



'AINA PONO HAWAI'I STATE FARM TO SCHOOL REPORT

AUGUST 2016 THROUGH JULY 2018

January 2018 – May 2018

Mililani High School

Mililani Uka Elementary School

Mililani Waena Elementary School

May 2018

Mililani Middle School

August 2017 –September 2017

Kalaniana'ole Elementary & Intermediate School

November 2016 – May 2017

Kohala High School

Kohala Middle School

Kohala Elementary School

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EXECUTIVE SUMMARY

Beyond Green Sustainable Food Partners (BGP) spent November 2016 through May of 2018 implementing 'Aina Pono. BGP trained the cafeteria staff and school employees in 'Aina Pono processes to progress operations in the 'Aina Pono outcome areas as follows:

1. Systematically increase HIDOE's **purchasing of local food** for school breakfast, lunch, and snack programs. Target: 40% local food (*i.e.*, grown and/or raised within the State of Hawai'i).
2. **Increase student participation** in child nutrition programs, *i.e.*, increase the number of students that eat school meals. Target: participation increases by 5%.
3. Increase student **consumption of healthy foods** in school meals. Targets: Processed food shall not exceed 40%; food waste declines by 10%.
4. The Initiative will be **cost-neutral** over time, *i.e.*, implementation costs will be covered by cost-savings generated by decreased waste and increased efficiencies. Target: Overproduction shall not exceed 5%.

'Aina Pono started at the Kohala School Complex on Hawai'i Island. The Kohala High School cafeteria also services Kohala Middle School and Kohala Elementary School. The foundation of the program – asking students what they want to eat, asking cafeteria staff what they want to make, and merging these preferences with local food availability – proved to be the foundation of success for 'Aina Pono.

BGP visited every classroom in all three schools asking students what they liked and didn't like about the school food, and what they wanted to see on the menu. Next, BGP taste tested menu items selected by the students and staff constantly for two months until the recipes were perfected.

The Kohala kitchen staff went from serving processed food to 100% scratch-cooked food from one day to the next. Accomplishing this feat was due to the strong, hard-working staff, and the cafeteria manager leadership rising up to the task by doing whatever it took for the program to be successful.

The efforts of the dedicated cafeteria team at Kohala led to an increase of 22.5% of local food purchases. Additionally, fresh food purchases went from a baseline 27% to 92% at the end of the first semester. The increase of local and fresh foods coincided with more than \$30,000 in savings and more students eating in the cafeteria.

Following Kohala, BGP moved to Kalaniana'ole Elementary and Intermediate where the program met resistance from a manager and staff unwilling to change. With no one from 'Aina Pono leadership willing to push the program, 'Aina Pono ended after two months of training and the cafeteria returned to making processed food.

The program transitioned to Mililani High School which contains the second largest student body in the state with approximately 2,445 students. Despite the increased project complexity for a school of this size, Mililani progressed significantly in all outcomes resulting in a savings of \$107,658 while increasing local food and fresh food purchases, as well as student participation, thereby demonstrating the possibility of success at any school in Hawai'i dedicated to 'Aina Pono.

The 'Aina Pono program at Mililani propelled forward due to three human factors - a strong commitment from the Mililani staff, an active student body, and a well of effective partners.

The Mililani High School principal, vice-principal, and administrative staff went above and beyond in making sure the cafeteria staff received the support they needed to be successful. For example, the school paid for knife sharpening and contributed office staff to assist with lunch service. This helped the cafeteria staff (19 of 20 employees) commit to 'Aina Pono from the beginning, leading to quicker, more robust program success. In return for their commitment, the cafeteria staff gained vitality and joy for their jobs. They reported having more fun with their peers and became a stronger team.

The student involvement in 'Aina Pono, from creating posters and morning announcements to initiating a petition and discussing the program with state political leaders, provided a boost to the overall program while developing empowered students able to see results from using their voice. The student leadership stemmed from their own dreams for school food, not from any adult telling them what to do.

The two most generous partners for 'Aina Pono at Mililani included the Kokua Hawai'i Foundation and the YMCA volunteer group. Both of these groups stepped up with genuine support and a committed investment of their time. Kokua Hawai'i Foundation coordinated and conducted all of the waste audits at the three schools, and assisted with overproduction data. The YMCA volunteer group provided daily support to the cafeteria operations.

BGP spent the last month visiting classrooms and taste testing 'Aina Pono recipes while discussing 'Aina Pono operations with the cafeteria team at Mililani Middle School. However, the cafeteria manager ceased the program upon hearing that the BGP contract was ending.

PROGRAM OVERVIEW

In 2015, Lt. Governor Shan Tsutsui convened the Hawai'i Farm to School Advisory Group to develop a pathway toward bringing fresh, local food to schools statewide to reinforce the vision that Hawai'i exists as a perpetual reminder of finite resources, fertile lands, and communities who are committed to the wellbeing of their keiki. Today, 'Aina Pono Hawai'i State Farm to School program is a public-private collaborative bringing this vision to life. Program partners include Beyond Green Sustainable Food Partners, the Office of the Hawai'i Lieutenant Governor, the Hawai'i State Department of Education, and The Kohala Center with support from private funders. 'Aina Pono: Hawai'i's Farm to School Initiative is an expression of the pride their people have in food grown on the islands, the ingenuity of the people trusted to feed their keiki and the collective strength to return communities to a legacy of cultivating fresh, locally grown sustenance to build the minds of tomorrow.

The central part of the program is to work towards a menu featuring only 'Aina Pono meals. These are meals where the items are scratch cook foods from the raw state –hopefully sourced locally as much as possible. They have been taste-tested and improved upon based on feedback from the customers. They are also meals that, in general, are not cooked all at once and held in a warmer most of the day, but cooked 'just in time' as its needed so the food does not get old and dried out and tasteless because it's been sitting in the warmer for hours and hours.

'Aina Pono Hawai'i State Farm to School program began at the Kohala School Complex on Hawai'i Island in November 2016. The main kitchen at the High School acts as a commissary kitchen and all meals for not only the High School but also Kohala Middle School and Kohala Elementary School are prepared here and then transported to the schools. The combined enrollment of the three schools is approximately 780 students.

While the Kohala School Complex continued to build upon their initial success, the 'Aina Pono team started piloting the program at Mililani High School in January 2018 while developing a plan to rollout the program to all schools in Hawai'i. Mililani High is the Hawai'i State Department of Education's second largest food production site. The cafeteria provides about 2,500 school lunches daily for approximately 1,000 high school students and an additional 1,500 students at Mililani Uka Elementary and Mililani Waena Elementary.

The Mililani High School cafeteria staff implemented a progressive plan for slowly introducing 'Aina Pono meals into the standard school menu at the three schools it services. January featured zero 'Aina Pono meals, February included 3 'Aina Pono lunches, March added two 'Aina Pono breakfasts and moved to all 'Aina Pono lunches per week, and the April and May menu contained all 'Aina Pono meals.

Menus for each of the Spring 2018 months follow, with the 'Aina Pono meals noted in February as marked with fruit symbols and March with an asterisk. All meals in April and May were 'Aina Pono meals. Menus for Kohala for Spring and Fall 2017 featured similar 'Aina Pono menu items.

Mililani High School

Jan-18

Breakfast served 7:10 a.m. -7:40 a.m.
Lunch served 10:00 a.m. - 1:10 p.m.











MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	
1				4	5
Frankfurter W/Steamed Rice Peaches, 100% Fruit Juice CHICKEN CAESAR SALAD Purchased Pepperoni Pizza, Coleslaw, Broccoli Florets/Baby Carrots, Pears Pineapple (9-A)	Pepperoni Pizza Stix Orange Wedge, 100% Juice TOFU SALAD Beef Frank in WG Bun, Baked Beans, Rainbow Salad, Fruit Slushy, Orange (9-A)	Brkf.Smoothie, Cinnamon Toast Banana, Apple Wedge PASTA SALAD Pork Gisantis and Rice, Broccoli & Carrots, Apple Wedges, Pineapple (9-A) WG Roll (9-A)	School Made Coffee Cake Mixed Fruits, 100% Fruit Juice CHEF SALAD Fried Saimin W/Egg Roll, House Salad, Grape Tomato, Fruit Juice, Peaches (9-A)	Turkey Ham W/ Cheese on Bun Pineapple Chunks, Cranberries Chili W/Cheese , Roll, Potato Wedge, Rainbow Salad, Grape Tomato, Apple, Pears (9-A)	
15	Pizza Bagel Mixed Fruit, Cranberry TOFU SALAD Beef and Bean Burrito, Curly Fried, Lettuce Leaf, Tomato Slice, Orange Wedges, Peaches (9-A)	Egglette W/WG Toast Papaya/ Pine Chunk, 100% Juice PASTA SALAD Turkey Pastrami Sandwich, House Salad, Baby Carrots, Fruit Cocktail, Apple Wedges (9-A)	School Made Applesauce Muffin Pineapple Chunks, 100% Juice CHEF SALAD Teri Cheese Burger, House Salad, Baby Carrots, Baked Beans, Fruit Juice, Pears(9-A)	Portuguese Sausage, Steamed Rice Peaches, 100% Fruit Juice SOMEN SALAD Kailua Pork w/Spinach, Rice, Lomi Tomato, Pineapple, Apple Wedges (9-A) ,Sweet Roll (9-A)	
Maple Pancake Wrap Peaches, Cranberries CHICKEN CAESAR SALAD Vegetarian Pizza, House Salad, Fruit Cocktail, Pears (9-A)	Breakfast Chicken Patty W/Rice Mixed Fruit, 100% Fruit Juice TOFU SALAD Cheesy Chili Tots and Biscuit, House Salad, Apple, Fruit Juice (9-A) Short Bread Cookies	School Made Cinnamon Roll Pineapple Chunks, Orange Wedge PASTA SALAD Baked Chicken, Whipped Potato, House Salad, Orange Wedges, Peaches (9-A), WG Roll	School Made Banana Bread Pineapple Chunks, 100% Fruit Juice PROFESSIONAL COLLABORATION DAY (NO SCHOOL)	School Made Banana Bread Pineapple Chunks, 100% Fruit Juice BBQ Pork Sandwich w/Slaw, House Salad, Fruit Slushy, Orange Wedge (9-A)	
Apple Pastry Orange Wedge, 100% Fruit Juice CHICKEN CAESAR SALAD Popcorn Chicken W/Rice, Baked Beans Rainbow Salad, Fruit Slushy, Orange Wedge (9-A)	Breakfast Sliders Peaches, 100% Fruit Juice TOFU SALAD Philly Cheese Steak Sandwich, House Salad, Grape Tomato, Fruit Juice, Peaches (9-A)	Cinnamon Toast and Ham Links Pineapple, Cranberries PASTA SALAD Golden Nuggets, Rice W/ Pickled Cabbage, Carrot Broccoli, Pineapple (9-A), , Apple Wedge, Roll (9-A)		MENU SUBJECT TO CHANGE WITHOUT NOTICE ALL MEALS INCLUDES HALF-PINT OF MILK	
22	23	24	25	26	
29	30	31			

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Mililani High School

Feb-18

Breakfast served 7:10 a.m. -7:40 a.m.
Lunch served 10:00 a.m. - 1:10 p.m.

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
<p>MENU SUBJECT TO CHANGE WITHOUT NOTICE</p> <p>ALL MEALS INCLUDES HALF-PINT OF MILK</p>			<p>Fried Rice and Eggs 1 Mixed Fruits, 100% Fruit Juice</p> <p>Turkey & Gravy W/Rice, Roll, Coleslaw, Broccoli Florets/Baby Carrots, Peach, Orange (9-A)</p>	<p>Waffles w/Syrup 2 Banana, Apple Wedge SOMEN SALAD</p> <p>Chicken Nuggets W/WG Roll, Potato Wedge, Rainbow Salad, Apple Pineapple (9-A)</p>
<p>Breakfast Quesidilla 5 Seasonal Fruit, 100% Fruit Juice CHICKEN CAESAR SALAD</p> <p>Beef Broccoli , Rice House Salad, Baby Carrots, Mixed Fruits, French Bread, Banana 9-A</p>	<p>Cinnamon Bagel w/ Cream Cheese Pineapple, 100% Fruit Juice 6  TOFU SALAD</p> <p>Baja Fish Taco, w/Garlic Aioli, Apple, Roasted Vegetable , Fruited Muffin , Peaches (9-A).</p>	<p>Greek Yogurt, Cinn. Toast 7 Papaya/Pine Chunk, 100% Fruit Juice PASTA SALAD</p> <p>Local Teri Patty w/WG Rice, Seasoned Vegetables, Local Banana, Apple (9-A) </p>	<p>Baked Ham, Biscuit 8 Peaches, 100% Fruit Juice CHEF SALAD</p> <p>Corndog, Baked Beans, House Salad, Baby Carrots, Fruit Juice, Orange Wedge (9-A)</p>	<p>Applesauce Cake, 9 Local Papaya, Dried Cranberries SOMEN SALAD </p> <p>Roast Pork w/Gravy, Rice, Vegetable Juice, Sweet Roll (9-A) Lomi Tomato, Pineapple, Apple (9-A)</p>
<p>12</p> <p>TEACHERS INSTITUTE DAY (NO SCHOOL)</p>	<p>School Made Bkf. Burrito 13 Pineapple, 100% Fruit Juice TOFU SALAD</p> <p>Chili Frank W/Rice, Roasted Vegetables, Baby Carrots , Pineapple, Banana 9-A, WG Roll, 9-A</p>	<p>Waffle w/ Fruited Topping 14 Mixed Fruit, 100% Fruit Juice PASTA SALAD </p> <p>Hot Turkey Sandwich w/Gravy, and Whipped Potato, House Salad, Local Pineapple, Apple 9-A </p>	<p>Banana Bread, Boiled Eggs 15 Local Pineapple, Orange CHEF SALAD </p> <p>Chicken Tenders Strip, W/Rice, Mixed Fruits, House Salad , Pears (9-A)</p>	<p>French Toast W/Syrup, 16 Seasonal Fruit, 100% Fruit Juice SOMEN SALAD</p> <p>Sloppy Joe w/Tater Tots, House Salad, Apple Wedges, 100% Juice, Short Bread Cookies</p>
<p>19</p> <p>PRESIDENT'S DAY (NO SCHOOL)</p>	<p>Frankfurter, WG Rice 20 Peaches, 100% Fruit Juice TOFU SALAD</p> <p>Fish Wedge, Steamed Rice, Baked Beans, Rainbow Salad, Fruit Slushy, Apple Wedge (9-A)</p>	<p>Pepperoni Pizza Stix 21 Orange Wedge, 100% Fruit Juice PASTA SALAD </p> <p>Spaghetti W/Meatballs, Caesar Salad, Fresh Broccoli, Garlic Bread, Banana, Peaches (9-A)</p>	<p>Egg Salad Sandwich 22 Apple, Cranberries CHEF SALAD </p> <p>Cheeseburger, Potato Wedges, Rainbow Salad, Orange Wedges, Pears (9-A)</p>	<p>School Made Coffee Cake 23 Mixed Fruit, 100% Fruit Juice SOMEN SALAD</p> <p>Chicken Tenders, Rice, Cabbage, Broccoli & Carrots, Orange, Roll 9-A, Pineapple (9-A)</p>
<p>French Toast w/Syrup 26 Seasonal Fruit, 100% Fruit Juice CHICKEN CAESAR SALAD</p> <p>Chicken Patty on Bun, Curly Fries, Lettuce, Tomato, Seasonal Fruit, Peaches (9-A)</p>	<p>Pork Sausage, Fried Rice 27  WG Toast, Banana, 100% Juice TOFU SALAD</p> <p>Pasta Florentine W/French Bread, House Salad, Mixed Fruits, Season Fruits (9-A)</p>	<p>Portuguese Sausage, Steamed Rice 28 Peaches, 100% Fruit Juice PASTA SALAD</p> <p>Chicken Katsu w/ Kim Chee, Rice, Broccoli ,Local Papaya, Peaches (9-A) </p>		

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Mililani High School

Mar-18

Breakfast served 7:10 a.m. -7:40 a.m.
Lunch served 10:00 a.m. - 1:10 p.m.

