. Now we get questions from customers and meeting planners about how we handle food waste.”

“What made the difference was the fervor that the stewarding team brought to the project.”

10. Reduction in food waste could accelerate in the hospitality sector by implementing best practices from the cruise industry.

“The main opportunity is to implement the highly advanced systems from the cruise industry in the hotel industry. The cruise industry does real time planning based on 100% occupancy and very detailed demographics.”

“For instance in the cruise industry we count the # of guests, gender, age, and study these demographics. Royal Caribbean and Carnival have created formulas based on demographics. They engineer the menu based on the demographics in house at any given time... they constantly measure using the point of sale system with visual monitors...measuring everything in real time and adjusting production accordingly.

“The waste in the cruise industry is less than 5%. They replenish and replace based on real time data. It’s probably three times that in the hotel industry on average.”

“Having spent half my career in the cruise industry and half my career in the hotel industry, the operators in the cruise industry are much more disciplined in terms of planning, measuring, and adjusting. The hotel industry is way behind the cruise industry...They need to do a much better job at developing and implementing plans.”

Interview Transcripts by participant (#'s 7-11 correspond to survey instrument items)

ID #1

7. Our obstacles and challenges are mostly operational. We're working with organized labor and unfortunately our staff isn't the most accommodating worker force. Separating food waste would be considered a new job or program and I'm sure it would meet with resistance.

It's always prudent to reduce waste, but it wasn't a key consideration when our property opened in December 2013. We don't currently have a recycling program and we don't compost. We have bigger fish to fry from a financial perspective. We have more important staff issues.

There's a new law in New York City that requires restaurants to recycle in various ways. The law went into effect last month. Non-compliant facilities will be fined beginning in January. Our garbage collection company has made some recommendations – quick fixes to help us comply. I'm not aware of all of the details but the trash company will be doing the heavy lifting.

8. Yes, there are things we could do to improve our food waste program. Absolutely. It wouldn't be easy for us to do but we should have a single-stream recycling program. We're space constrained and I just told you about staff issues and priorities. You should know that our banquet operation is quite small. We can only accommodate groups of 100 and fewer. Our wasted food today goes to the staff cafeteria on property.
9. There is no training today for the Culinary Team related to food waste. Education about food waste and the global food crisis would be nice but I'm not sure how impactful it would be. We have staff issues.
10. We're not measuring anything now. It hasn't been a requirement and it isn't a priority for our staff.
11. Implementing the new law related to recycling and composting is our top priority. Our trash company is taking the lead on it. I would like to see us have an easy, effective, efficient way to separate recyclables and compostable waste from our overall waste. We need extra garbage cans, maybe colored garbage cans. We have space constraints but there is more we could do if we have resources and it was a priority. Our kitchen and catering operations weren't set-up initially with recycling or food waste in mind.

Food waste isn't part of our discussions with groups today. We don't talk about it. We only have room for 100 people so it isn't a big business for us now. Also, when there are leftovers, that food goes to our staff cafeteria so there's very little waste.

I am talking on behalf of myself. I don't speak for Hyatt. I'd appreciate not being quoted in reports directly.

ID #2

7. Minimizing food waste requires a system-wide effort. Food waste needs to be managed consistently and across departments. I'm only able to dictate processes and procedures across my department. I have 115 people on the culinary team and 145 stewards. A broader effort is required. We need to involve Engineering, Food and Beverage Management, Sales and other groups. My scope is limited and I'm not qualified or an expert. If I went to Sales and told the staff to do x, y and z it wouldn't be impactful. Managing food waste needs to be a strategic initiative from senior management or corporate. There needs to be a coordinated communication plan. Everyone needs to understand his or her roles and buy-in.

8. We talk about waste but I'm not sure everyone is thinking the same thing. It's a broad concept. There is absolutely more we could do to minimize waste. First we need to identify the different types of waste and streams and make sure the staff is properly educated and trained to put plans in place. Pure waste should be treated as waste but vegetable waste is different from animal waste, which is different from overproduction. We need to actively manage each of the waste streams. It will take a multi-prong and multi-department approach and plan.

We need to start by consistently tracking and reporting waste. We have an eco-initiative but in my opinion it isn't credible. We aren't consistent and it isn't monitored regularly.

9. I would do more training with the culinary team but I'm not an expert. I need to be better trained and educated, or we need to hire experts. We're not even equipped to do some pretty basic things today. Organic waste needs to be separated from animal waste. Grease and oil and other high fat items need to be separated. We need to implement a system to recover what we can while also reducing over-production.

Today we direct our over-production to employee dining. We inconsistently donate to food shelter and food banks. We would donate more if the process was efficient and timely. It's not.

10. We need to do a better job of tracking and logging food waste. If we could show the staff that we're wasting 3,000 pounds of produce everyday it would raise eyebrows. People just don't think of it and it's not a priority. If there was an incentive, people would be more motivated.

We don't have the right systems in place today. Shame on me because I'm in-charge.

Managing and minimizing food waste hasn't been part of my education or skillset. We don't know how to create a food waste system. It starts with me and I'm not equipped. I

would love to train and delegate people on my staff to take different food waste tasks and jobs. It needs to start with an expert.

11. Improving our food cost is a priority and directly related mostly to over-production. When we donate food to shelters or food banks we're not saving costs. When we donate wet waste to pig farms we don't improve our bottom line. When we compost more, we don't become more profitable. When we produce less food for an event, we're more efficient and it affects profitability.

We do talk about over-production today but we don't do enough. We do yield tests. We keep a yield notebook. We work with our Events team to refine production numbers; however we need to do more to educate and get customer and guest buy-in. In the sales process we talk about the number of buffet lines and how long the lines should remain open. Guests expect buffet stations to be abundant and full from the opening on an event until we close the line. In my opinion, buffets are the biggest source of food waste at my hotel and in the United States. We're contributing to people over-eating. Buffets should be illegal. Buffets cause food safety issues, contribute to obesity and result in over-production. We need to do more to provide incentives for planners to shift to plated events.

There is something else I'd like to add. I have been in the business for a long time and over the years the waste stream has shifted. We used to make food in-house from scratch. More and more we are outsourcing production. We used to get cartons of melons delivered every week. Today we get peeled melons. We're saving cardboard and the staff time to peel the melons. More and more vegetables and fruit arrive pre-cut, pre-processed. Food shelf life is shorter and the culinary staff wastes more ingredients because the convenience is so high. A chef used to be careful measuring garlic when he had to peel it first. Today you simply open a container. It is easier to use and therefore we often use too much. Everything is cheap from a time perspective.

I hope I said something that was useful to your project. If you have follow-up questions or if I can help in any way, include me. I hope we can begin to make a real difference in this issue.

ID #3

7. A number of obstacles come to mind for me. First and perhaps the biggest is the way we get food from suppliers and vendors. Oftentimes the food needs to be trimmed. The packaging is massive. Cardboard and plastic packaging isn't food waste, but we should be working more closely with vendors to minimize packaging. The next thing I think of relates to infrastructure. We can recycle aluminum cans and glass bottles but we don't have a local infrastructure to compost here. That waste goes directly in the landfill. Finally we need to do a better job of prepping.

8. We don't have a food waste program, per se. We need to educate our associates about food waste. We need to measure food waste. I don't have a sense of how much waste we create today other than the amount of trash we send to the landfill. I would estimate that half of our total trash is food waste. I know what are food costs are but I don't know what the opportunity is.
9. Our culinary team learns kitchen processes and techniques, but we don't have any formal training related to food waste. They're learning safety and they are told not to waste but I don't believe there's any depth.
10. When you compost, you have a measure of what's being wasted. Getting an infrastructure or solution in place to compost would be helpful. If we had a good solution to measure our waste, I think we could do more closely monitor food costs. There's a correlation but I don't know how to prove it at a P & L level.
11. Composting would be huge. I don't know if you know my background but before I was general manager here I worked on the corporate sustainability program. Since I've been here I have struggled to find a composting program. Our only option is to get a machine. We haven't even been able to find farmers to take food waste from us. The farmers in this area are small and don't have the efficiency. They're just not ready yet.

We have a healthy meeting and conference business. We have done our best to promote plated events because we have more control over quantities. Breakfast and lunch buffets are preferred because of timing. Leftovers from a buffet that haven't been presented go to our employee cafeteria. Any leftover food from a buffet line is thrown away. We don't want to take any safety risks. More and more we'll try to use presented food later in a day. For example, if we have cut fruit and it hasn't been served, it might be used for a meeting break.

I do think our customers are more aware of the food waste issue and that's good. Our customers will push us to do more. Now we get questions from customers and meeting planners about how we handle food waste. People are interested.

ID #4

7. To us, food waste is about protecting the excess food in a manner that allows us to donate that food or use it in another way. If the food hasn't been handled properly – stored at the right temperature, for example – we lose our ability to use the food in another part of our culinary operation or donate the food. The hotel also has an active composting program. We're very conscious of food waste. We do our best to minimize waste while also satisfying our guests. Last year we donated 6,000 or 7,000 pounds of edible food to a local organization called Food Lifeline.