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
MENU SUBJECT TO CHANGE WITHOUT NOTICE ALL MEALS INCLUDES HALF-PINT OF MILK			1 Egglette w/WG Toast Papaya/Pine Mix, 100% Juice CHEF SALAD Italian Sausage & Cheese Pizza, Baked Beans , House Salad, Baby Carrots, Fruit Juice, Apple (9-A)	2 Pizza Bagel, Cream Cheese Pear, Dried Cranberry SOMEN SALAD Kalua Pork w/Cabbage, Rice, Lomi Tomato, Local Pineapple, Orange 9-A ,Roll (9-A)
5 Maple Pancake Wrap, Peaches , Cranberries CHICKEN CAESAR SALAD Chicken Nuggets w/WG Rice, Roasted Vegetables, Hummus, Baby Carrots, Pineapple, Orange (9-A)	* 6 School Made Cinnamon Roll Pineapple Chunks, Orange TOFU SALAD Creole Macaroni w/WG French Bread, House Salad, Fruit Slushy, Apple Wedge (9-A)	* 7 School Made French Toast Local Banana, 100% Juice TERI CHICKEN W/ PUMPKIN SALAD Beef Stew w/Ulu, Steamed Rice, WG Roll, House Salad, Fruit Cocktail, Local Papaya (9-A)	8 School Made Banana Bread Local Pineapple, 100% Juice CHEF SALAD Beef Hot Dog in Bun, Tater Tots, House Salad, Apple Wedges, Juice (9-A), Short Bread Cookies	* 9 School Made Pork Sausage, Fried Rice, Local Papaya, 100% Juice SOMEN SALAD Korean Chicken w/ Shredded Cabbage, Rice, Kim Chee, Local Banana, Local Pineapple (9-A)
12 Breakfast Sliders Peaches, 100% Fruit Juice CHICKEN CAESAR SALAD Chili W/Cheese & Roll, Potato Wedges, Rainbow Salad, Orange Wedge, Local Banana (9-A)	* 13 Home Made Breakfast Pizza Apple Wedge, 100% Fruit Juice TOFU SALAD Vegetarian Pizza, Coleslaw, Broccoli Floret Baby Carrots, Peaches, Local Pineapple 9-A	14 Strawberry Yogurt Parfait/Granola Local Banana, 100% Juice TERI CHICKEN W/ PUMPKIN SALAD Local Beef Patties w/ Mushroom Gravy Rice, Lettuce, Tomato, Apple, Local Banana 9-A	15 Cinnamon Toast & Pork Links Local Papaya, Dried Cranberries CHEF SALAD Pork Gisantis w/Rice, Broccoli, Carrots, Local Pineapple, Peaches (9-A)	16 Apple Pastry Orange, 100% Juice SOMEN SALAD Hot Dog in Bun, Baked Beans, Rainbow Salad, Fruit Slushy, Pears (9-A)
19 SPRING BREAK NO SCHOOL	20 SPRING BREAK NO SCHOOL	21 SPRING BREAK NO SCHOOL	22 SPRING BREAK NO SCHOOL	23 SPRING BREAK NO SCHOOL
27 KUHIO DAY NO SCHOOL	* 28 School Made Breakfast Burrito Local Pineapple 100% Fruit Juice TOFU SALAD BBQ Pork Sandwich w/Slaw, House Salad, Fruit Slushy, Pears (9-A)	* 29 School Made Cinnamon Roll Local Papaya, 100% Juice TERI CHICKEN W/ PUMPKIN SALAD Chicken Adobo w/Rice, Green Papaya Slaw, Edamame, Orange, Apple Wedge (9-A)	* 30 Ham & Cheese Omelette w/Toast Pear Halves, 100% juice CHEF SALAD Imu Kalua Pig w/Spinach, Poi, Lomi Tomato, Local Pineapple, Local Banana, Sweet Roll	 GOOD FRIDAY NO SCHOOL

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Hawaii Farm to School Introducing Local Fruits and Vegetables

New Food Item with asterisk For New Breakfast Item

Mililani High School

Apr-18

Breakfast served 7:10 a.m. -7:40 a.m.
Lunch served 10:00 a.m. - 1:10 p.m.

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Bagel w/Cream Cheese Apple Wedge, Milk CHICKEN CAESAR SALAD Teri Chicken, Steamed Rice, Tossed Salad, Fresh Fruits, WG Roll, Milk, Assorted	Ham & Cheese Omelette WG Toast , Orange Wedges, Milk TUNA TOFU SALAD Sloppy Joe on WG Bun, Leaf Lettuce, Baked Beans, Fresh Fruits, Milk, Assorted	Fried Rice W/ Hawaiian Sausage Banana, Milk CHEF SALAD Baked Chicken, Home Made Mashed Potato, Broccoli Stir Fry, Fresh Fruit, Roll, Milk Assorted	Cinnamon Roll, Papaya Wedge, Milk TERI CHICKEN W/ PUMPKIN SALAD Kalua Quesadilla, Tomato Salsa, House Salad, Fresh Fruit, , Milk, Assorted	Breakfast Cheese Pizza Banana, Milk SOMEN SALAD Cheese Pizza, Caesar Salad, Carrot Sticks, Fresh Fruits, Milk, Assorted
Scrambled Eggs and Ham WG Toast, Fresh Fruit, Milk CHICKEN CAESAR SALAD Beef Stew, Steamed Rice, WG Roll, Fresh Fruits, Milk, Assorted	Homemade Pork Sausage, Fried Rice Fresh Fruit, Milk TUNA TOFU SALAD School made Cheese burger, Oven Potato, Lettuce, Tomato, Fresh Fruits, Milk Assorted	Strawberry Smoothie Fresh Fruit, Milk CHEF SALAD Chicken Adobo w/Rice, Green Papaya Slaw, Edamame, Apple Wedge	Banana Bread, Fresh Fruits, Milk TERI CHICKEN W/ PUMPKIN SALAD Nacho's w/Cheese, Tossed Greens, Fresh Fruits, Milk, Assorted	Fried Rice, Scrambled Eggs Fresh Fruits, Milk SOMEN SALAD Pepperoni Pizza, Caesar Salad, Carrots Sticks, Fresh Fruits, Milk Assorted
Portuguese Sausage, Rice Fresh Fruit, Milk, Assorted CHICKEN CAESAR SALAD Mexican Lasagna, Lettuce & Tomato, Salad, Fresh Fruits, Milk Assorted	Biscuit w/Cinnamon Swirl Fresh Fruit, Milk, Assorted TUNA TOFU SALAD Teri Chicken Burger, Oven Fries, Lettuce, Tomato, Fresh Fruits, Milk, Assorted	Fruit Parfait, WG Toast Fresh Fruit, Milk Assorted CHEF SALAD Spaghetti w/Meatballs, Garden Salad, Fresh Fruits, French Bread, Milk Assorted	Cinnamon Bread Fresh Fruits, Milk, Assorted TERI CHICKEN W/ PUMPKIN SALAD Grilled Cheese Sandwich, Tomato Soup, Tossed Salad, Fresh Fruits, Milk, Assorted	French Toast, Canadian Bacon Fresh Fruit, Milk, Assorted SOMEN SALAD Kalua w/Cabbage, Rice, Lomi Tomato, Sweet Roll, Fresh Pineapple, Milk, Assorted
Scrambled Eggs , Ham, WG Toast Fresh Fruit, Milk, Assorted CHICKEN CAESAR SALAD Chicken Stir Fry, Steamed Rice, Fresh Fruits, WG Roll, Milk, Assorted	Homemade Pork Patty, Fried Rice Fresh Fruit, Milk, Assorted TUNA TOFU SALAD Sloppy Joe on WG Bun, Leaf Lettuce, Baked Beans, Fresh Fruits, Milk, Assorted	Strawberry Smoothie, WG Toast Fresh Fruit, Milk Assorted CHEF SALAD Chicken, Home Made Mashed Potato, Broccoli Stir Fry, Fresh Fruits, Roll, Milk Assorted	Egg Salad Sandwich Fresh Fruits, Milk Assorted TERI CHICKEN W/ PUMPKIN SALAD Roast Pork w/Gravy, Rice, Tossed Salad w/Edamame, Fresh Fruit, Roll, Milk, Assorted	Banana Bread Fresh Fruits, Milk, Assorted SOMEN SALAD Vegetarian Pizza, Caesar Salad, Carrot Sticks, Fresh Fruits, Milk, Assorted
Canadian Bacon, Scrambled Eggs Fresh Fruit, Milk, Assorted CHICKEN CAESAR SALAD Spaghetti w/Meat sauce, Garden Salad, Fresh Fruits, French Bread, Milk Assorted				MENU SUBJECT TO CHANGE WITHOUT NOTICE ALL MEALS INCLUDES

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Mililani High School

May-18

Breakfast served 7:10 a.m. -7:40 a.m.
Lunch served 10:00 a.m. - 1:10 p.m.

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
	Canadian Bacon & Cheese on Bun Orange Wedges, Milk TUNA TOFU SALAD 1	Strawberry Granola Parfait Papaya Wedge, Milk CHEF SALAD 2	Cinnamon Roll Pineapple, Banana TERI CHICKEN W/ PUMPKIN SALAD 3	Pork Sausage Steamed Rice Banana, Milk SOMEN SALAD 4
	Paniolo Burger on Bun Mushroom , Red Potato, Lettuce, Tomato, Fresh Fruits, Milk Assorted	Beef Stew w/Ulu, Steamed Rice, House Salad, Fresh Fruits, WG Roll, Milk Assorted	Creole Macaroni, French Bread, House Salad, Fresh Fruit, Milk Assorted	Pepperoni Pizza, Caesar Salad, Carrots Sticks, Fresh Fruits, Milk Assorted
	Waffle w/Syrup , Fresh Fruit, Milk CHICKEN CAESAR SALAD 7	Chicken Patty, Steamed Rice Fresh Fruit, Milk TUNA TOFU SALAD 8	Strawberry Smoothie, WG Toast Fresh Fruit, Milk CHEF SALAD 9	Banana Bread, Fresh Fruits, Milk TERI CHICKEN W/ PUMPKIN SALAD 10
Nacho w/Beef & Cheese , Tossed Greens, Fresh Fruits, Milk, Assorted	Turkey Pastrami Sandwich, Tossed Greens, Carrots, Fresh Fruits, Milk, Assorted	Roast Pork w/Gravy, Rice, Tossed Salad w/Edamame, Fresh Fruit, Milk Assorted	Teri Chicken Burger, Baked Beans, Tossed Salad, Fresh Fruits, Milk Assorted	Beef Lau lau ,Rice, Lomi Tomato, Sweet Roll, Fresh Sweet Potato, Fruit, Milk, Assorted
Portuguese Sausage, Rice Fresh Fruit, Milk, Assorted CHICKEN CAESAR SALAD 14	Breakfast Cheese Pizza Fresh Fruit, Milk, Assorted TUNA TOFU SALAD 15	Scrambled Eggs, Pork links Fresh Fruit, Milk Assorted CHEF SALAD 16	Biscuit w/Cinnamon Swirl Fresh Fruits, Milk, Assorted TERI CHICKEN W/ PUMPKIN SALAD 17	French Toast, Canadian Bacon Fresh Fruit, Milk, Assorted SOMEN SALAD 18
Teri Chicken, Steamed Rice, Tossed Salad, Fresh Fruits, WG Roll, Milk, Assorted	Sloppy Joe on WG Bun, Leaf Lettuce, Baked Beans, Fresh Fruits, Milk, Assorted	Baked Chicken, Home Made Mashed Potato, Broccoli Stir Fry, Fresh Fruit, Roll, Milk Assorted	Grilled Cheese Sandwich, Tomato Soup, Tossed Salad, Fresh Fruits, Milk, Assorted	Kalua w/Cabbage, Rice, Lomi Tomato, Sweet Roll, Fresh Pineapple, Milk Assorted
Scrambled Eggs , Ham, WG Toast Fresh Fruit, Milk, Assorted CHICKEN CAESAR SALAD 21	Homemade Pork Patty, Fried Rice Fresh Fruit, Milk, Assorted TUNA TOFU SALAD 22	Strawberry Granola Parfait Fresh Fruit, Milk Assorted CHEF SALAD 23	Bagel w/Cream Cheese Fresh Fruits, Milk Assorted TERI CHICKEN W/ PUMPKIN SALAD 24	Banana Bread Fresh Fruits, Milk, Assorted SOMEN SALAD 25
Chicken Burger, Red Potato, Lettuce, Tomato, Fresh Fruits, Milk, Assorted	BBQ Pork Sandwich w/Slaw, Tossed Salad, Fresh Fruit , Milk, Assorted	Mexican Lasagna, Lettuce & Tomato, Fresh Fruits, Milk Assorted	Vegetarian Pizza, Caesar Salad, Carrot Sticks, Fresh Fruits, Milk, Assorted	Spaghetti w/ Meat Sauce, Garden Salad, Fresh Fruits, French Bread, Milk Assorted
Canadian Bacon, Scrambled Eggs Fresh Fruit, Milk, Assorted 28	Pork Sausage Steamed Rice Apple, Banana, Milk Assorted 29	Cinnamon Bread Papaya, Pears 30		MENU SUBJECT TO CHANGE WITHOUT NOTICE ALL MEALS INCLUDES
Chili w/Cheese & Roll, Red Potato , Rainbow Salad, Fresh Fruit , Milk Assorted	Cheese Pizza , House Salad, Fresh Fruits, Milk, Assorted	Teri burger, Oven Potato, Lettuce, Tomato, Fresh Fruits, Milk Assorted		

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OUTCOME: INCREASE PARTICIPATION

INDICATORS: Increase in participation rates in USDA child nutrition programs (breakfast and lunch) at project schools.

TARGET: Minimum 5% increase in participation in breakfast and lunch programs.

Overview:

Great food is one piece of the puzzle to increase participation. Beyond Green Partners (BGP) trained the cafeteria staff to improve their culinary skills to make more flavorful, enticing food, but continued training is needed. Increasing participation requires a focus on food, agriculture, and healthy eating in every aspect of the school. Kids need regular reminders at home, in the garden, in the classroom, and through school communications. BGP met with teachers to involve them in creating new educational opportunities to connect the cafeteria to the classroom. A number of new approaches emerged:

- The Mililani high school library staff created a display board in the library using nutritional information provided by Kokua Hawai'i Foundation. The display board features nutritional information for fruits and vegetables for Hawaiian grown produce and several popular meal items.
- One of the math teachers at Mililani utilized BGP information to develop a survey for her statistics class to study farm to school data.
- Under the guidance of BGP and their teacher, the culinary education students at Mililani created and prepared a school lunch following USDA guidelines.
- The Principal at Kohala Elementary School requires the students to spend 17 hours in the school garden
- Kohala High School Art Classes painted murals on the cafeteria walls

Additional pieces of the puzzle that need additional commitment from DOE and SFSB to increase participation include:

- Moving towards all kids gardening, rather than a single class of plant science gardening
- Food and agriculture education in the classroom (i.e. math classes studying cafeteria participation statistics, English classes writing poems about food, history classes studying agricultural land use throughout time, etc.)
- Inviting student voice through continuously talking to the students who are the cafeteria customers – BGP primarily conducted surveys and student discussions without participation from cafeteria managers due to lack of interest by the cafeteria managers, but the process of asking their opinions matters more than what they say or whether the school can accommodate their ideas
- Real time communication about the cafeteria program to all stakeholders including parents, students, teachers, administration, and community members

Increases in participation also come from introducing new items to the menu periodically rather than using the same menu for a year or more, as is done with the current SFSB menu cycle. New items need to be introduced every other menu cycle. For example, at the end of 2 four-week cycles, introduce 3-4 new menu items. New menu items keep customers interested and also keep the kitchen from getting bored. The kitchen staff tends to take short cuts and lose motivation when they get bored.

Participation is the hardest thing to change in the cafeteria food system transformation process. Staff and students alike have repeatedly seen new initiatives start and then die. Therefore, a demonstration of commitment generally takes time to produce results. After introducing the 'Aina Pono program to students at Mililani, one student offered evidence of this skepticism by answering the question "What reason would motivate you to eat the school lunch?" by saying "Actually showing the difference between previous lunches and school lunches now. To see if there is actually a difference."

The waste audit revealed anecdotal evidence that students who are familiar with menu items from eating it at home are more likely to eat it at school.

The program is still facing challenges because, while the main entrées were all 'Aina Pono by the end of the Spring Semester, there were still sauces made from powdered bases and sides that were not freshly prepared. Additionally, the Elementary Schools still had food that was prepared in advance and held in the warmers because of the bulk preparation at the High School. The food would be fresher and probably better received if there was a way to do the final preparations at the Elementary Schools.

Mililani High School Data:

Mililani High School contains the second largest student body in the state with an average of 2,500 students. The student enrollment at all three schools fluctuated throughout the spring semester, with monthly enrollment at Mililani High School ranging from 2,394 to 2,570 students in 2018 and 2,392 to 2,530 in 2017.

All data on these charts is a comparison of the Baseline Period of January - May 2017 and the Aina Pono Service Period of January 2018 – May 2018.

The Mililani High School cafeteria implemented a progressive plan for slowly introducing 'Aina Pono meals into the standard school menu. January featured zero 'Aina Pono meals, February included 3 'Aina Pono lunches, March added two 'Aina Pono breakfasts and moved to all 'Aina Pono lunches per week, and the April and May menu contained all 'Aina Pono meals.

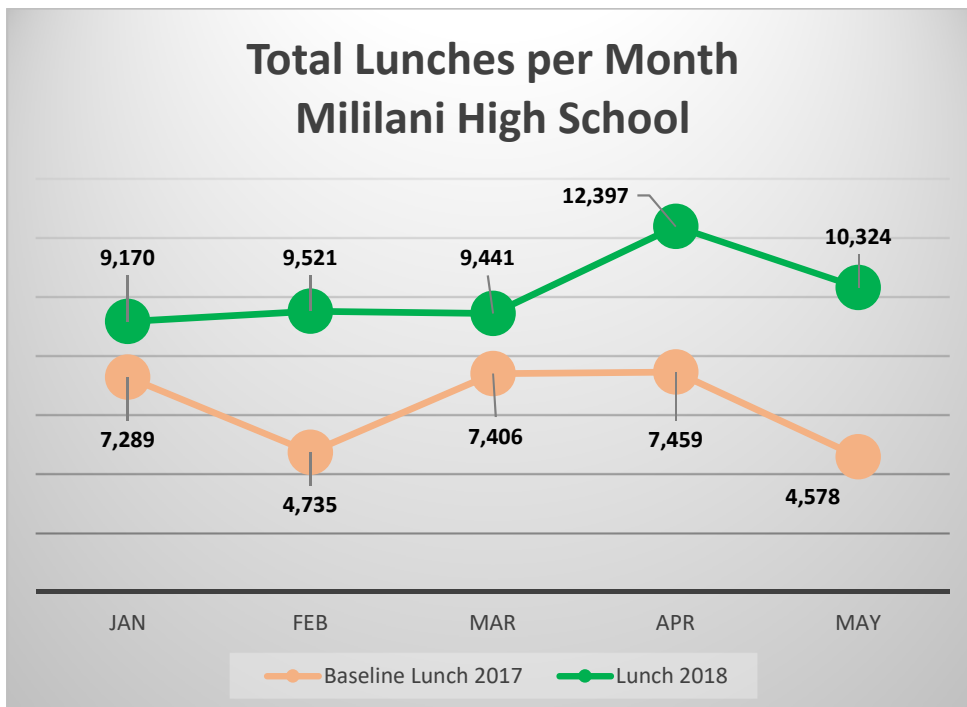
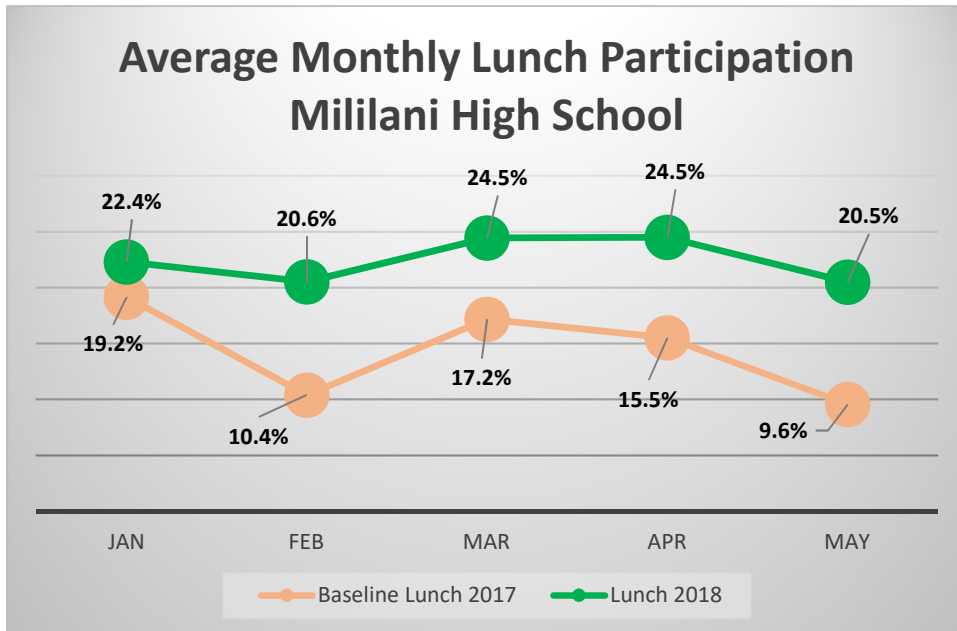
Mililani High School saw the percentage of students buying lunch over the course of the Spring Semester go from 14.2% of the population to 22.4% of the population, exceeding the target participation rate increase of 5% for lunch by 19% (50,853 lunches were actually served - total increase of 19,386 over the 5% increase goal of 1,573 additional lunches). Over the course of the spring 2018 semester, lunch participation averaged 559 people per day – an over 200-person increase per day over Spring 2017 (average 354 per day).

Results for Mililani High School - Baseline to Goals

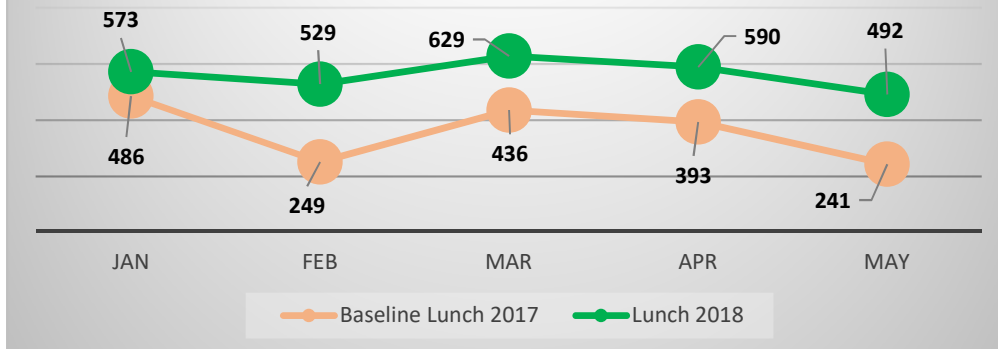
Lunch

# Lunches Sold by Month	Baseline Lunch 2017	5 % Increase Goal	Lunch 2018	Actual Inc. over Goal	Actual Increase %
January	7,289	7,653	9,170	1,517	26%
February	4,735	4,972	9,521	4,549	101%
March	7,406	7,776	9,441	1,665	22%
April	7,459	7,832	12,397	4,565	61%
May	4,578	4,807	10,324	5,517	121%
TOTAL	31,467	33,040	50,853	17,813	57%

Below are charts to graphically show the increase in meals purchased by month at Mililani High School for the Spring Semester 2018 over the Baseline of Spring Semester 2017.



Average Daily Lunch Count Mililani High School



Breakfast

Overall breakfast participation rates were basically unchanged at 4% of student enrollment for the semester but did see an additional 254 kids buy breakfast over the course of the semester, which is a 2.7% increase in meals purchased (which was below the goal established for participation increase) – or ½ kid. Breakfast is a difficult meal to increase participation and we have included ideas in our Recommendations Section for this to ensure more kids are getting the most important meal of the day and are ready for the challenges ahead of them. Greg did observe that there were a large number of students that arrived at the school either just ahead of the bell or late. This attendance practice makes breakfast in the cafeteria virtually impossible.

Participation by Month – Mililani High School						
	January	February	March	April	May	Total
Service Days 2017	15	19	17	19	19	89
Service Days 2018	16	18	15	21	21	91
	January	February	March	April	May	Total
Breakfast 2017	1,524	1,845	1,906	2,124	1,841	9,240
Breakfast 2018	1,709	1,835	1,664	2,247	2,039	9,494
Variance	185	-10	-242	123	198	254
% Change	12.1%	-0.5%	-12.7%	5.8%	10.8%	2.7%
Participation by Day (Average)						
	January	February	March	April	May	Average
Breakfast 2017	102	97	112	112	97	103.8
Breakfast 2018	107	102	111	107	97	104.3
Variance	5	5	-1	-5	0	0.5
% Change	5.1%	5.0%	-1.1%	-4.3%	0.2%	0.5%

Due to variation in number of service days per month, the daily average for meals sold can be less even in a month where more meals were sold overall. As an example, in April, 123 more meals were served but since there were two more days school days in that month, 224 more breakfasts would need to have been served for the average per day to stay the same.

Participation by Month – Mililani High School						
	January	February	March	April	May	Total
Service Days 2017	15	19	17	19	19	89
Service Days 2018	16	18	15	21	21	91
	January	February	March	April	May	Total
Lunch 2017	7,289	4,735	7,406	7,459	4,578	31,467
Lunch 2018	9,170	9,521	9,441	12,397	10,324	50,853
Variance	1,881	4,786	2,035	4,938	5,746	19,386
% Change	25.8%	101.1%	27.5%	66.2%	125.5%	61.6%
Participation by Day (Average)						
	January	February	March	April	May	Average
Lunch 2017	486	249	436	393	241	354
Lunch 2018	573	529	629	590	492	559
Variance	87	280	194	198	251	205
% Change	17.9%	112.2%	44.5%	50.4%	104.0%	58.1%

Waena Elementary School Data:

The Mililani Waena Elementary School cafeteria implemented a progressive plan for slowly introducing 'Aina Pono meals into the standard school menu. January featured zero 'Aina Pono meals, February included 3 'Aina Pono lunches, March added two 'Aina Pono breakfasts and moved to all 'Aina Pono lunches per week, and the April and May menu contained all 'Aina Pono meals. All meals were made at Mililani High School and transported for service to Waena on a daily basis.

All data on these charts is a comparison of the Baseline Period of January - May 2017 and the Aina Pono Service Period of January 2018 – May 2018.

The elementary students were not as excited about the new meal items as the high school students were. This matches the surveys and taste tests done prior to implementing the new menu in that the elementary school students requested different meals than the high school students.

As the semester progressed, we did see participation increase so participation rates were rising, as was the goal.