All departments need to be trained to minimize waste. The culinary team is at the top of the pyramid, but many different people and groups are involved. It's important we improve communication around this issue to the various departments.

Buffets generate the largest volume of food waste. Consumption is hard to predict. We have a tendency to produce a little more than we think we need because we want to make sure we're covered and don't have to scramble to cook more food at the last minute. We rarely run out of food but it has happened. Tomorrow we have the Dallas Cowboys checking into the hotel. Estimating food needs for different groups is a real challenge. We're very sensitive to our guests' needs. Plated events are much easier and more efficient with respect to food waste.

8. We could do a better job of ensuring re-use of food from our events. Sometimes an item can be repurposed for another meal or item. We also need to protect food safety so excess food can be donated. There's room for us to be more conservative with placing food on buffets.
9. The Culinary Team stewards the food waste issue internally, though there are more groups involved. The more closely Catering and Events works with the Culinary Team, the better off we will be. Culinary is responsible for production.
10. I can't state figures. We track how much we compost and the Culinary Team is able to report how much food, in pounds, we donate to Food Lifeline. These statistics are reported to management in the same way we report water consumption and electricity consumption.
11. For me, two priorities come to mind. First we need to be more mindful of food safety. We shouldn't put too much food on the buffet line in advance. We need to monitor food temperature too. If we have confidence food has been stored properly, there's a greater opportunity for us to re-use, and then donate, the food. Next and perhaps more importantly we need to be conservative with the volume of food on buffets. Buffet quantity is a tough issue, but working together perhaps we can get more efficient. It is important we meet or exceed our guests' expectations. In our discussions with meeting planners, they want to know there will be ample food. That said I think there is more we can do in our discussions. We need to be conservative while covering guests' need.

The questions you asked were very good. You gave me plenty of opportunities to describe my perspective.

ID #5

7. We face quite a few challenges when trying to minimize food waste. We work with a lot of large groups. Every week we do multiple events for 1,000 to 6,000 people. For a group that guarantees 3,800 people for a dinner buffet, the group might have 4,700 people

staying on the property. The 3,800 guarantee is an estimate but we generally make food for a couple hundred extra people. 200+ additional meals wouldn't be uncommon. We need to make sure there's enough food. That's the priority.

We wish there were better options with respect to donating excess food. There aren't great options here in Orlando. We want any donated food to be picked up in a refrigerated truck to ensure food safety. Usually the employee cafeteria is our best option. We recycle through Reedy Creek and some of waste is picked up from a pig farmer. We donate non-perishable items, bread, pastry and packaged food to a local group.

8. If we had a refrigerated truck and the proper resources, we would donate more to local shelters and food banks. Keeping food at the right temperature is a real challenge and we don't want to take chances.

Internally we don't have any reports to track food waste, cardboard and plastic recycling or composting. The main way we track waste is by looking at food costs.

Some groups want to know what we do with excess food.

9. We do training on food handling. The staff is trained how to prepare food properly, how to cut vegetables and trim meat for example. There's a consciousness about trimming fish steaks so other parts can be used for other entrees, for example. The main source of food waste is over-production following a buffet event.
10. Frankly, if there was an effort to minimize food waste I'm not sure how we'd put a process into place. We have what we need today relative to our priorities.
11. Minimizing food waste isn't on my top five goals right now. We don't talk about food waste with meeting planners unless they bring it up. They ask us questions about organic ingredients and sustainability first. Food waste is much further down the list. Usually a meeting planner's questions relates to donating food, not minimizing waste. They want to be sure their guests have ample choices and plenty to eat.

Unfortunately working more closely on donating food is just another thing for a catering manager to add to his or her list. I'd love to have someone coordinate this for us. I'd love for this to be a topic of discussion. People are interested in the environment and it needs to be driven from that point. Reducing waste needs to be a goal. Right now I'm feeling badly we're not doing more.

ID #6

7. We don't have an offsite partner to send excess food now. I'll give you an example from last week. We had a large group in the hotel and one night the group provided a guarantee

for 900 people for dinner. Only 600 people attended the dinner. The group paid for all 900 meals but you can only imagine how much food was wasted. There was nothing we could do with the extra meals at the last minute so it was recycled into organic waste. I don't think there was anything we could have done differently. Our contracts are set-up with a 72-hour guarantee because our chefs need the time for ordering ingredients and then preparation. It was a lovely night and I imagine many of the conference attendees went to local restaurants rather than dining as part of the meeting. Every group is different. As a planner, you need to decide, should I gamble on the estimate? We gamble by making meals for the guaranteed number: no more and no less.

8. I think we're doing a really good job making improvements to our food waste program today. I say that because over the last two years we have steadily reduced food costs from 24% to 19%.

We have a buffet restaurant that does an average of about 400 breakfasts each morning. We need to be careful with over-production, but we also need to be careful and have enough food for our guests. It's a matter of hitting the number and to do that we try to learn from experience. We produce more than half of what we need in advance and continue to make food as guests arrive. From a timing perspective, it's important to be ahead of the game but no too far ahead.

9. Again, I think we're doing a good job. Training here is good. We track everything that goes into the organic waste. When we can pastries that aren't consumed at the breakfast buffet and excess meals from catering are moved to the staff cafeteria, for example. Training is mostly awareness. I don't have any specific suggestions.
10. Measuring waste needs to be easy and quick. I don't know. Perhaps we should have different color-coded and sized totes or bins. The staff would separate the food waste based upon the type, green bins might be for vegetables, for example. Staff would then make estimates based upon the sizes of the different bins. Whatever system we would put in place would need to be quick and easy.

Today our Sous Chefs estimate waste at the end of every event and every meal. The tracking is just an estimate and it's not specific.

Today the tools we use for measuring and tracking waste are quite basic. Reducing food costs even further would reduce our food waste even further. As I mentioned earlier, we've reduced our food costs over the last two years from 24% to 19%. I think we can reduce our costs even more. I believe our improvement is directly related to being more efficient, being more mindful about food waste. In the sales process today we do not talk with meeting planners about food waste. However, meeting planners and guests ask us about food waste after the fact when they see how much food is left in the buffet or open chairs in a banquet room. I think there is an opportunity for us to do more. We need

talking points and a story. We haven't pushed a green image yet but I think many meeting planners would welcome it. It would be a good sales point.

We don't have a solution for donating food. First we don't know our way around the issue. Also, there's concern with liability. Being able to tell meeting planners that we donate excess food to certain organizations would be a great sales story.

We used to have an ORCA system running here. We had it for over a year but we experienced problems with water measurements. The City levied heavy fees based on increased usage and our costs were too high. We got rid of the unit and started managing our organic waste more aggressively. We placed refrigerators on the loading dock and did a few other things.

Our leadership has incentives related to our bottom line. Controlling food costs is directly related to our profitability, so reducing food waste further is of great interest.

We have a morning briefing everyday. We talk about food waste in that meeting so it is top of mind. We track the cost of food and revenue on a daily basis.

To a certain extent, our kitchen staff knows about our environmental initiatives. There is room to improve our training and education.

Please let me know if there's anything else I can do to help. I'm happy to be involved or talk further. Thank you.

ID #7

7. It is difficult to find local agencies and food banks to partner with here to donate food. Food banks aren't set up well to pick-up food in a timely and consistent manner. If we've taken the time to pack and store the food for pick-up and then no one arrives to get in as scheduled, it becomes a storage issue.

It's also very challenging to find someone to pick-up vegetables that have been sorted for compost, for example.

Before I was in Hilton Head, I worked in Detroit. In Detroit, there were more coordinated efforts with food banks and other organizations for hungry people. Detroit had a better infrastructure related to composting too.

8. We worked on a large donation program with South East Frozen Food Distribution. We were able to work with them to donate food and it was a good program.

It's important to build partnerships with the right local and regional groups. I assume you know about Westin's wellness initiative. Working to offset carbon is part of that initiative. As much as possible we're working to be carbon neutral. Finding resources is important to help us reach that goal. At the same time, we have to be mindful of our margins. We are willing to segregate food waste and recyclables, but believe it or not it difficult to find businesses and government agencies here. We don't have a local refuge company for compost. There just aren't local or state resources.

9. I think we do a good training job today. There's room for us to improve our donation efforts but the challenge is finding local partners.
10. We measure food waste today, but it's mostly visual. We don't weigh the waste and report the results to management. It's all about economics. We create detailed logs of leftovers and then go through the results to see what we can learn. We have different pre-set banquet menus. For example, we have an Italian lunch menu and a Mexican lunch menu and a Chinese menu. After a banquet we'll create a log that details leftovers and then discuss what or how can we cutback on the next event. The challenge is being efficient while still serving guests. We're very disciplined with menu engineering. It's cost based. We look at how much we're spending and working to improve efficiency.

We do talk with guests and meeting planners about food waste. Some of our guests talk with us about food waste too. They ask us what we do with food leftover from buffets or events. They ask if we work with food banks or hunger organizations.