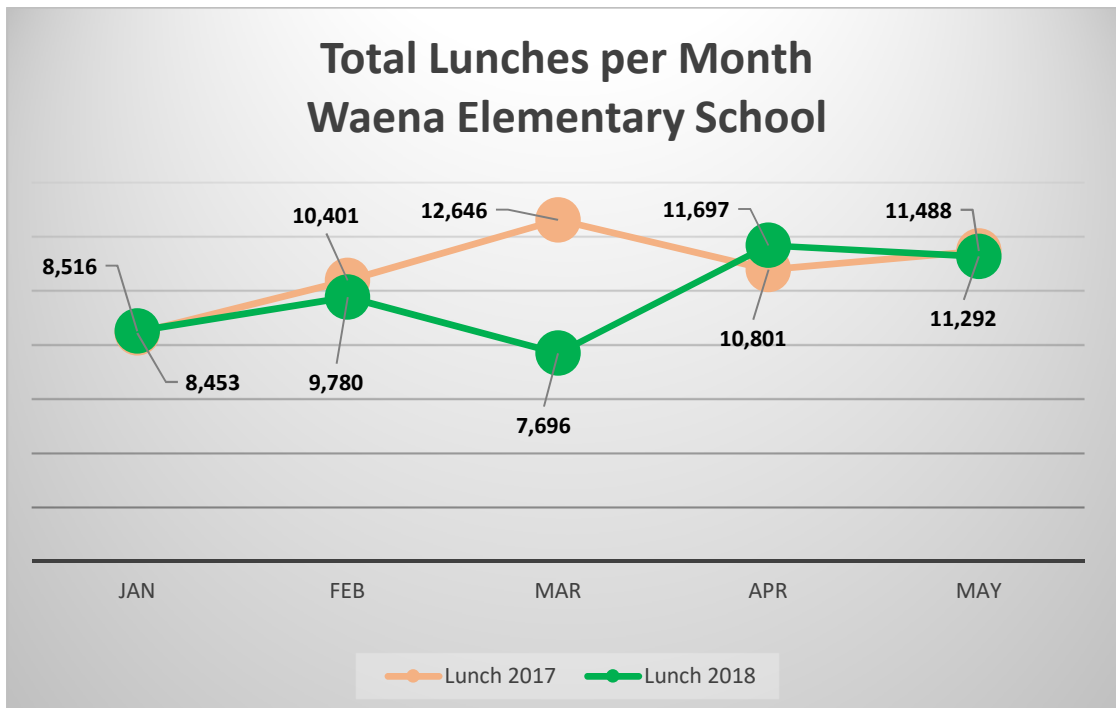
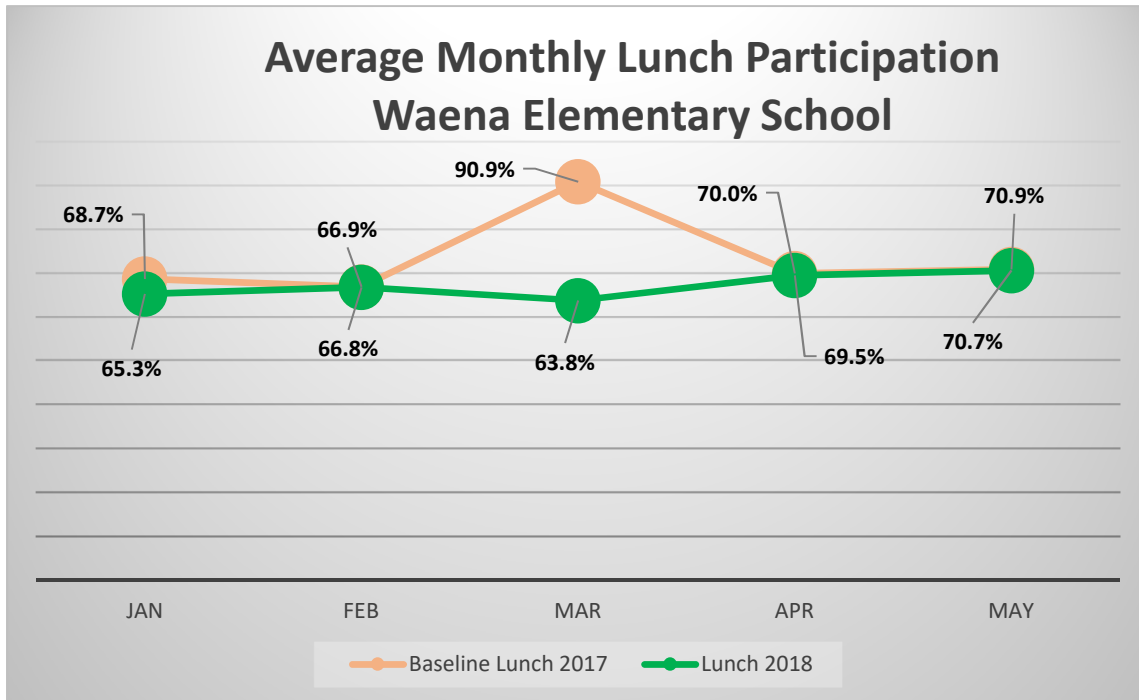
Waena Elementary School saw the percentage of students buying lunch over the course of the Spring Semester actually drop overall from 73.3% of the population to 67.5% of the population. Included in the 2017 average is an incredibly high 90.9% participation rate for the month of March. We were not able to determine what the staff did in 2017 to get such an overwhelming response. The enrollment numbers were double checked.

Results for Waena Elementary School - Baseline to Goals

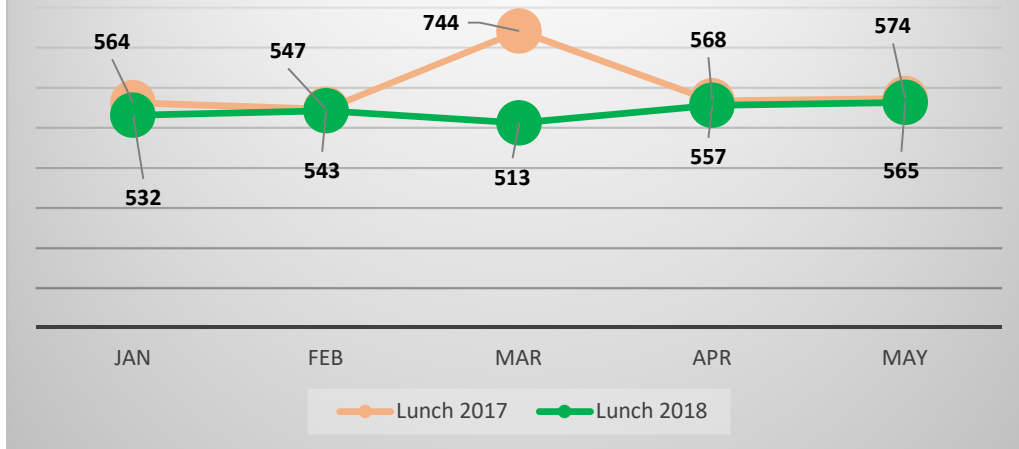
Lunch

Lunch Counts by Month	Baseline Lunch 2017	5 % Increase Goal	Lunch 2018	Actual Inc. over Goal	Actual Increase %
January	8,453	8,876	8,516	(360)	1%
February	10,401	10,921	9,780	(1,141)	-6%
March	12,646	13,278	7,696	(5,582)	-39%
April	10,801	11,341	11,697	356	8%
May	11,488	12,062	11,292	(770)	-2%
TOTAL	53,789	56,478	48,981	(7,497)	-9%

Below are charts to graphically show the changes in meals purchased by month at Mililani High School for the Spring Semester 2018 over the Baseline of Spring Semester 2017.



Average Daily Lunch Count Waena Elementary School



Breakfast

Overall breakfast participation rates were basically unchanged. Breakfast is a difficult meal to increase participation and we have included ideas in our Recommendations Section for this to ensure more kids are getting the most important meal of the day and are ready for the challenges ahead of them.

Participation by Month – Waena Elementary School						
	January	February	March	April	May	Total
Service Days 2017	15	19	17	19	20	90
Service Days 2018	16	18	15	21	20	90
	January	February	March	April	May	Total
Breakfast 2017	1,287	1,619	1,556	1,857	1,925	8,244
Breakfast 2018	1,309	1,510	1,235	2,033	2,121	8,208
Variance	22	-109	-321	176	196	-36
% Change	1.71%	-6.73%	-20.63%	9.48%	10.18%	-0.44%
Participation by Day (Average)						
	January	February	March	April	May	Average
Breakfast 2017	86	85	92	98	96	91.6
Breakfast 2018	82	84	82	97	106	91.2
Variance	-4	-1	-9	-1	10	-0.4
% Change	-4.65%	-1.55%	-10.05%	-0.95%	10.18%	-0.44%

As seen at Miliani High Scholl, due to variation in number of service days per month, the daily average for meals sold can be less even in a month where more meals were sold overall.

Participation by Month – Waena Elementary School						
	January	February	March	April	May	Total
Service Days 2017	15	19	17	19	20	90
Service Days 2018	16	18	15	21	20	90
	January	February	March	April	May	Total
Lunch 2017	8,453	10,401	12,646	10,801	11,488	53,789
Lunch 2018	8,516	9,780	7,696	11,697	11,292	48,981
Variance	63	-621	-4,950	896	-196	-4,808
% Change	0.75%	-5.97%	-39.14%	8.30%	-1.71%	-8.94%
Participation by Day (Average)						
	January	February	March	April	May	Average
Lunch 2017	564	547	744	568	574	598
Lunch 2018	532	543	513	557	565	544
Variance	-31	-4	-231	-11	-10	-53
% Change	-5.55%	-0.75%	-31.03%	-2.02%	-1.71%	-8.94%

Uka Elementary School Data:

The Mililani Uka Elementary School cafeteria implemented a progressive plan for slowly introducing 'Aina Pono meals into the standard school menu. January featured zero 'Aina Pono meals, February included 3 'Aina Pono lunches, March added two 'Aina Pono breakfasts and moved to all 'Aina Pono lunches per week, and the April and May menu contained all 'Aina Pono meals. All meals were made at Mililani High School and transported for service to Uka on a daily basis.

All data on these charts is a comparison of the Baseline Period of January - May 2017 and the Aina Pono Service Period of January 2018 – May 2018.

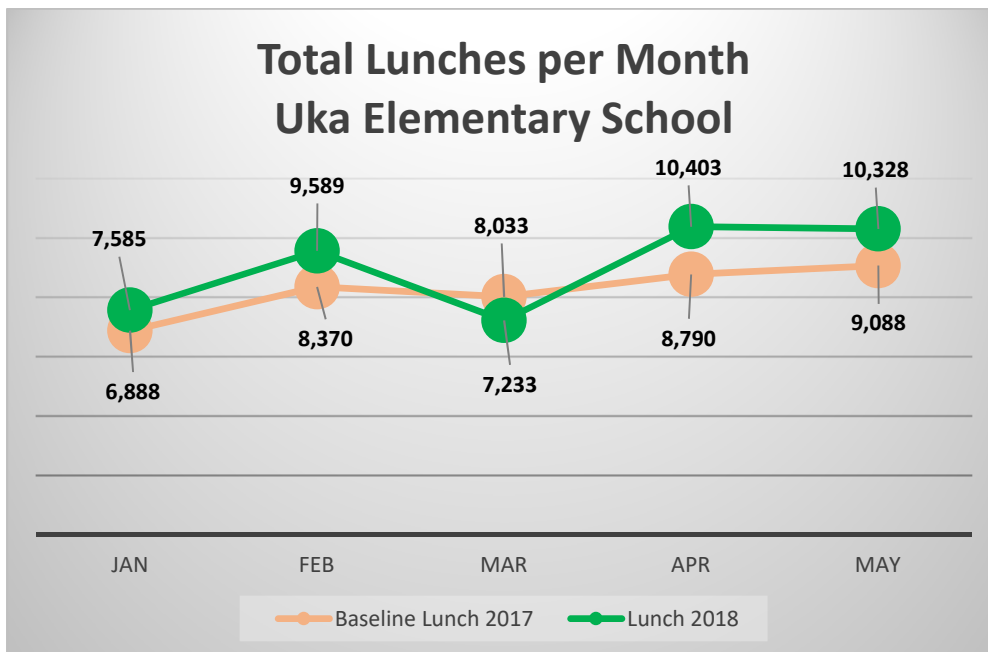
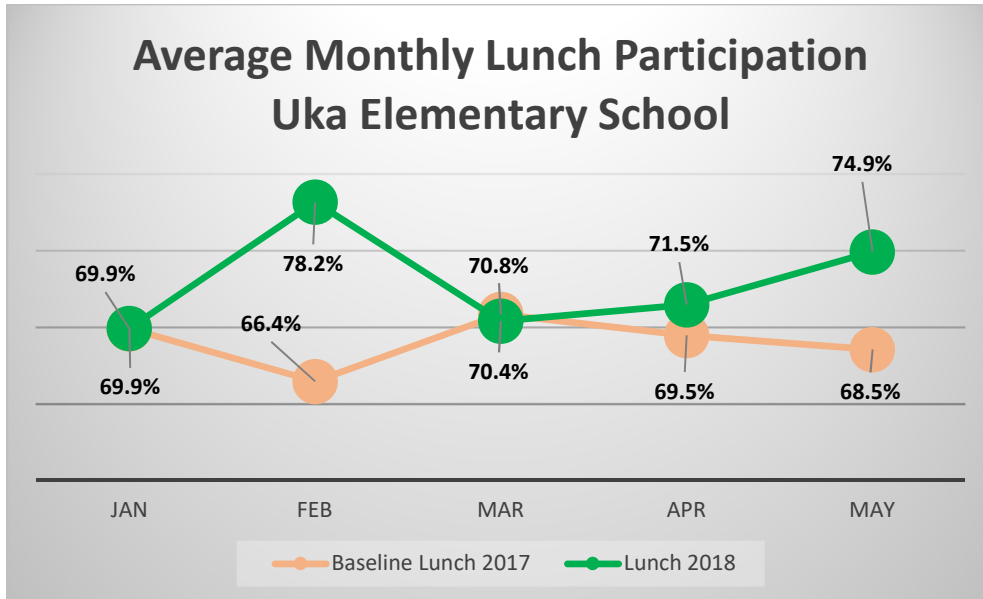
Uka Elementary School saw the percentage of students buying lunch over the course of the Spring Semester go from 69.0% of the population to 73.1% of the population. This is a 4.2% increase in participation rates, but is a 9.6% increase in actual number of lunches served – going from 41,169 in 2017 to 45,138 in 2018. Over the course of the spring 2018 semester, lunch participation averaged 500 people per day – a 42-person increase per day over Spring 2017 (average 458 per day).

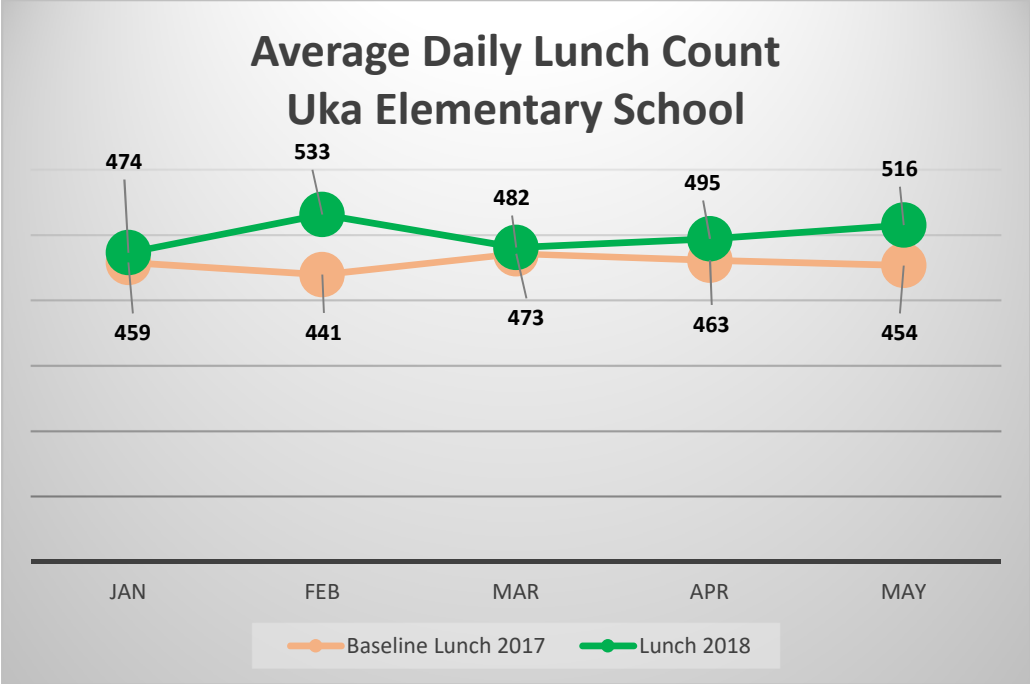
Below are charts to graphically show the increase in meals purchased by month at Uka Elementary School for the Spring Semester 2018 over the Baseline of Spring Semester 2017.

Results for Uka Elementary School - Baseline to Goals

Lunch Counts by Month	Baseline Lunch 2017	5 % Increase Goal	Lunch 2018	Actual Inc. to Goal	Actual Increase %
January	6,888	7,232	7,585	353	10%
February	8,370	8,789	9,589	801	15%
March	8,033	8,435	7,233	(1,201)	-10%
April	8,790	9,230	10,403	1,174	18%
May	9,088	9,542	10,328	786	14%
TOTAL	41,169	43,227	45,138	1,911	10%

Below are charts to graphically show the changes in meals purchased by month at Uka Elementary School for the Spring Semester 2018 over the Baseline of Spring Semester 2017.





Breakfast

Participation by Month – Uka Elementary School						
	January	February	March	April	May	Total
Service Days 2017	15	19	17	19	20	89
Service Days 2018	16	18	15	21	20	91
	January	February	March	April	May	Total
Baseline Breakfast 2017	1,088	1,354	1,214	1,482	1,514	6,652
Breakfast 2018	1,032	1,163	946	1,343	1,521	6,005
Variance	-56	-191	-268	-139	7	-647
% Change	-5.1%	-14.1%	-22.1%	-9.4%	0.5%	-9.7%

Participation by Day (Average)						
	January	February	March	April	May	Average
Service Days 2017	15	19	17	19	20	89
Service Days 2018	16	18	15	21	20	91
	January	February	March	April	May	Total
Baseline Breakfast 2017	73	71	71	78	76	369
Breakfast 2018	65	65	63	64	76	332
Variance	-8	-7	-8	-14	0	-37
% Change	-11.1%	-9.3%	-11.7%	-18.0%	0.5%	-10.0%

Lunch

Participation by Month-- Uka Elementary School						
	January	February	March	April	May	Total
Service Days 2017	15	19	17	19	20	89
Service Days 2018	16	18	15	21	20	91
	January	February	March	April	May	Total
Baseline Lunch 2017	6,888	8,370	8,033	8,790	9,088	41,169
Lunch 2018	7,585	9,589	7,233	10,403	10,328	45,138
Variance	697	1,219	-800	1,613	1,240	3,969
% Change	10%	15%	-10%	18%	14%	10%
Participation by Day (Average)						
	January	February	March	April	May	Average
Service Days 2017	15	19	17	19	20	89
Service Days 2018	16	18	15	21	20	91
	January	February	March	April	May	Total
Baseline Lunch 2017	459	441	473	463	454	458
Lunch 2018	474	533	482	495	516	500
Variance	15	92	10	33	62	42
% Change	3%	21%	2%	7%	14%	9%

Kohala Complex Data:

The Kohala Complex includes Kohala High School, Kohala Middle School and Kohala Elementary School and serves just under 800 students.

All data on these charts is a comparison of the Baseline Period of January - May 2016 and the Aina Pono Service Period of January – May 2017.

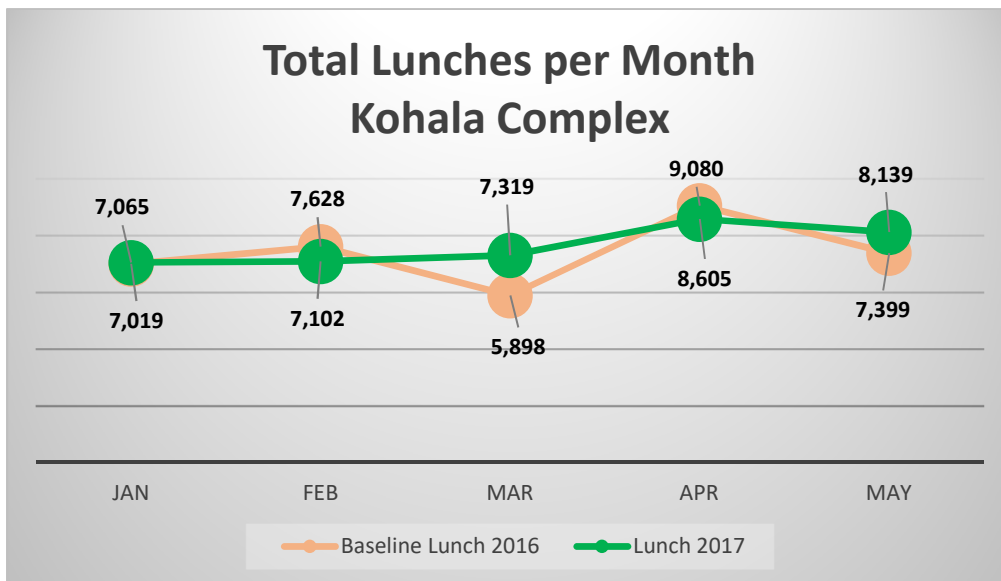
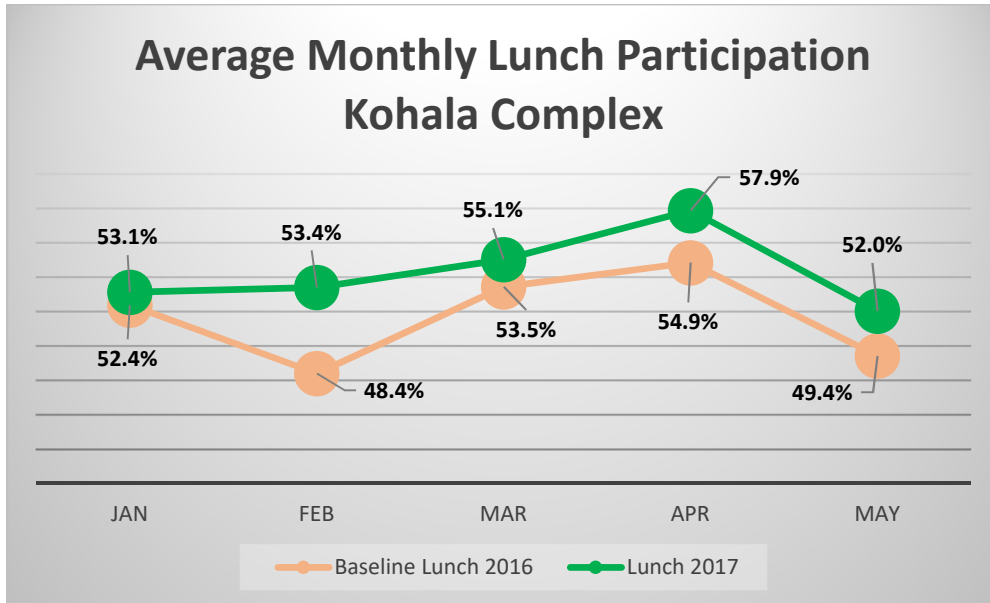
The Kohala Complex saw the percentage of students buying lunch over the course of the Spring Semester go from 49.4% of the population to 52.0% of the population. This is a 2.6% increase in participation rates, but is a 10% increase in actual number of lunches served – going from 7,399 lunches in 2016 to 8,139 in 2017. Over the course of the spring 2017 semester, lunch participation averaged 425 people per day – an 18 person increase per day over Spring 2016 (average 407 per day).

Results for Mililani High School - Baseline to Goals

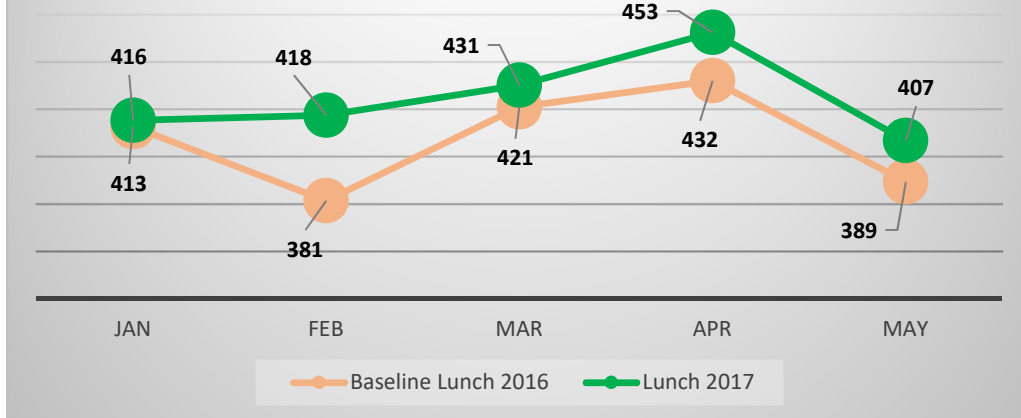
Lunch

Lunch Counts by Month	Baseline Lunch 2016	5 % Increase Goal	Lunch 2018	Actual Inc. to Goal	Actual Increase %
January	7,019	7,370	7,065	(305)	1%
February	7,628	8,009	7,102	(907)	-7%
March	5,898	6,193	7,319	1,126	24%
April	9,080	9,534	8,605	(929)	-5%
May	7,399	7,769	8,139	370	10%
TOTAL	37,024	38,875	38,230	(645)	3%

Below are charts to graphically show the changes in meals purchased by month at Kohala Complex for the Spring Semester 2017 over the Baseline of Spring Semester 2016.



Average Daily Lunch Count Kohala Complex



Breakfast

Participation by Month – Kohala Complex						
	January	February	March	April	May	Total
Service Days 2016	17	20	14	21	19	91
Service Days 2017	17	17	17	19	20	90
	January	February	March	April	May	Total
Baseline Breakfast 2016	3,713	3,583	2,694	4,347	3,451	17,788
Breakfast 2017	2,867	3,011	3,029	3,629	3,585	16,121
Variance	-846	-572	335	-718	134	-1,667
% Change	-22.8%	-16.0%	12.4%	-16.5%	3.9%	-9.4%
Participation by Day (Average)						
	January	February	March	April	May	Total
Service Days 2016	17	20	14	21	19	91
Service Days 2017	17	17	17	19	20	90
	January	February	March	April	May	Average
Baseline Breakfast 2016	218	179	192	207	182	195
Breakfast 2017	169	177	178	191	179	179
Variance	-50	-2	-14	-16	-2	(16)
% Change	-22.8%	-1.1%	-7.4%	-7.7%	-1.3%	-8.4%

Lunch

Participation by Month - Kohala Complex						
	January	February	March	April	May	Total
Service Days 2016	17	20	14	21	19	91
Service Days 2017	17	17	17	19	20	90
	January	February	March	April	May	Total
Baseline Lunch 2016	7,019	7,628	5,898	9,080	7,399	37,024
Lunch 2017	7,065	7,102	7,319	8,605	8,139	38,230
Variance	46	-526	1,421	-475	740	1,206
% Change	0.7%	-6.9%	24.1%	-5.2%	10.0%	3.3%
Participation by Day (Average)						
	January	February	March	April	May	Average
Service Days 2016	17	20	14	21	19	91
Service Days 2017	17	17	17	19	20	90
	January	February	March	April	May	Average
Baseline Lunch 2016	413	381	421	432	389	407
Lunch 2017	416	418	431	453	407	425
Variance	3	36	9	21	18	18
% Change	0.7%	9.5%	2.2%	4.7%	4.5%	4.4%

OUTCOME: INCREASE FRESH FOOD AND STUDENT SATISFACTION

INDICATORS: Increase in fresh vs. Processed foods used in school meals at project schools. Student feedback via taste tests and surveys.

TARGETS: 60% Fresh Food. Student satisfaction rates of 80%.

Overview: Increase Fresh Food Utilization:

School kitchens predominately employ individuals without culinary training or experience. Preparing food from boxes and cans does not necessitate such skills but cooking from scratch requires a basic level of training to learn how to make food and continued training to become skilled at making food taste better.

Currently, SFSB training for school cafeteria workers is not sufficient, and training needs will increase with a scratch cooking program.