Last year had a goal to plan more events outside where we could grill to-order meals. When it is possible to grill to-order, we waste less high cost high protein ingredients. That said, it's important to serve guests in a timely fashion. It really depends on the group and type of event.

11. A year ago it was our goal to do more outdoor grill to-order events. We were successful and we have reduced waste of high protein ingredients in those events. When food is in a hot box for an hour, the quality takes a hit. We'd much rather cook in smaller batches and therefore reduce the waste in that way too. It's all a matter of meeting guest expectations. Many groups schedule one-hour lunch breaks. Service needs to be quick and efficient to get everyone in and out.

In terms of social responsibility, I'd love to do more with local groups. It would be good for public relations and good for our guests too. Finding partners is difficult. Food needs to be picked up in a timely manner. When I was in Detroit, it was much easier to find partners.

I've been here in Hilton Head for three and a half years. I started in the business many years ago as a chef. Just prior to my current position, I was the Executive Chef and Director of Food and Beverage in Detroit.

You've asked all the right questions. You provoked good thinking on my end. I'm reminded how much waste we create and we need to do a better job of gleaning. I used to be involved in Share our Strength and I really loved working with that organization. I was very active for a number of years. When I was in Detroit the hotel ran a soup kitchen at a local school. Every day of the week a different department of the hotel was responsible. It was rewarding for our associates and it was a great community service. You've rekindled my interest in doing something like that again.

Please let me know if I can be of any further assistance.

ID #8

7. We don't have a lot of food waste. It really depends on the volume of buffet events on the calendar. We pay attention to portion size. Having a high percentage of plated meals is important. Again, we're sensitive to portion size and try not to overload plates, if possible.

It's important to be very thoughtful with ordering too. We have challenges, at times, with the Food & Beverage sales team. Buffets create waste and we try to keep food in the kitchen until the last minute possible. Anything that isn't eaten is either repurposed for another entrée or meal, goes to our employee cafeteria, or is thrown away. We donate very little food.

8. It is important to continue to train and retrain all Food and Beverage managers and staff. They're very involved in the planning and the more they know, the better. It's a constant challenge. We are very careful with ordering and do our best to only order what we know we'll use.
9. I can't think of any specific training I'd like to see. It's important that all teams related to meetings, banquets, and restaurants be involved in the food waste issue to make a difference. I can only tell you what I do with the culinary staff. I often talk about food waste in our pre-shift meetings. From time to time I'll do trash can spot checks to see what the different cooks are throwing away. I will then ask the staff why they threw something away and what they could do differently next time. We always look at production levels in our restaurants and for banquets. We review our purchasing practices and talk about portion control. Buffets are the major component to food waste and so we try to do as many plated events as possible.
10. We don't do any measurement or tracking now. I'm unsure what the benefit would be to measuring waste and I don't know how we do it. I saw a program a few years ago but it would have required extra staff and we can't afford it.
11. We work hard to keep operational costs down and that means trying to reduce waste. We make sure our staff is trained. We keep a close eye on production levels and make sure

food is kept at safe temperatures so we can use it later on. It's important to avoid food waste at the base – smart purchasing, accurate production levels. We try to avoid production waste.

There are ways to recycle waste that minimize space inside and around the culinary area. We need to make it easy. We need specific trash-cans for waste. The idea is to save on trash removal, which can get expensive.

ID #9

7. It's all about planning. Guest forecasts need to be as accurate and realistic as possible. We need to work as a team – Food and Beverage and Culinary – to eliminate over production. When we book an event, we create a Banquet Event Order, a BEO. We prepare one percent more meals than the guaranteed number on the BEO, just in case extra guests show up. We used to prepare more than one percent over the BEO.

Actual guest numbers vary for us more greatly for social events for local organizations than for in-house meeting events. When there's a group in-house, we'll look at the number of guests who check into the hotel versus the estimated number and make revisions. However, we lock our numbers in 72 hours in advance of an event to give our culinary team to order and prep. If a number declines within that time frame, we will have likely already prepped some items. Counts can go up but can't go down. If we could more accurately predict guest counts, we could minimize waste.

8. About six years ago there was a corporate initiative to track and log food waste. I believe it was about the time we implemented the Birchstreet program. Birchtree is a purchasing and recipe management program. Well, during this initiative we measure the food after each event. I believe the chef responsible for the event assigned someone from the culinary team to measure the number of bins of unused and cooked items. We studied the logs and identified patterns of preferences. Sales used that information during the planning phase with groups to create menus that result in greater utilization. We told planners, for example, that mashed potatoes aren't popular and offered alternatives. We still use the results of that effort but we haven't actively tracked or logged food waste for a couple of years. If we can plan menus that are popular with guests, the end result is less waste.
9. I think the culinary team understands the dynamic of yield management and proper meal prep. We don't have any specific food waste training for sales and I don't know what might exist for the culinary team. The sales team has a daily BEO meeting each day and that leads to a food waste discussion of sorts. We discuss guest quantities and special meals. Special meals have a direct impact on waste. We may not learn about special meal requests until 24 hours before an event. Purchasing has already ordered food and the culinary team may have prepped food. After the fact we may have to prep extra special meals for these guests. It's not efficient but it's an issue deal with for almost every event.

10. I talked about the corporate initiative we did several years ago after we implemented Birchstreet. Measuring the waste and then looking for patterns was very helpful to purchasing, culinary and sales. Having data is helpful and I think we should put some energy behind having a good sense of what and how much we're throwing away and wasting. We are actually looking into purchasing different color bins for exactly this purpose. We could put all the protein waste in one color bin, the vegetable waste in a green bin, fruit waste in a blue bin and so on. Today we don't have a specific responsible person, or a plan.
11. Summer is our slow season and we have had some discussions of looking at waste more carefully but we don't have a specific point-person or a plan. Our purchasing manager is taking it on informally I believe. It would be a good idea for us to step back and take a broader, more strategic look at our food waste, create a plan and then track how we're doing. There are opportunities to be more efficient and reduce waste.

ID #10

7. I have been at the property for only a few months and have made quite a few changes around food waste. It's a process but we're making good progress. One of the challenges we have is with chefs ordering food. We calculate needs based on the number of guests and the menu. The formulas are all calculated. We constantly ask ourselves, are our quantities appropriate or are we ordering too much?

If we have an event with a 300-person guarantee, we order food for 300 people plus five percent overage. It's very difficult to calculate more precisely. That said, even in a few months we have fewer leftovers. Our food waste has improved. For that buffet with 300 people, we'll prep food for the total number but only cook for about 225. After a period of time we'll see how much we need to cook to meet final needs and jump on it. The goal is to have very limited leftover in hotboxes. The prepped food that hasn't been cooked or served will be repurposed for another meal.

8. Quite often our guests ask us what we do with excess food. Guests are more and more aware of the issue and have concerns that we're not just throwing food away. When we have food tastings before events, guests want to be reassured that leftovers will be used in some productive way. We have talked about creating a program to donate food to local groups. However we have very limited waste and are in the planning stage of possibly building an employee cafeteria. We think it makes more sense to transfer excess food to employees but we're still in the planning stage.

I have about 80 cooks on my staff and approximately 60 stewards. We are not a union property.

9. The sales team is very aware of food waste. I mentioned that guests are often asking about our food waste program. I'm not certain what training the food and beverage staff does related to this issue, but I know it's on the radar.

With respect to the culinary team, I'm brand new to the property. I'm working closely with the team to teach chefs how to properly use fruit, vegetables, proteins and all of the items we order. It's critical to train the staff. The staff needs constant coaching and mentoring to build confidence. For example, before I arrived the tops and bottoms of green peppers were throw away. Presentation is important but it's also important to use as much of each product as possible. We're training the staff to be creative with stocks, soups, sauces and specials. Coaching and holding people accountable are part of the plan.

10. We have set-up a program to actively track food waste. Today we're doing this only for banquets and our events business. The sous chef responsible for an event is in-charge. He or she logs wasted food using hotel pans. This is done following every event. It's a new practice and we have yet to roll it out in our restaurants and other outlets. We cross reference the food logs with our purchasing. At the end of the month we discuss the results and talk about how we can get more efficient. The learning is important. Purchasing is closely involved and that is important.

11. It's exciting that when we have site visits and inspections we're getting questions about and discussing food waste and farm to table programs. I think it helps us build relationships from a sales perspective. In today's day and age, it's important that we use food correctly. We work closely with a local high school and we have these discussions with the students interested in culinary careers. They are interested in this issue. More and more we're trying to work with local farmers and gardeners with our recycling and composting too.

ID #11

7. Since I joined the hotel, our major problem and challenge has been to reduce inventory. When I arrived I was working with a \$100,000 inventory of fresh product. We're reduced the fresh inventory to \$30,000. We're organized our relationships with suppliers to receive deliveries on a daily basis. I would rather run out of an item than waste food. We are working very closely with purchasing and we calculate our needs quite specifically. This care on the front end is very helpful.