The successes achieved from utilizing fresh foods at the Kohala Complex and at Mililani High School are in part attributed to:

- BGP's daily training to improve culinary skills, teamwork, and leadership
- BGP's belief in the staff to execute the work required
- BGP's attitude of supporting the kitchen staff to win
- Willingness of staff to learn new skills

The results of such efforts lead to better tasting food and more satisfied customers, as well as contributing to building customer palates for nutrient dense foods above low-quality junk food to enable students to live a healthy, energized life.

Food preparation takes time. Accurately estimating the amount of food needed minimizes wasted labor. Cutting up raw chicken or fresh papaya takes more time which is why BGP trained staff on correct forecasting and on how to set up work stations where teams can collaborate in the preparation of the food. In addition to more efficient operations and better tasting food, the teamwork leads to more satisfied employees.

The following comments from cafeteria staff (in their own words) at Mililani High School demonstrate their satisfaction:

"I love the teamwork. And the new menu!"

"This work makes it easier for every work station."

"This program makes me work with my team to cook healthy food for kids. I love it!"

"Love the program. It's more healthy for the kids and they waste less."

"We now serve good food and it developed a good relationship with our co-workers."

Students need to be thought of as customers in every step of school food service operations. The more their voice is encouraged and listened to, the more satisfied they will be with the meals provided.

Finally, the staff need training for receiving products. In general, they accept what comes in without confirming orders due in part to a lack of training and to poor delivery times during peak production. This allows vendors to bring low quality fresh food that is either too old, not ripe for the timing it's needed, or non-local produce when local is ordered. Additionally, when staff do not check the delivery against the order vendors can deliver insufficient quantities of food compared to what was ordered.

Data:

Invoices are submitted to FMS in a very unorganized way which makes the data entry difficult. A more organized submittal process will make data entry easier which will create clear reports for SFSB and the cafeteria to review to understand where they stand in reaching their goals and if additional actions are required.

They are also not submitted to SFSB so there is no review or tracking on purchases done to ensure financial goals are being addressed.

Vendor invoices are gathered together by the kitchen manager and sent as an ATP Report. There is not a set way for these reports to be sent. Reports can span weeks if not months, so data can be entered into the accounting system late. Monthly reports should be reviewed within a week or so of month end to see if there are trends that need to be addressed. If expenses are entered late, they will not show up in the monthly report in a timely manner and a falsely positive financial situation may be initially reported.

In Kohala, BGP was able to tabulate data based on the date of the invoice. This was possible because BGP employed a full-time data person that worked in the Kohala kitchen and could record invoices as they came in. A dedicated data person for the second-year contract was promised but was never provided to BGP.

Definitions:

Fresh foods are raw ingredients that have not been turned into anything else. Examples include head lettuce or other whole vegetables, whole fruit, ground beef in bulk, and raw chicken parts. Fresh foods also include single items that are packaged for storage and transport that are generally either not available in a "raw" state or are not practical to use for production from "raw". Examples of this include flour, rice, canned whole vegetables or beans, oils and other natural flavorings.

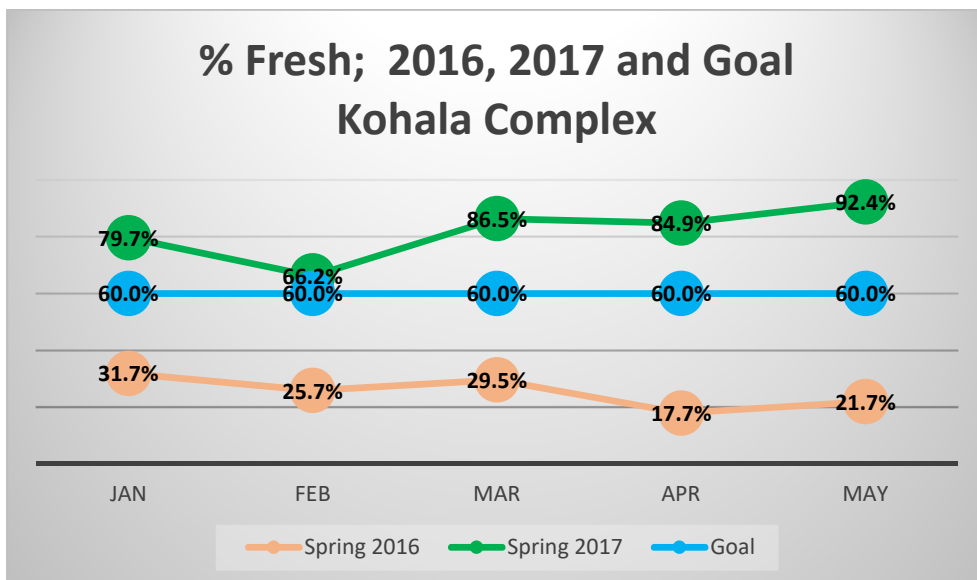
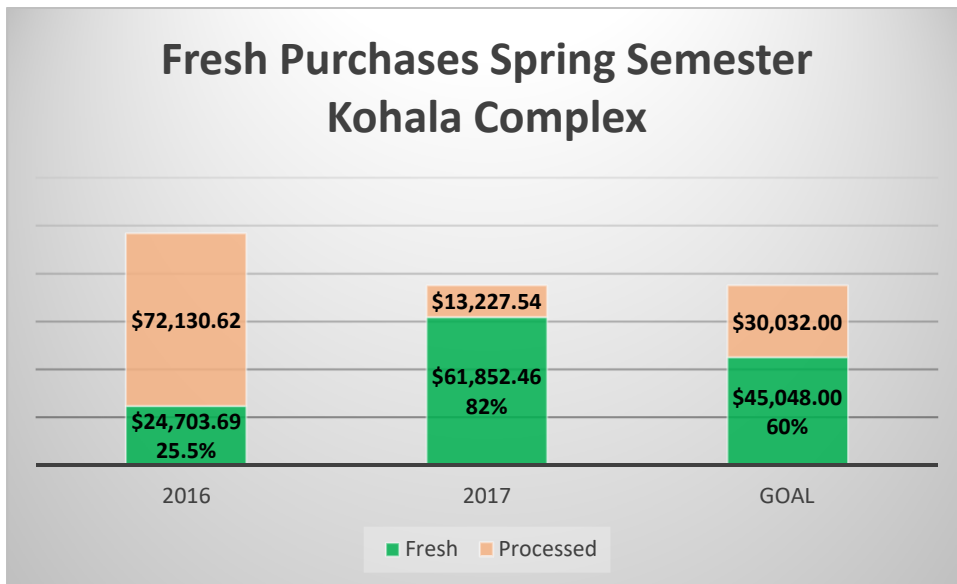
Processed foods started out as raw ingredients, but then have been altered and/or combined with other ingredients to make something new. Examples include most items from a can, pre-pattied burgers or pre-made frozen chicken fingers, and cut vegetables.

All milk is processed for this data, since it is received in individual containers.

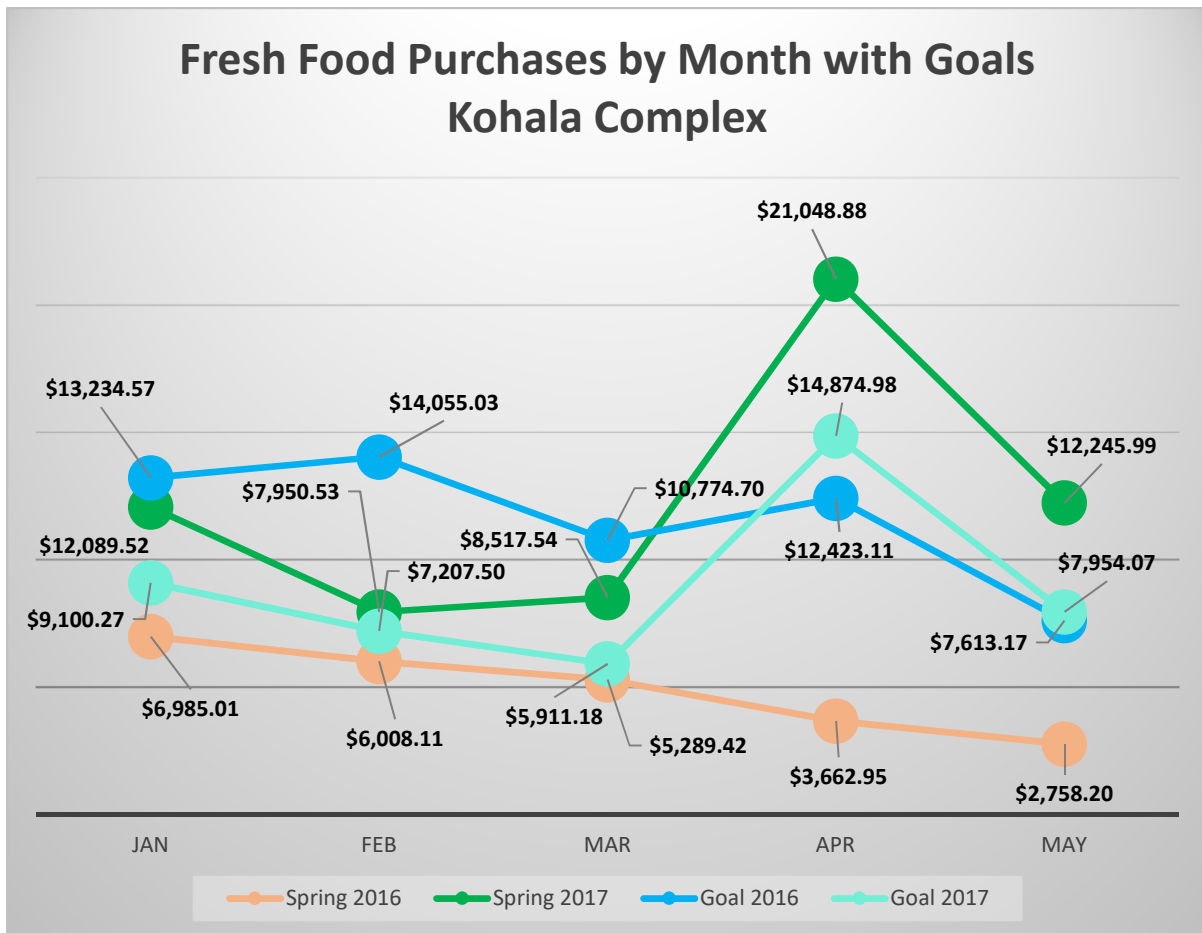
Fresh Federal Commodities are not included since they are not an expense to the school.

As to be expected, training at Kohala focused on coaching the Cafeteria Manager and her kitchen team in how to cook with fresh and raw ingredients, while meeting food safety standards and producing meals that students would appreciate.

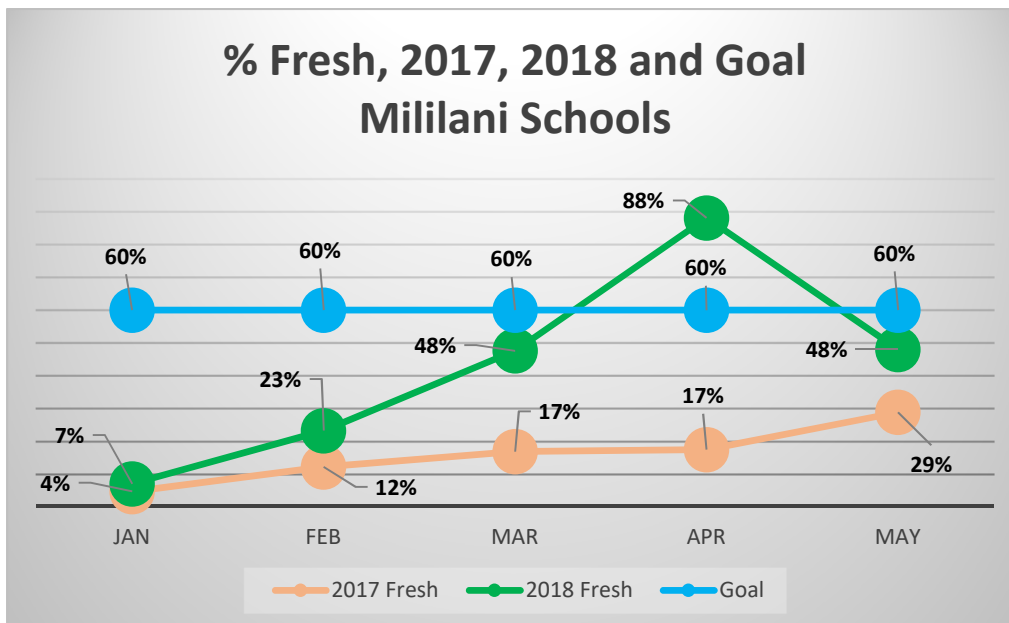
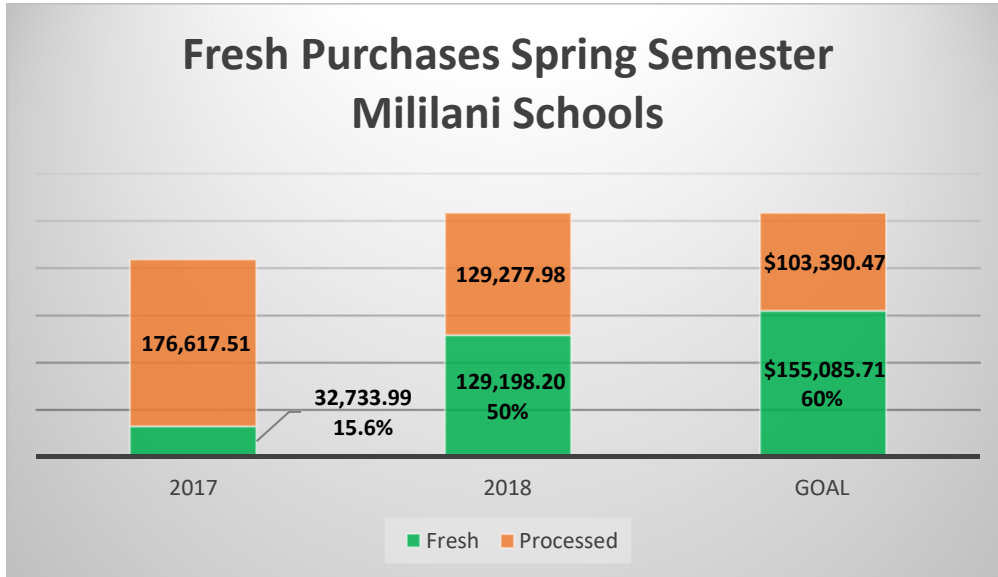
As for every component of this Farm-to-School model, incorporating fresh food into meals is a process. At Kohala, the month of February 2017 shows a decrease; the Cafeteria Manager, after the first month of cooking from scratch, felt cautious and ordered more processed food fearing her team would not be ready to continue the hard process started in January. After talking with Greg about it, she realized it was feasible, and fresh food purchases increased again in March.



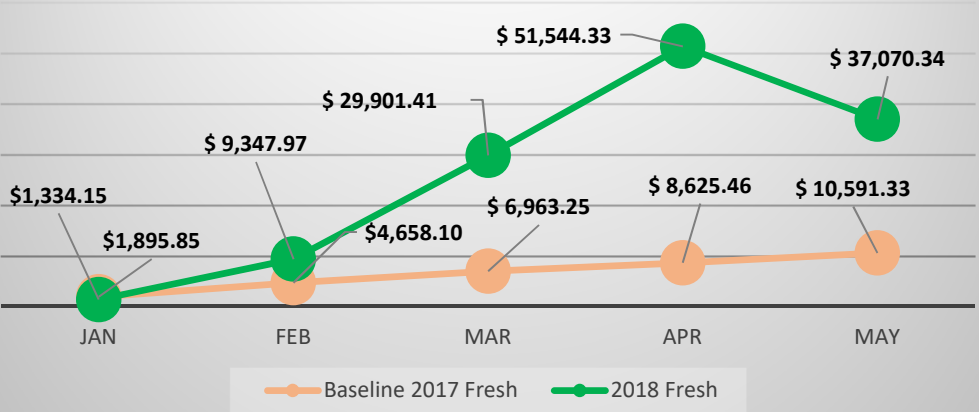
An interesting concept that this chart helps to highlight is how the goal is affected by the amount of food purchased. As total food purchases increase in real dollars, the goal total outlay increases along with them. In 2016, when overproduction was probably significant based on what BGP observed prior to training on proper production levels, overall food purchases were significantly higher. This increases the dollar value required to meet the 60% goal. This graph shows how far below the goal the actual purchases were for 2016. If we had only charted against the dollar amounts calculated for 2017 goals, 2016 would have appeared to have been close to reaching the goal.



One unusual challenge the team faced was that the storerooms and freezers at Mililani were full to capacity – well beyond what was necessary to run the cafeteria from day to day. In an effort to not waste food that was purchased and on hand, these items were used prior to buying any new, and thus, fresh items. As the reserves were diminished, fresh food was purchased in place of the frozen or packaged foods that had been on hand.



Comparison of Fresh Purchases Mililani Schools



Overview: Student Satisfaction:

120 students from Mililani High School discussed 'Aina Pono during two student Senate meetings and provided input about the program. During the first meeting students shared their thoughts about what foods they would like to see on the menu. During the second meeting students shared their thoughts about what is working and not working about the program. The student voice contributes to their satisfaction of the meals. The more they have a say in what they eat and how the food is prepared, the more they are vested in the program.

At Kohala, BGP and the Cafeteria Manager met with a large variety of students in all three schools and asked the following questions:

1. What is working about the food in the cafeteria and cafeteria in general?
2. What is not working?
3. If you had a magic wand, what would you do differently? What foods do you want to see?

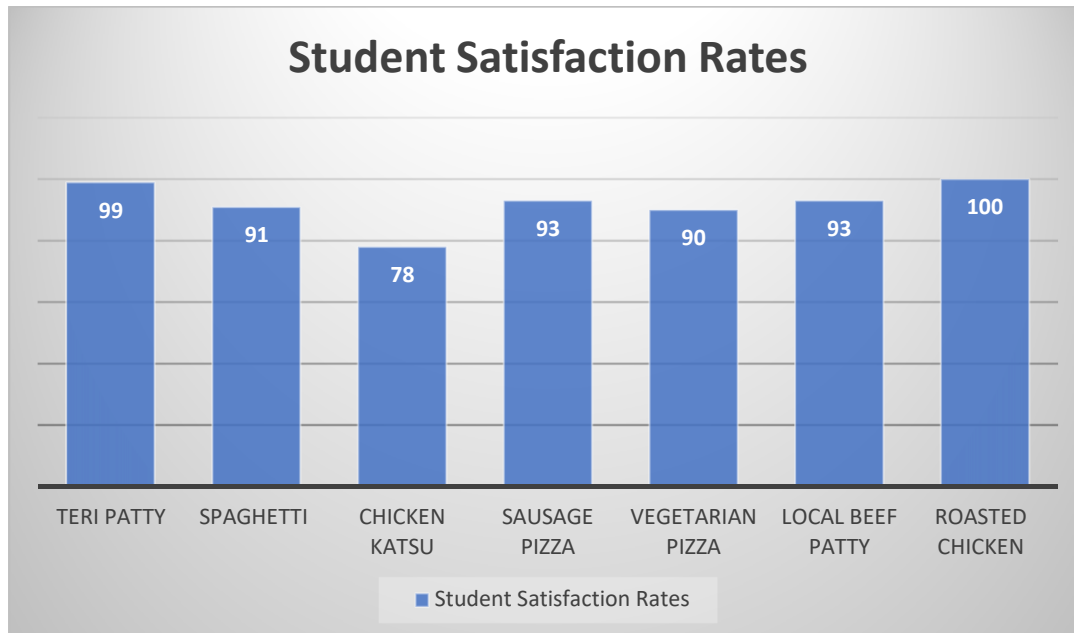
Once we collected all that information, we started creating recipes by merging it with what the cafeteria staff wanted to cook and what the local farmers were growing, while also following USDA standards and budgetary constraints. Cooks learned how to prepare the new food and then we went back to the classrooms and asked students to taste the food and provide us with feedback.

We did not go live with any menu items until we had the Kohala students' "thumbs up". Six taste testings were done and written surveys were conducted in November and December 2016 for the Winter menu that we had planned to launch on January 9th, 2017. New surveys were conducted in February 2017 to collect feedback on the Winter menu and suggestions for the creation of the new Spring menu that went live on March 28th, 2017.

BGP and the Mililani cafeteria staff conducted taste tests for the spaghetti and meatball lunch with students at Mililani High, Mililani Waena, and Mililani Uka to further engage their voice into the program. 268 students in grades 1 through 12 provided written feedback (on paper) expressing their opinions about the spaghetti and meatballs and garlic bread. The cafeteria staff reviewed the student suggestions and made adjustments to the recipes prior to serving the spaghetti and meatball lunch. BGP and the Mililani cafeteria staff conducted taste tests for the pizza and received approximately 500 written responses from students to inform changes and improvements to the recipe. The taste tests allowed student input to guide the recipe improvements which contributed to exceeding the target for student satisfaction rates.

BGP sent eight surveys during the course of the semester to evaluate student satisfaction of the meals being served and received a total of 817 responses. We used Google Forms to gain written feedback from high school students through email and to elementary school students through their classrooms. The student satisfaction rates in the charts below are determined by students indicating that they liked the meal served.

The chicken katsu and the sausage pizza responses include students from grades K-12. The rest are 9-12 only. All dishes except the chicken katsu exceeded the target satisfaction rate of 80%. In general, elementary school kids have different preferences than high school students. However, the menu targets high school student preferences more often. Therefore, lower ratings can occur when elementary student opinions are considered. Additionally, the food for elementary school students is prepared in the early morning for transport from the high school cafeteria. When food sits around for hours the quality of the food diminishes.



The following are direct quotes from students in responses to the question, “What did you like about the lunch?” (grammar, punctuation and wording were left unedited)

“veggies and patty were fresh and not frozen”

“flavor was great”

“good beef”

“there were a lot of veggie choices”

“I liked the fresh vegetables (they were also tastier than usual). I also liked the patty with the veggie bits inside – yum”

“that they cooked from scratch”

“It was new, it tasted great, reminded me of the Teri beef at big city diner.”

“it’s not crap, it actually tastes good”

“has more flavor in the vegetables”

“it's really different from the other food we had and by different I mean it in a very positive way!”

“It looked appetizing.”

“I felt like I was eating something that belonged inside of me, unlike the other canned foods, which made me feel more confident and safer about eating school lunch.”

“The chicken tasted like chicken. The kimchee was something new to eat and really good.”

The following are student survey responses to the question, “What reason would motivate you to eat the school lunch?” (This question was asked of students who answered the survey saying they did not eat the school lunch.)

“If it had a reliable gluten free option”

“shorter lines”

“more vegetarian/vegan options”

“better tasting food”

“I tend to bring my lunch from home because I don't have enough time to go to the caf and come back to my classroom to eat.”

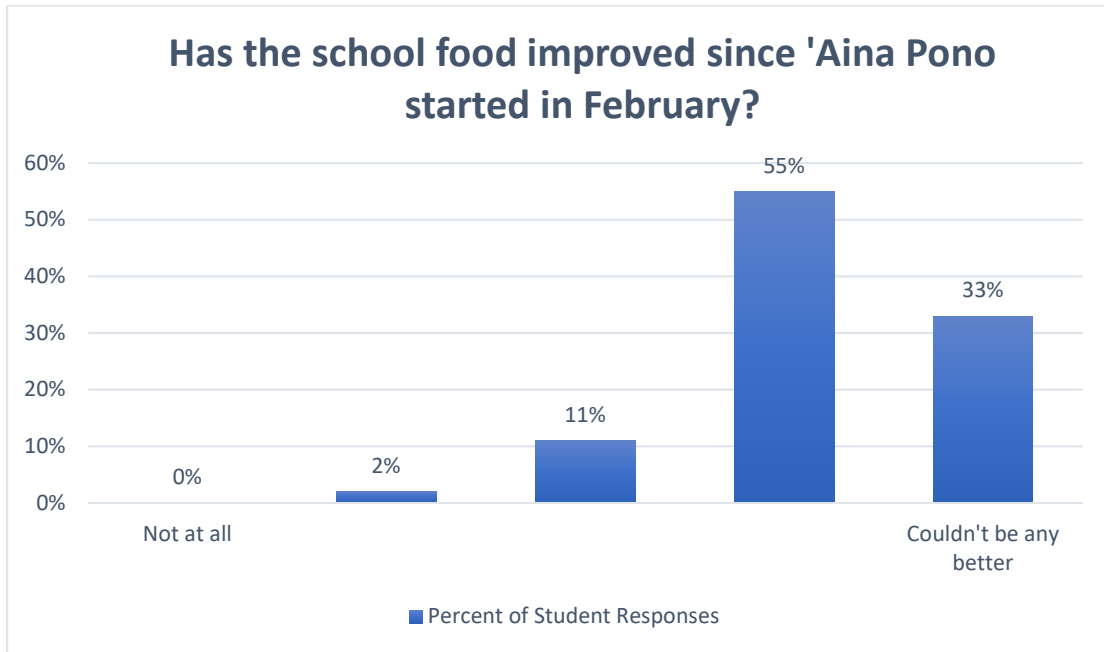
“Fresh salad bar”

“I don't eat school lunch, but more appealing look”

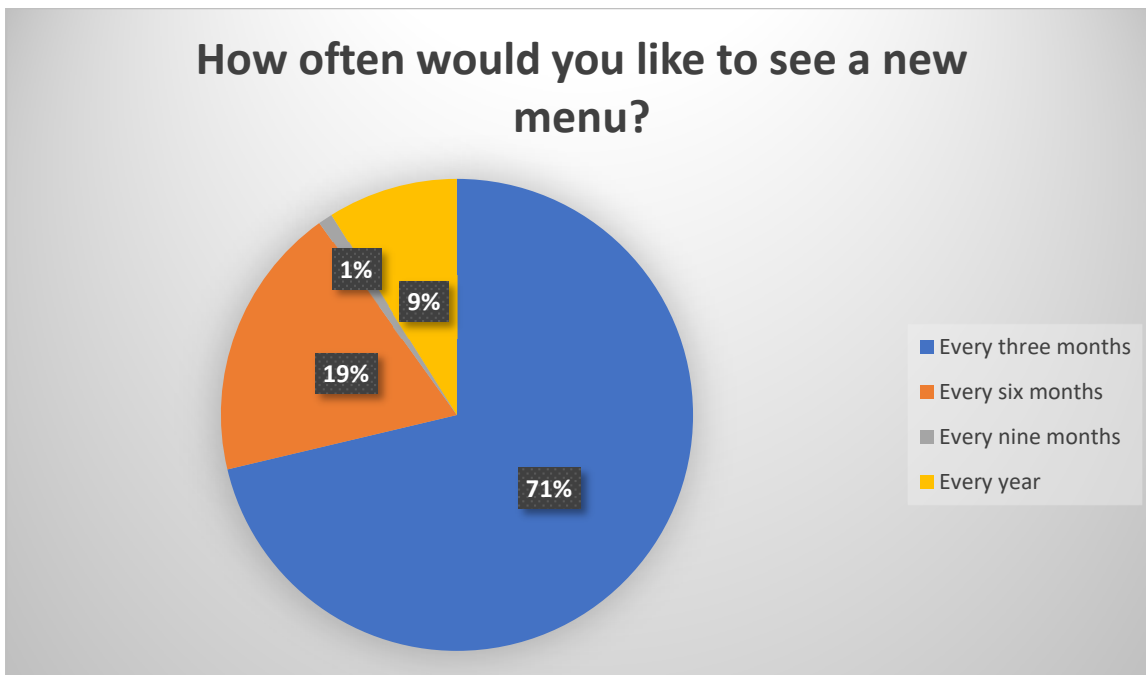
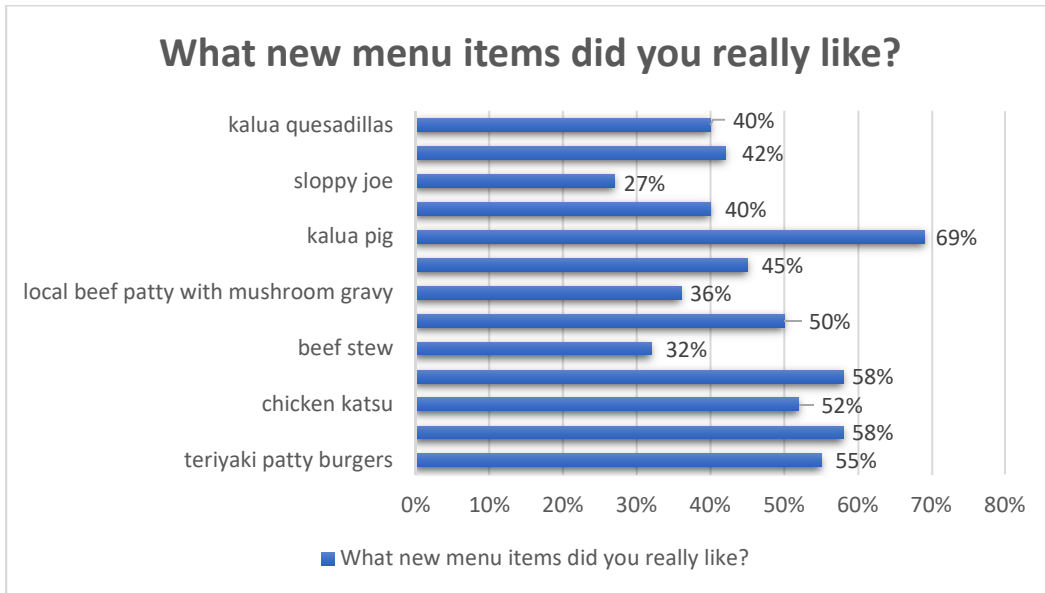
“Bigger portion size, other carbs besides rice and bread”

“Better food options, better food quality, and shorter lunch lines.”