We are also matching our employee cafeteria menus with our banquet menus to reduce inventory and waste. There are 145 employees on the culinary team and 700 in the hotel.

We donate items that are very close to expiration from the minibars in our 565 rooms to local shelters and we're changed our minibar offering to include only items with a long shelf life.

8. We throw away almost nothing. Italian food is very flexible. We use leftover pasta in different menus, for example. It helps to be creative and have an employee cafeteria. Since I arrived the culinary team is working more carefully with our purchasing managers.

Planning menus properly, ordering carefully, being mindful of expiration dates and rejecting items too close to the expiration, and training chefs how to organize prep stations has had a big impact. We see the reduce waste in food costs. Our food costs have improved from 25 percent when I arrived to 17.8 percent today. It takes a mentality and training.

This is the first time I've worked at a union hotel. For the manager, it's a challenge and responsibility. I have to know the contract well and understand how to work within the guidelines. At a non-union hotel or restaurant, everyone does everything. At a union hotel, roles are very specific. It's important for me to understand the situation and respect it and the people working here. People work in food service because they have passion for food. The staff is extremely willing to help out when necessary. It's about good communication and respect.

9. For the culinary team, prep training is what we have focused on. A well-organized prep station is the main factor in controlling waste and we focus on preparation. If we're serving a dish that includes porcini mushrooms, we calculate how many grams are needed for each serving. If there are leftovers, we have a plan in place to make sauces or stocks. Planning and preparation are impactful.

We're very demanding about the prep stations. We train to create good lines. It needs to be very conscious. Being organized equates to being more efficient.

10. It is critical to work closely with suppliers on product pricing, quantities and expiration dates. We monitor expiration dates closely and plan menus to minimize waste based on expired items. When food is delivered, we make sure the expiration dates make sense and we reject items that are too close to expiration. We have popcorn in our minibars and if we can't get acceptable expiration dates, we trade-out product. The more we're conscious of food waste, the more our suppliers will be conscious of the issue.

11. We don't compost food waste today and we don't produce too much compostable waste. We purchase our fruit and vegetables pre-washed and pre-peeled and cut. It's more expensive, but we're buying in such large quantities we get the payback on saved labor expensive. To be honest, my priority this year is our butcher. We have a butcher on staff and we haven't resolved whether it makes sense to buy our fish and meat pre-cut from suppliers. Our fish and meat waste would be minimized if we purchased pre-cut, but presentation and consistency is important to me. When we're trimming salmon steaks, it's not efficient for us to create salmon burgers for a daily special. It's too difficult for us to use meat scraps for sausage. It's more efficient for the suppliers.

ID #12

7. We face a few challenges. We waste food when equipment breaks down. We waste food when we don't get information in a timely manner from clients. Last week we had a banquet scheduled for 600 people and the client gave me an updated count less of 450 less than 24 hours before the event. Product had already been ordered and delivered. We try to use the excess product as best as possible, but getting information late leads to waste. Finally we could do a better job of managing waste if we had a recycling and composting program here. We don't. We don't have space to separate products or other equipment or a person responsible for recycling.
8. If we received information on a timelier basis from clients and guests, it would result in less waste. We need better tools to forecast our business from a management perspective. Over forecasts lead to over production which results in food waste. The executive chef and I are both new. The forecasts we have for our restaurants aren't accurate. The forecasts are too aggressive. Over forecasts impacts purchasing.
9. I'm not aware of any specific training we do today for the culinary team related to food waste. We don't have any training for the sales staff.
10. We have put in place a process for the chef responsible for each restaurant and event to complete a food waste log at the conclusion of the evening or event. The executive chef reviews the logs on a weekly basis for new insights and then training. The logs are coded – for example, 1 next to an item means it was rotten; a 2 next to an item means it was past its expiration date and so on. We trust the chefs to fill out the logs completely and honestly and we hope people take the food logs seriously. We don't want to hide issues but I imagine some chefs are concerned they'll get in trouble if too much food is wasted. It's all about education and training. We tell the team we understand there will be waste. We tell them we're tracking the waste to learn and become more efficient. Waste happens in the industry but there's room to improve. If we don't measure waste, we can't reduce it. In many cases we need to communicate more with our vendors. We receive food too close to its expiration date. We need to do a better job of forecasting. We tell people they won't get in trouble. It's about education.
11. Our excess food goes to the employee cafeteria today. It would be helpful if we had a system to donate some food to local food banks and shelters and also compost certain waste. As I mentioned, we don't have a recycling and composting program today. No one has taken this issue. We need an owner, someone responsible. We will need to invest in different color bins for the kitchen and perhaps some composting equipment but I think the expense will be worth the time and money. We need a system.

ID #13

7. I'm proud to be working for Hilton and based in Austin. Sustainability is a key pillar of the Hilton Company. It's how we do business. Sustainability is an important value here in Austin. It's a great fit. A new city law to divert restaurant waste from landfills goes into effect in October. We are working closely with local partners to develop comprehensive plans for zero waste to landfills. We're working with local partners so the compost we generate here goes to specific hog farms and vegetable farms and then comes back to benefit us. This is becoming part of our team's culture and we take the work seriously.

I'm heading up the initiative. Everyone at the hotel is part of it. We're celebrating successes and discussing how we can continuously improve what we're doing. We're even using compostable silverware. We have a zero tolerance for plastic. The team is proud of the work we're doing together. One of the ways we're getting people engaged is by having the staff meet, get to know and work with our local farmers.

8. We already have a great initiative in place. We're working at all levels and across departments. With sales we're talking about portion size and zero waste. Purchasing has strict guidelines in place. We encourage zero waste and we are working hard to educate our staff and guests. The city is also a partner and the city is helping us find local partners to meet our goals. We're providing information about what we're doing to our guests and sharing the results with our guests.
9. We are working closely with the culinary team today to make sure there's awareness and education to meet our goals. We're talking about and learning how we plan and produce meals impacts what goes into the bins after a meal or event. It's a big push and we're making our farmers the superstars. We are working closely with our suppliers to make sure the food we receive isn't over-ripe or bruised. We're sending food back that doesn't meet the guidelines we establish with vendors and suppliers.
10. We started six weeks ago and in just a short time we have already seen a 3.4 percent decrease in waste in our employee cafeteria. That translates into a \$2,800 food cost savings in the employee cafeteria alone. We have food logs. We're weighing waste. We're incorporating learning into education and celebrating staff. We're communicating the results to staff and it's having a positive impact.

With help from the city, we're also starting to work with local homeless groups like the Texas Food Bank. We're doing what we can to keep excess from buffets at the right temperature and safe. The city is helping coordinate pick-ups so the food can feed people who are hungry.

11. My next goal is to reduce banquet and event waste by 10%. It's a modest goal but once we meet it, we will go further. It starts by communicating the goal with the team, making sure there's an understanding and awareness, together talking about how to realize the

goal and putting plans in place. I'm really involved with sales on securing event business now. I'm involved with clients in the planning stage and we talk about waste when we plan menus. I share menus that work best and I'm getting 99 percent buy-in from clients. It is important and exciting.

I'm happy to help with your project in any way I can. Please feel free to call me again. This is important to me. I'm from the cruise ship industry and we had a zero waste philosophy. I want us to move in that direction here and it's a perfect fit in Austin and with Hilton.

ID #14

7. Knowledge. I am new to the property. I have been here for one month. From what I see, people don't know what to do and why it is important. People need to understand the impact for reducing food waste and becoming more efficient.
8. We can always do better. We need more bins to separate and segregate food waste. We need composting equipment. I don't know if we're tracking waste. It requires labor and at the end of the day it is all about labor. This is a union hotel.
9. You need to check with the executive chef. I have been here for one month and I don't have experience here to answer the question.
10. Previously I worked at the InterContinental Hotel in San Francisco and we paid a heavy tax for trash. Trash pick-up and disposal fees were very high. We tracked our waste based on what we sent to the landfill and composting facility. The city was very focused on environmental issues. I don't have the sense it's the same here.
11. Dishwashers need to segregate the trash and compost. That doesn't happen now. Waste all goes to the same place. We don't have any equipment or system for composting. I don't have a sense if food waste is even a topic that's discussed.

I come from a cruise background and I'm familiar with the topic. If you don't recycle and work to reduce waste on a ship, that's the end.

ID #15

7. In my role, the first thing I hear is there has to be enough food. In terms of staff, there needs to be more awareness of the food waste issue and education. When we have leftovers from an event or meeting, the food first goes to our employee cafeteria. I see employees taking huge amounts of food on their plates. There's no awareness of portion size.

I lead our hotel's Green Team. We are supposed to meet every month but meet about ten times a year. The General Manager participates in some meetings. The focus is on waste and trash, not specifically food waste. It's hard to measure food waste. We do measure our trash and compost monthly because we pay outside companies to remove the waste from our facility. Food waste isn't a high profile topic yet. We need to make people more aware of how food waste impacts our lives. If we raise awareness we will be able to do more.

8. We need to educate our staff about food waste. When you mention food waste now, most people think of compost and I know you're thinking more broadly. We're not at that point yet.
9. I don't know of any culinary training related to food waste. The staff is aware of our composting program but I think it starts and stops at that point. The executive chef may have more information for you, but I'm not aware of any specific training in the culinary area.
10. We know how much we send to the landfill and how much we compost on a monthly basis, but that's it. Our food tracking system is a clipboard and our chefs and cooks are supposed to report if they had to throw away chicken and produce, etc. It's not tight and I don't know how the information is used or if the information is accurate.
11. Education and awareness for the entire hotel staff. Specific training for the culinary staff is important and would be helpful too.

It's difficult to efficiently donate food from the hotel to needy community groups today. We have such a wide variety of items that are available and some groups are quite specific. We work with a volunteer organization, Keep Austin Fed, but it is a 100 percent volunteer group. Food is picked up in volunteers' cars and not stored properly. There isn't a good local solution.

Meeting planners are more aware of the food waste issue than the average party or wedding sponsor. The planners ask if we can donate leftover food. We do our best and that's what they want to know.

ID #16

7. Our biggest challenge is the availability and cost of third party collection. We rely on third party partners for both donation of safe leftovers and composting and recycling.
8. Creating greater awareness of food waste as an issue amongst all hotel staff members, in all departments of the hotel, is the biggest opportunity for us. We need to make reducing waste as easy as possible, with more education and more tactical solutions. The staff needs to understand specifically what they can do to reduce waste and why it is important.

9. There's more we can do with respect to education and awareness. Over production creates waste and throwing food into the trash creates waste. There's room for our recycling and composting efforts to get better. Sales isn't doing enough today to educate guests about food waste. We don't have the resources today to help sales. Our clients don't fit into a simple box. We work with a mix of clients – some very price sensitive and only concerned there will be enough food and others who talk about the carbon footprint of an event. It would be helpful to have information tailored information for clients that would allow us to reduce waste and meet client needs.
10. We measure waste today but it's mostly from a food cost standpoint. We do sustainability reporting that includes the pounds recycled, pound composted and pounds of trash. There's room for us to improve our reporting and be more consistent and accurate with the reporting. Our performance score is relatively low.
11. Compliance with the Austin City Council wet waste composting and recycling ordinance is our number one issue this coming year.

There is more my food and beverage team could do in the sales process with group and planners. I think it's a five in importance and a two in current performance. There's room to improve but we just don't know how to talk with clients about food waste and sustainability today. Our clients are concerned that they'll run out of food. We do our best to estimate how much food a group will consume, but we're mostly guessing today. There's an opportunity for us to work more closely with planners and our culinary team.

ID #17

7. The biggest thing is when F&B is not meeting forecast the first thing that gets cut is stewarding. Our property is a union hotel and we have specific categories of job descriptions for specific positions. Per the union contract, stewarding is responsible for all trash. We are typically staffed at about 50-60% occupancy. When we are running at 100% occupancy it's everything we can do to just get the dishes cleaned.

The food waste issue has only come about during the last 3 months. I think that the banquet side of the house could double the reduction in food waste. A banquet captain is always calling for more food when the trays get low, even if 100% of the food has been eaten. Any food we already put out goes into the ORCA. I know of about a dozen groups that won't book our property unless we are telling them about what we are doing to reduce food waste. I said this on the conference call about 2 weeks ago. Behavior change is the biggest opportunity. We have employees that go back to the seventies. They want their grandkids to live in a world that's not polluted but they don't fully understand the issues.

8. I honestly don't know that incentivizing is the right way to go. I would create a separate position that would be responsible for all food waste. I would call the position "Footprint".
9. We do two-minute pre-shifts with the employees. If we had a different two-minute video every morning covering a different issue with short education blurbs for our people, maybe in Spanish as well for the kitchen and Vietnamese or Ethiopian for housekeeping?
10. I think the important thing is that when Hilton builds a hotel you have to have a lot of space. We use an ORCA machine and you have to go 1/2 mile to wash the bins. If we don't wash the bins we get fruit flies. The closest scale is 40 feet away.
11. Staffing is the #1 problem. We run the lowest food and labor costs in the company. Its great for owners but could be a lot better in terms of food waste. Tying our hands does not help. If I get more budget I have to put on another cook or dishwasher, it would be better if we had a position to reduce food waste that I could not touch. This person could also become the trainer for the whole hotel.

ID #18

7. We have no infrastructure for composting yet. We are working with the City of Austin to create a pilot-composting program. This is a good direction. I have been working toward this for several years and feel good changes are coming.

When you have a buffet restaurant or a buffet event, any food that has been on the line can't be donated, repurposed or even shifted to our employee cafeteria. We have an in-house employee cafeteria and our buffet and banquet over product or waste is repurposed for staff in a beneficial manner. We haven't worked with food banks in our area.

At this time we haven't established a wet waste program with a local hog farm. We do a fairly good job with cardboard and plastic recycling. We should work more closely with our suppliers to get them involved reducing packaging and I am excited that we will be involved in the pilot-composting program.

8. Composting is at the top of the list. Next we need to focus on education. The culinary team has more awareness of food waste than servers and others in the food and beverage operation. We need to make the entire hotel staff more aware of the food waste issue and educate staff as appropriate.

The biggest opportunity for hotels related to food waste is around plating. Our portions are too large. When we do buffets, at the end of the night there are consistently leftovers. Smaller physical plates might be one step in the right direction. I don't know how we could impact guest portion size but you can only imagine. We're prevented by health code from donating perfectly good food and it's unfortunate.

9. We don't have any specific training for the culinary team on food waste. The philosophy of the kitchen leadership is to be conscious of environmental stewardship. Environmental stewardship needs to be part of our lives. We need to share best practices with one another.

I can't think of any corporate programs related to food waste. We do have programs related to purchasing and it is all related. We're encouraged to purchase from sustainable farms and sources. We try to work with vendors who have a similar philosophy. We consider whom we are buying from. Local sourcing, buying local vegetables are important to us in the kitchen.

We have one tradition that I believe is relevant to your study and very helpful to the staff in terms of educating them about waste and the environment. We take the team on farm tours whenever possible to connect to the source. It gives the team greater awareness and respect.

10. We don't measure food waste today. We don't capture and weigh waste today. There is a portion guide.

I haven't seen any software solutions that measure and track food waste.

11. The city's composting program will be a major initiative for us. Composting will divert an enormous portion of what we send to the landfill. Ninety-nine percent will be diverted. It's a pilot program and I don't know what the outcome will be. The program is geographic and involves the hotels and businesses along a shared alleyway on our street. We'll share dumpsters with our neighbors, though I don't know if we'll know specifically how much waste the hotel is diverting. Some aspects of the program still need to be figured out.

Food waste isn't a subject we talk about with guests or meetings planners. Clients drive the discussion. I know we share the same philosophy with our sales team.

Having an incentive for reducing food waste is a good idea. Leadership receives an incentive today based on financial performance and food costs are critical to reducing food costs and being efficient.

ID #19

7. We have a large operation and our biggest challenge is having awareness of what everyone is doing on a daily basis. We have about 70 people in the culinary area.

8. We haven't gone the recycling route yet, though I hope composting is on the horizon. We can't find a vendor to compost that can accommodate our needs. Any vendor we work with needs to meet our insurance requirements and insurance is expensive, for example.

We could be more diligent with what's being wasted versus what is useable. We keep a log of food that we throw away in the preparation phase.

9. No. Every kitchen is different. Waste is managed differently from restaurants to banquets. We have the tools and training we need today.
10. I don't have any ideas. We keep a log of food we throw away and I review that information every week with our purchasing manager. It's hard to measure food waste. We don't track how many pounds of vegetables or other items are thrown away or how many pounds of food from a buffet are wasted. There's no quantifiable information. In prepping, we make certain assumptions about yield. We can't estimate that we'll have x percent waste. It varies widely.
11. I think we've addressed the food waste issue here. It's now about managing it on everyday. Buffet waste varies by the group, time of day, break schedule and other factors. There is no average waste percentage.

Recycling is a hot button for sales. Groups will ask us if we recycle. They ask what we do with extra food. Any food we put out for guests has to be thrown away and here that means in the trash and to the landfill. If we've prepared food but haven't put it out for guests, we will send that food to our employee cafeteria. Donating food to community groups is against the health regulations here. Even if we wanted to, we couldn't donate food.

ID #20

7. I was educated at the CIA and used to be a head chef at a property with over 2,000 rooms. One of the big problems is the short-term nature of the planning cycle. Five years ago it used to be 21 days, today at 7 to 10 days. In other words the planning cycle has been cut in half. As a result our ability to respond and adjust our production schedules is limited. Also now so many of the event planners are third-party. Many more of them used to be proprietary and in-house. They don't have a substantive knowledge of issues about food production and yield and menu engineering.
8. We have a significant focus on stacking menus and menu engineering. Our banquet menus are streamlined through alignment with currently available high-yield products. During the last three years we've increased our food margin by 1100 basis points. Most of our food is produced in a centralized commissary setting. It's a lot more work to move around raw ingredients than finished or partially finished product. Our lettuce is not being cleaned in multiple settings and our meat is not being sliced in multiple locations. We are

using the same preparation for both banquets and outlets throughout the property. We've tried to significantly reduce the number of SKU's and cross-utilize in menu items wherever possible. For example used chicken tenders and multiple menu items including salads.

9. Here is my opinion. Most important thing is to educate people on the impact of food waste on the ecology of our planet. You have to tap into people's emotions. I think they'll respond if they understand environmental impact of 1 pound of food waste.
10. We've added a beehive to our roof. I think one of the biggest opportunities is to continually find out what type of semi-prepared product is available that can be used in our menus and is high-yield. For example we do a lot in the pastry area by buying specific components like the shells for our cannolis. The problem is that some of these products are only available regionally and with large minimum orders.
11. This year we composted 95 tons of food waste. Over the last several years we've improve this number 15% year-over-year and I think word about 70% effective now sorting our trash. So I think we will continue to improve.

I think the whole farm to table movement has taken a big hit over the last couple years due to the Chipotle fiasco. People are a lot more concerned about foodborne illness. As farmers turn to more natural supplements due to reduced availability of nitrogen, people are going to need to understand they need to be cautious and wash their vegetables.

ID #21

7. I am the corporate chef for Starwood. We manage 11 brands. Everybody is always playing by the numbers. Meeting planners are pretty savvy and do not want to pay more than they have to pay. Sometimes we get caught. We have a general practice of producing only about 3% above our guarantees. What that means is that the hotels often have to offer substitutes in order to feed everyone.
8. We have strategies to reduce our waste at buffets. For example we try to downsize the number of buffets we are offering as the hours go by. From 4 to 3 to 2 to 1. We also use smaller size vessels towards the later part of the buffet.

We also encourage properties to do more local and seasonal menus. If you're in New Orleans, then cook good Cajun. Too many properties try to be everything to everybody. When you're cooking Asian, Italian, North African, Latin, etc. then that leads to a lot more waste.
9. I think it always comes down to culture and communication. You have to have the right culture and leadership at a property.

10. I do a lot of property visits. I see what is in inventory. We do a pretty decent job of saving energy, water, and emissions. That's easy to measure. I think if we did a better job of explaining how much energy and water is in wasted food then people would be more motivated. For example, if we told them how much 150 hotels that each throw out 10 lbs. of tomatoes, then they would figure out ways to throw out less.
11. We use a recipe costing solution called ATCO (<http://www.atcoblueflamekitchen.com/Recipes/>) that tells us how much to purchase so we produce the right amount of food and have the right amount in inventory. If we could do a better job of using recipe-costing software at all properties we could reduce waste.

ID #22

7. Roccio, who connected us, submitted my name based on the work I did at the San Diego Hotel and Marina. I was the #2 there back in 2011. We were hosting a rooms and engineering meeting. We billed it as a zero waste meeting. We thought we were pretty green but we were anything but green. We had a food dehydrator that required a lot of energy. The machine broke and we started food composting. Youtube "Sheraton San Diego sustainability". I put together a ten-minute video sitting at the Greenery.

Convenience, or lack thereof. As we were going through this zero waste meeting at the Sheraton San Diego. 1053 rooms, 7 outlets, served about a million covers, We started looking at food composting. We partnered with Waste Management. If you don't make it easy on your team it is never going to happen. If it is not the same or few steps. I was there three years, been in phoenix two years.

8. It starts with measuring, right? While its something that I've wanted to get off the ground, it has to be a priority. For the last 2 years I've had other priorities. Now I have a new executive chef that I think I could get on board.
9. I'm going back to San Diego, what made that possible was the fervor that the stewarding team brought to the project. You need a cheerleader or two. As it relates to tools, our demographic work force is 50% Spanish speaking. It is easy to digest training if it is in really short forms, ie. You can't have contamination in food waste type of education. On preparing less, could there be incentives.
10. I'm going back to San Diego, what made that possible was the fervor that the stewarding team brought to the project. You need a cheerleader or two. As it relates to tools, our demographic work force is 50% Spanish speaking. It is easy to digest training if it is in really short forms, ie. You can't have contamination in food waste type of education. On preparing less, could there be incentives.
11. Part of our opportunity here at the hotel is that we are in a mixed used building. We share a loading dock with an office tenant occupying the top floors. We share the recycling, etc.

with the tenant upstairs. Because we are in a downtown environment it is not an easy environment to have a composting operation in the Arizona temperatures. We have a brand new executive chef, the previous regimes we were not at the right place.

When I consider Starwood's overarching cultural philosophies, one is do the right thing, it is kind of social and environmental causes, when I compare it to Marriott's overarching cultural values, I think food waste will still be aligned. I think there is a business case for reducing food waste. The cost per ton can be half rather than send to the landfill.

ID #23

7. The two biggest things that come to mind is that we're trying to meet the needs of the clients. If a group that is coming for 300 people, our standard is one buffet line per 150 people, the group says they are in a hurry and insist on having 3 lines that leads to waste. We don't have the right systems and equipment in place to compost.

We also had someone ask here about reaching out to find a local food bank that would come pick up the food. I've only been here six months and we have not gotten around to this. I used to be in Austin and everything had to be temperature controlled and it made it virtually impossible to donate food waste.

8. We don't have enough food compost bins to maximize the reduction. We have a new director of engineering who I think is working on diverting solid waste to landfill. At our hotel we need better systems.
9. I think with some meeting and event planner understood all the issues it would make a difference but for other groups would not care. I would say that that only 20% or so would be in this category. There are clients that based on their business models they ask what is it they we do to reduce food waste. They already have this in their culture. I would say these types of groups are also around 20%. I would say the majority of groups are not aware.
10. I would include a mission statement in the sales process that might get it on people's radars! At this hotel the first step for us is the composting. The biggest opportunity to reduce waste is through composting. It's on my radar for the next 6 months. We're also looking for a partner that we can donate food to. I don't know yet whether it is easier in Denver than in Austin. I think that any type of training that is visual and short 2-5 minutes at most.

ID #24

7. In one sense it is about American culture. I am from Italy. The major problem is the way people in the US don't value resources. I am from Europe space and resources are much more precious and much more appreciated. Here it is not like this. Many Europeans better

understand how water, energy, soil relate to food. Here portions are twice what they are in Europe so we generate much more waste in general.

8. Right now we are working with Pete Pearson and the WWF focusing on measuring waste from breakfast. We are measuring how much waste we are generating, weighing everything on scales. WWF is following up on everything. I met with Pete and then he handed it off to a couple of other people.
9. I would love to have an education program about food waste. The mentality about the soil, the water, where food comes from ,etc. As soon as we have our new chef this will part of the discussion.
10. I stopped eating meat in March because I have been educating myself. We need to teach people and touch their emotions. Most people don't understand the word sustainability. I think that there is a lot of potential with this work with the WWF. Weighing waste is a good start.
11. I would say we don't do enough in food donation. Luckily we don't do much catering business. We currently do not have a list of where we can donate food. Our biggest meeting is 110 people. The key is education. We have to change the culture in the US. We have to show people that throwing away a piece of bread is much more than just the bread. It is all the water, grain, soil, energy, etc.

ID #25

7. From age 15-22 I was working in France. I have been doing a chef job for the last 20 years. I have been working for Hyatt for 10 months. So we have a program in place that is supposed to recycle. We have an ORCA machine. It is supposed to reduce our waste weight. We don't do compost. We use the ORCA to add enzymes and then send it down the drain. It is more like ecology and treating our waste. This is one of the good things we have in place.

In terms of banquets, we tend to do too much. We don't want to disappoint the guest, so we tend to over-serve. We don't have the structure to reduce at events. We put out too much food in large containers. Culturally, I am French; in the US everybody expects a big portion. That's really part of the big food waste problem in this country. We tend to serve 7 to 8 oz. portions instead of 5 oz. portions in Europe.

8. We are doing some butchering in house. We don't have the most skilled employees. We have to always go back to re-train on how to produce a filet, there is a lack of technique on a whole fish that can generate up to 10% more waste. If we were not butchering in house we might have less waste. We don't have the freedom to buy everything pre-portion.

9. Some time of powerful videos would be great. I'm going to relate to my own kitchen, there is a lack of knowledge about the products. The younger generation is very knowledgeable about the environment but now so knowledgeable about each product: for example, how to use the entire apple.
10. There is a lack of commitment to rotate the inventory properly. They are always going for the freshest. They'll use the freshest apples. So basically we need a lot more education and the time to have these conversations. Many of our young cooks needs to see how an animal is raised and fed...this could have an impact on the younger generation.
11. Try to drive a change of mentality in portion sizes. Maybe voices from the medical community. We don't need eat as much protein as we are eating. I think it's a lot more than just using the ORCA machine. It's more about behavior and understanding in the back of the house.

ID 26

7. The New York City Food Waste Standard in Hospitality is going to regulate what we can and can't do in terms of food waste. This includes very specific regulations that will come out in 2017. All the labor is union, so one of our challenges. It is going to be a big problem to segregate food waste. We need the proper tools and equipment to get it done. It could possibly require another position. I think you need certain equipment and the New York City law could be a big problem. We have to watch what NYC is going to require before we decide what we are going to do. We already have something down there that is kind of like a juicer that turns it into pulp.
8. I would love to have a big grinder that divides the waste into what needs to go down the drain.
9. We used to have an environmental manager but we eliminated the position. That person was more on top of his game. I'd like to see this position come back just to have the hotel to get caught up. We have 1,000 employees here. Training needs to be tri-lingual. Slavic is one of the languages.
10. We have very minimal space for trucks to get back here. We would need some sort of massive remodel to allow for more composting. We don't have 50 garbage containers. In Times Square you have walk-in refrigerators to keep your garbage in.
11. It's hard to salvage food here. I run at 50% food cost. It is all regulated by the city and we have to watch the union laws. Some groups don't donate anything and will kill you. I think we need to deal very efficiently with the state-to-state laws.

ID #27

7. I think from an event planning perspective we do a good job. We try to get our meeting planners living on an island to do as much as they can to conserve, recycle, and pass on that cost to them. We are a paperless meeting property, water stations, cloth table cloths, recyclable cups for water stations. We do a good job reducing energy at meetings. My event team does a very good job at operations.

Our sales team is relatively new.

Our chefs are very good at dealing with the guarantees. Our chefs have it down to a science to limit the food waste on buffets. We only produce about 102%. We keep the cold food cold and the hot food hot. For example if not all the beef has not been carved and kept at temp and cooled down at temp then it can be reserved safely the following day. We really have the buffets down. We plate at 101%. Living on an island we all have to get really good at this. We can't just run over to Costco. I like my chefs to meet my meeting planners. We explain that we will always have food for your people. If we're in to a three hour session at a meeting and gone through 75% of the food we will adjust.

8. I think the key is getting everyone involved. This includes stewarding, the chefs and waste management. Asking everyone how to work on portion control. We need to look at dinner rolls, 1, 1.5, or 2 per person? Constantly we need to check is food in the hot box or in the fridge. It needs to always be kept at temperature so it can be reused. If we put all the pans over the sternos then we need to throw out several pans of lasagna for example.
9. If we show short videos of Directors of F&B meeting with chefs, banquet captains, and catering, etc. discussing these issues, working together as teams, especially on buffets. The biggest thing is communication.
10. I can't speak to the measurement issue since I'm not in the kitchen. I know that our chefs work closely to keep as much local procurement. The serve safe regulations limit what we can do legally to donate food to the homeless, etc.
11. Controlling how much we put out on the buffets and keeping food as serve safe temperatures is the key so we can reuse and also donate and give back to the community.

ID #28

7. I think finding companies to help us with the process of food waste. It's difficult finding people that can do it affordably. I was previously at the Grand Hyatt in Atlanta (450 rooms) and they could not keep up with it. Now that I am at a the Hyatt Regency (1,250 room property) and we have an even bigger problem. We have a program in place for cardboard, but not sure how much is getting out. My team puts it in the bins but not sure how much is actually getting recycled. Even our compost bins we dump it in the bins but

I would be interested how much is actually being composted. My biggest question is what happens when it leaves the property.

8. At the Atlanta airport everything goes into the same bin and then they sort it after. If we could do this in the kitchen and save the kitchen staff time and make it easy that would be great.
9. It would make a lot of sense to do short videos in Spanish for the stewarding team. We need to educate what can be recycled. For example wax-lined containers like Starbucks coffee cups can't be recycled.
10. At my last hotel we recycled water runoff. We recycled soap and we had a chart where we would track month over month. Our sales team and catering team would take pictures of the chart every month and tell our customers and the sales team would show the pictures to meeting planners as a way of winning business. The new property is so big that we can't track how much we are doing. The vendor changed and the engineering department looks after the vendors here and the costs seem to be most important.
11. When I look at food waste I think about two things. Are we producing too much in the preparation or are we composting everything that is not getting eaten? We try not to send too much food out to the buffets. I'd be very interested in looking at any new tools that are available to help us.

ID #29

7. The law is a barrier for the industry. The opportunity to donate food from a large event or buffet is limited by the law. Too often we're prevented from donating food.

My focus is on utilization. I make sure utilization is the mantra of my team. We hope that carries forward to other people involved with the restaurants and events. If a guest is dining in a buffet restaurant or at a buffet event, we hope the guest eats what he or she takes and only takes what is needed. We try to control portion sizes. We're very conscious of portion sizes.

8. I have been executive chef at this property for about five years. My team has a strong understanding of the food waste issue. We're challenged by our geography. The Beaver Creek Resort Company doesn't offer composting and recycling is limited. We don't work with any local farmers or ranchers today. There is a local brewery that exchanges barley and wheat with a hog farmer for product, but we don't have a relationship like that today.
9. We don't have a curriculum or standardized culinary training program related to food waste but we constantly monitor utilization. The goal is to utilize everything. It helps with our food costs and I'm very happy with our food costs. We're well versed on food costs.

10. We don't have food waste logs or actively monitor or measure waste. We know our monthly trash tonnage but that's about the extent of our tracking and measuring.
11. I'm continuously monitoring portion size. Portion size is related to our utilization mantra.

If food waste is important to a client in the sales process, I'm confident our food and beverage team has information for them. It's not a topic that comes up regularly.

We have a Green Team at the hotel that meets regularly. Someone from my staff attends those meetings. There's a representative from every department.

ID #30

7. Guest demographics are very different in the hotel industry than in the cruise industry. The main opportunity is to implement the highly advanced systems from the cruise industry in the hotel industry. The cruise industry does real time planning based on 100% occupancy and very detailed demographics. They know in real time what they are serving and what is being consumed. We did a study with Ecolab. Restaurants in general expect to lose about \$1 per guest. It is very possible to plan the menu to reduce the waste. The cruise industry is best at this.
8. For instance in the cruise industry we count the # of guests, gender, age, and study these demographics. Royal Caribbean and Carnival have created formulas based on demographics. They engineer the menu based on the demographics in house at any given time. Then they count out the specific proteins and constantly measure using the point of sale system with visual monitors. They are basically measuring everything in real time and adjusting production accordingly. The waste in the cruise industry is less than 5%. They replenish and replace based on real time data. It's probably three times that in the hotel industry on average.
9. For catering and banquets a lot of chefs have gotten pretty good at managing protein, however not as good about measuring starches. About a half of waste is prep and total waste is about 15%. The problem is even though you know the total number of people you don't have the breakdown. About 80% of catering is leisure and business. In those environments people eat differently than on a cruise. They probably don't do a very good job finding out who is coming in the door. When it gets to the chef they don't have the detailed demographics. It's not really tracked and measured. They are also not held accountable in the same way as the cruise industry. At least one cruise line incentivizes the wait staff to reduce waste.
10. Basically implementing the same type of planning and measuring process as the cruise industry. In hotels you typically do not see the wait staff as employed permanently by the hotel. So they have very little ownership as compared to the cruise lines. Now on the

casino side they do a much better job. They know their seasonal cycles. At Caesar's Palace they know who their conference guests are and how this will affect their buffets.

11. You have to measure your existing waste and then an action plan is needed to reduce waste. Setting a target and a timeline. Ultimately you need a monthly plan. Having spent half my career in the cruise industry and half my career in the hotel industry, the operators in the cruise industry are much more disciplined in terms of planning, measuring, and adjusting. The hotel industry is way behind the cruise industry in terms of food cost and waste. They need to do a much better job at developing and implementing plans. It's a completely different environment now than it was 5 years ago. If they could bring in people with extensive backgrounds in the cruise industry it could have an enormous impact.

I'd say that the direction moving forward on this type of project is to measure and figure out what is spoilage. Secondly is the customer plate. What are they ordering? How good is menu planning taking into account the demographics. If in a catering environment we need to understand portion sizes and offer choices. Customers eat very differently if they are on vacation or on business.

ID #31

7. I think that it is twofold. One would be the consumers, and secondly would be the staff. It's very challenging to get them to care about these types of initiatives. In the heat of the battle these types of initiatives go out the window.

In terms of the consumers, people eat with their eyes. They like an abundance of food. You have the back of the house and the front of the house. The back of the house are mostly minimum wage line cooks, they just want to get the burger out. They just want to get the food out.

8. Recently I did some work with a university and they cared a bit more about sustainability. The university had a bigger commitment to sustainability. I think that to get people to care more it has to come from an entity like the AHLA or a governmental agency, and hopefully it will trickle down.
9. Any time a training comes into a hotel or the chefs have to go off-site, most places don't have much time to devote to training. For instance a chef only has a small window unless you are going to give them the day off. You have to answer the question of why it is important.
10. What I've seen is more post-consumer and using a bio-digester or an enzyme machine. Even in those cases you need training for this magnificent machine. It's looked like an extra step.

11. Probably the best that I've seen was at the University in Georgia. In the arena of universities they want to be known for their sustainability efforts. Sodexo and Aramark need to address this when answering the RFP process. Social responsibility is very important to the students. Training is the #1 opportunity.

ID #32

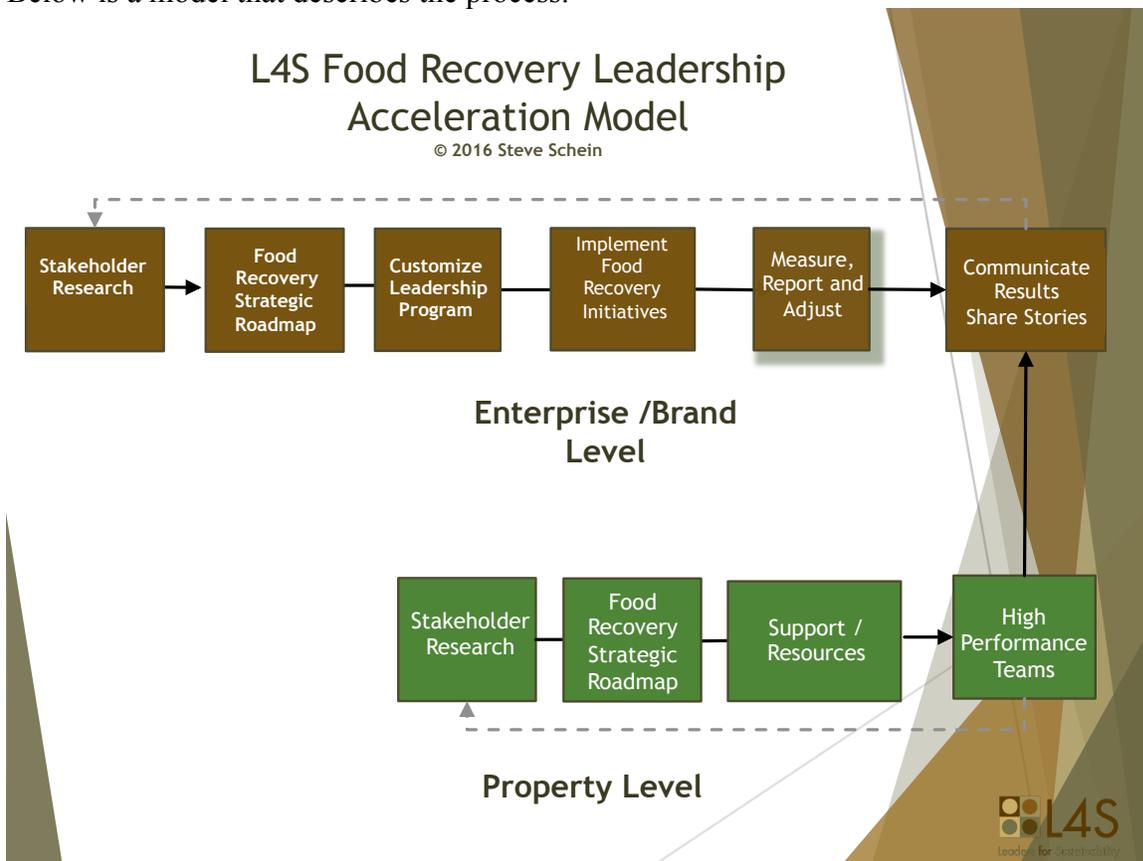
7. The industry needs to get smarter with guarantees of how many people will show for an event. I've been involved in too many events with a 2,000-person guarantee but only 1,500 show up. We're doing too much advance plating. The problem isn't over production: it's not being smart with the guarantees. I spent most of my career with Marriott. We have recipe cards for every item on the menu. Every items in broken down precisely and production is tight. The system is broken when the salesperson has an incentive for selling more meals than is needed. The salesperson earns a higher commission on a 2,000-person event than a 1,500-person event.
8. If a system could be devised for timelier guarantees, we would reduce waste greatly. It's important that staff be trained to adjust counts more quickly and repurpose food for other events that may have been ordered but not used. It's also important to be smart with timing. When planning for a reception the staff needs to understand how long guests' will have to eat and only produce reasonable quantities of food. Unfortunately it becomes an issue that is at times at odds with sales.
9. We don't have a food waste training program, per se. Our cooks and chefs are trained and do follow recipe cards very closely and recipe cards are designed to maximize usage and margins. We do need to make it easier to donate excess prepared food. We're not doing enough of that now.
10. There usually a waste chart and spoilage chart in the kitchen at every property but it's informal. Some executive chefs pay attention to the waste and spoilage more closely than others. Some chefs are good with recording items and some aren't. These charts are usually on a clipboard hanging on a wall with notes being taken by hand.
11. Making it easier for hotels to donate food to shelters and food banks needs to be a priority. There is too much red tape today. Rules vary by city or county and it's hard to get food to a shelter or food bank in a timely manner. Too often pick-up is unreliable and every facility has different rules for what they'll take. It's like recycling: if it's not easy, it won't get done. It would be helpful if the packaging was consistent. When an event ended, the banquet manager would know to place excess vegetables in a certain color bin and protein in another and then move the bins into a large refrigerator or freezer. We could learn a lot here in the United States from what's happening in Europe. Berlin has an advance food sharing movement.

Pilot Recommendation #1 – Food Recovery Strategic Roadmap Workshop

The first four findings from the research suggest that:

1. Few properties have a plan to address food waste and dedicated person responsible for coordinating communication and tactics
2. Active communication across functional areas and with vendors and municipalities positively impacts results
3. Changes in attitudes, expectations, and behaviors related to sales guarantees could lead to substantial reductions in food waste
4. Participants expressed a strong need for specific training and education

Collectively, these four findings represent a significant opportunity to accelerate and scale the reduction of both pre-consumer and post-consumer food waste in the hospitality industry. To capitalize on this opportunity, we recommend the piloting of a ***Food Recovery Strategic Roadmap Workshop*** to be conducted at a large conference hotel with 12-15 team members. Below is a model that describes the process.



Pilot Recommendation #2 – Municipal Food Donation Community Assessment

Research findings #'s 2 and 8 suggest that:

2. Active communication across functional areas and with vendors and municipalities positively impacts results
8. There is a wide range of opportunities and challenges related to recycling, composting, and donating

These two findings represent a significant opportunity to accelerate and scale the reduction of post-consumer food waste in the hospitality industry. To capitalize on this opportunity, we recommend the piloting of a **Municipal Food Donation Community Assessment** to be conducted in a major city as follows:

Initial Questions:

- How can municipal-level food donation programs be strengthened and maximized?
- What barriers prevent businesses from donating excess food to shelters and food banks?
- If your organization is a potential donor, what is the volume of food you anticipate donating (recovering) on a monthly basis?
- If your organization is a potential recipient, what is the volume of food you could process and disperse on a monthly basis?
- Which organizations should be involved in the donation network and why?
- Would an organized food recovery network improve donation efforts?
- What resources are required for the donation network to be effective?
 - Benchmark current food donation efforts, measurement standards and reporting
 - Capture best practices

Suggested Research Plan

1. Select city
 - a. New York, Denver, Nashville, San Diego
2. WWF and Rockefeller review and approve questionnaire
3. Recruit research participants
 - a. Segments
 - i. Municipal/Regional government
 - ii. Donation recipients
Shelters, Food Banks
 - iii. Possible Food Donors
Hotels, Restaurant groups, Hospitals, Caterers, Grocery, Food Service, Farms
4. Distribute findings and convene research participants to develop next steps

Pilot Recommendation #3 - Cruise Industry Food Waste Best Practices Study

Research Finding # 10 suggests that:

10. Reduction in food waste could accelerate in the hospitality sector by implementing best practices from the cruise industry

This final finding represents a significant opportunity to accelerate and scale the reduction of post-consumer food waste in the hospitality industry. To capitalize on this opportunity, we recommend the piloting of a **Cruise Industry Food Waste Best Practices Study** to be conducted in a major city as follows:

Initial Questions:

- How do major cruise lines evaluate food waste?
- What is the culinary training that leads to minimized food waste in preparation?
- How is the culinary space (kitchen, stock rooms, etc.) organized to achieve efficiency?
- Which departments or groups are involved in properly managing food resources?
- Is it possible to influence guest behavior related to portion size?
- Are there best practices that might be replicated in other industries (full-service hotels, hospitals, education, etc.)?
- Other, based on background interviews

Suggested Research Plan

5. Select cruise industry partners
 - a. Suggest three companies
 - b. Might an industry group like AHLA partner on the project? The industry “partner” would also be helpful with recruitment
6. Develop questionnaire based on background interviews
7. WWF and Rockefeller review and approve questionnaire
8. Recruit 35-to-45 research participants
 - a. Segments
 - i. Corporate
 - ii. Property/ship
 - iii. Culinary
 - iv. Operations
 - v. Marketing, other