Mililani High School students were surveyed in April about their thoughts on the first few months of 'Aina Pono. The following charts demonstrate their reflections. The students selected from a scale of 1 to 5 with 1 being "Not at all" and 5 being "Couldn't be any better".



The students were asked to indicate which items they really liked from a list of items that had been served. They were allowed to pick as many or as few items as they wanted. A total of 103 students responded to this survey.



OUTCOME: DECREASE FOOD WASTE
INDICATORS: Decrease in food waste.
TARGET: Plate waste declines by 10%.
Overproduction shall not exceed 5%.

Overview:

Waste monitoring is an essential component of an efficiently run cafeteria and can lead to savings that can be invested in more local and fresh food and better equipment, among other things. BGP trained all cafeteria team members at both schools in how to separate waste and measure it daily. At Kohala, cooks weighted waste bins at the end of the last lunch period in the cafeteria and at the end of their shift in the BOH and provided the data to BGP's Data Manager who inputted it in our tracking system. Analyzing this data can help the Cafeteria Managers make decisions on products to buy or to avoid, sharing the information among the staff and collaborating with them will allow them to be more efficient in cutting raw products and in reusing leftovers. Kokua Hawai'i Foundation provided the on site waste monitoring for Mililani.

One interesting discovery that the waste audit revealed was anecdotal evidence that students who are familiar with menu items from eating it at home are more likely to eat it at school.

While waste still exists in 'Aina Pono meals, it tends to be more inedible items such as fruit rinds. While there are currently no plans for composting of organic waste at this time, a future program would divert this type of waste from the main landfill. This would be a positive contribution to the reduction of carbon produced by organic waste decomposing in the landfill. Kohala does divert their organic waste to a local pig farm to feed the pigs.

Data:

At the Kohala schools, BGP started tracking waste from meals served. This is waste that is considered to be front of the house (FOH) waste. FOH is divided in food, milk and rubbish. Rubbish is made up of milk cartons, paper plates, plastic cups, styrofoam bowls, napkins, and utensils.

Kokua Hawai'i Foundation conducted waste audits at Mililani High School (9 days total – 1 'Aina Pono and 8 non-'Aina Pono), Mililani Uka Elementary School (5 days total – 2 'Aina Pono and 3 non-'Aina Pono), and Mililani Waena Elementary School (4 days total – 2 'Aina Pono and 2 non-'Aina Pono).

Kokua Hawai'i Foundation conducted the waste audit at Mililani High School February 2-16, and conducted waste audits at Uka and Waena March 12-16. A spot check conducted in April yielded useless data due to the serving of leftovers from the previous day. Kokua Hawai'i Foundation conducted a final spot check in May.

Waste audits and spot checks were conducted at the High School and at Uka Elementary School. Waena Elementary did not respond to a request to conduct a spot check, so no data was gathered there for that task. The schools are noted in the charts or graphs so that it is clear which location is being discussed.

Reduction in Plate Waste

When we started working at Kohala Complex, the staff prepared food using volume measurements. Our experience proves that by converting recipes from volume to weight, measurements are more exact, food tastes better, less food is wasted, and more money is saved. It is for all these reasons that we purchased scales and trained the staff in using them. We were not completely successful in this area. Power was never set up for the scales to work at each station, and the staff was never told by their Supervisors that this was a mandatory change. Staff saw the benefits of adopting this method but have not fully embraced it yet.

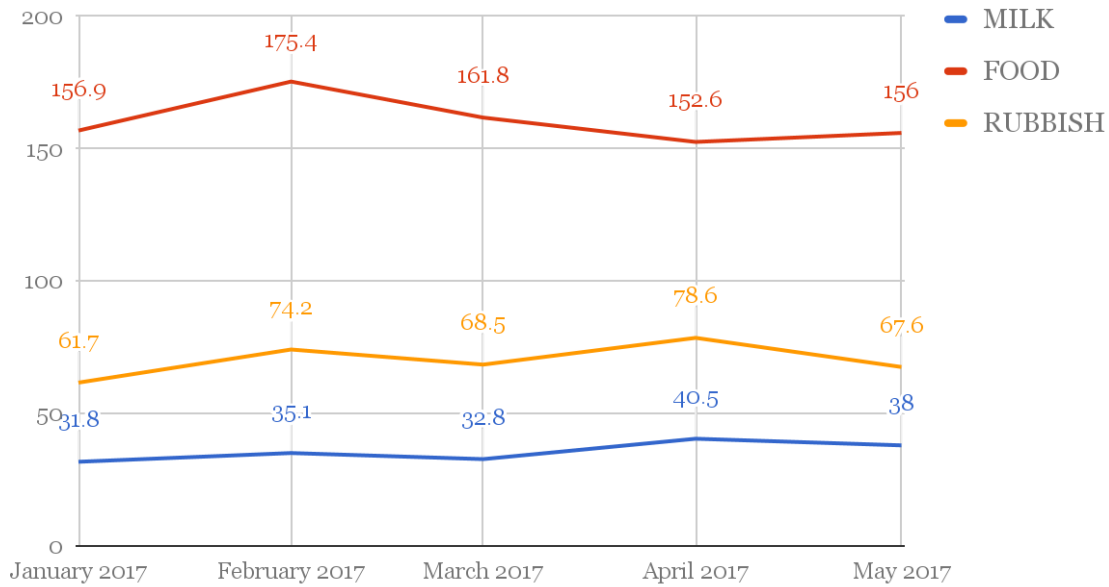
Another problem we observed at Kohala was related to food overproduction. Roughly 75 orders of additional lunches were made daily; this resulted in food waste and unnecessary time spent to produce food that was not going to be eaten and that could be devoted to other tasks. We were successful in training staff to produce more accurate quantities of food and to learn from the data they collected. The Cafeteria Manager collects production data on paper forms; we transferred that data into digital spreadsheets for the months of March, April, and May 2017 and showed her how to use them. Again, without a directive from DOE that states this is part of her duties, we are afraid this process will not continue on its own.

Over the last months where BGP was on site at Kohala, FOH waste has shown alternating trends; increasing and then decreasing. The increase in milk and rubbish (which is made up of milk cartons, paper plates, plastic cups, styrofoam bowls, napkins, and utensils) for April 2017 is believed to be due to two factors: 1) higher participation in the meal program and 2) wasted milk cartons due to the decision of the school staff to eliminate offer vs serve for the first group of students (pre-k through 2) - students are given all components and required to take a milk carton. BGP continued to watch these trends and study the drivers behind increases or decreases to help steady the trends. May 2017 reflected a decrease in the amount of rubbish as the school year closed out. BGP expects, with continued practice of portion and serving sizes as well as education for the students and staff in offer vs serve, that this number can and will decrease. In addition, no longer using reusable trays and the installation of a functioning dishwasher would reduce the amount of rubbish produced. The chart below shows such trends.

After working with Kohala, we implemented a more rigorous tracking program for over production tracking and reduction at Mililani.

Waste Tracking at Kohala High School and Kohala Elementary School

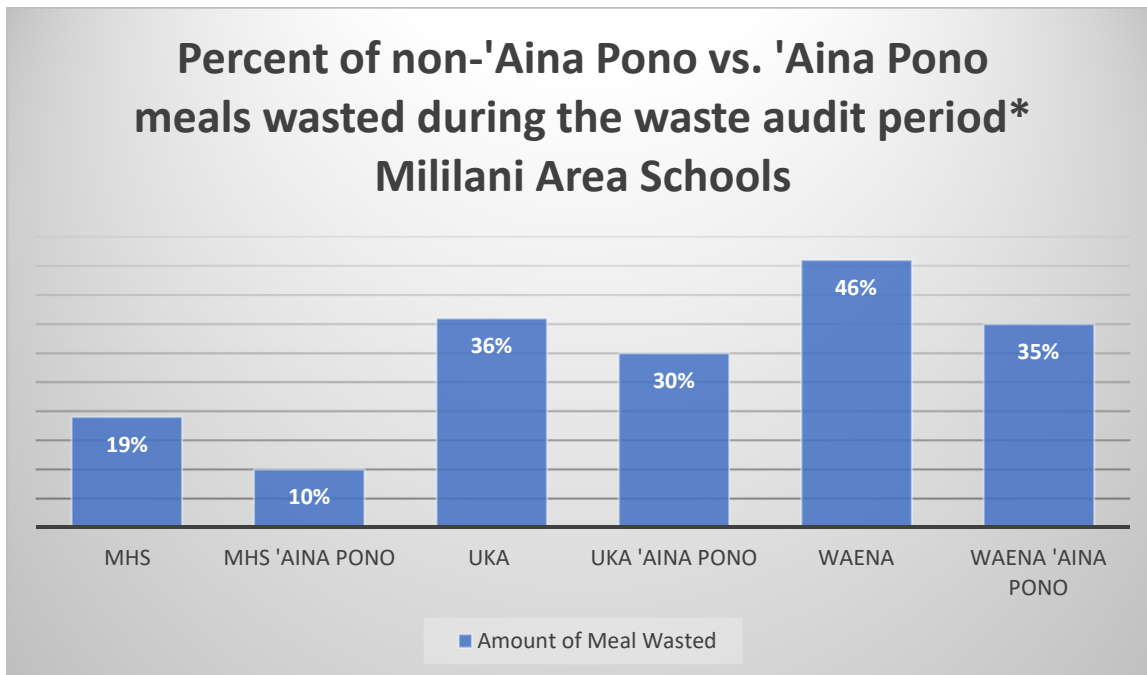
FOH waste; average per day in lbs



BGP also continually trained staff at Mililani on how to reduce overproduction. This effort is reflected in the progressive reduction shown in the data below. At Mililani High School the team made significant strides toward estimating much closer to what was needed for both breakfast and lunch for the three schools served from this kitchen. As an example, to explain the magnitude of overproduction waste, food production at Mililani High School for all three schools was tracked in February 2018 with 24.6% overproduction for breakfast and 13% overproduction for lunch. If you extrapolate this over the entire SFSB where 20,000 breakfasts and 100,000 lunches are made daily this would mean almost 5,000 too many breakfasts per day and 13,000 lunches per day would be produced. This is a huge waste of time and money. The labor saved by not making hundreds too many entrées can be redirected to scratch cooking – which does tend to take more time to prepare and/or cook per item. Additional labor dollar savings plus the money saved from not buying and then throwing away overproduced food could go for higher quality local food purchases. As overproduction and waste are reigned in and training is accomplished current staffing levels should be adequate to produce the correct amount of scratch cooked items.

Prior to training by BGP, the Mililani staff did not know how to effectively evaluate Food Production Records for overproduction, nor was it a priority in their daily operations. Additionally, the staff did not measure overproduction by weight.

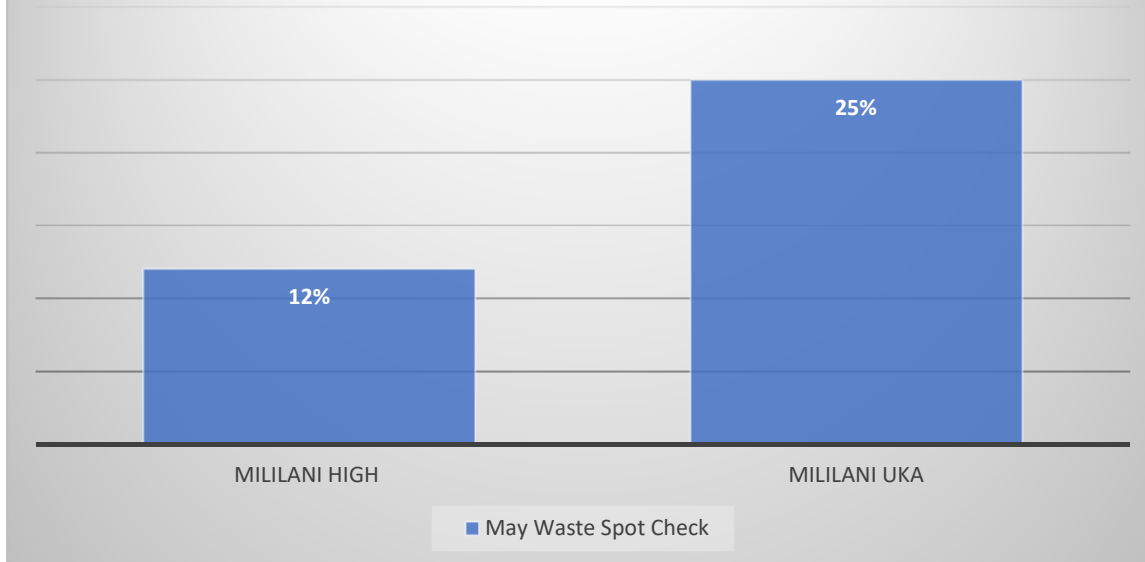
For Mililani, on days with new farm to school meals, the waste reduced during the initial waste audit by an average of 9% at the high school, 7% at Uka, and 10% at Waena compared to previous menu items. This percent reduction accounts for the starting weights of food and number of trays/entrees collected per day.



*Percentage accounts for the starting weights of food and the number of trays/entrees collected per day.

<i>Percent of Food Waste</i>	<i>Target</i>	<i>Non 'Aina Pono</i>	<i>'Aina Pono</i>	<i>% Reduction – Waste Audit</i>
<i>Mililani High School</i>	10% reduction	19%	10%	9% reduction
<i>Mililani Uka Elementary School</i>	10% reduction	36%	30%	6% reduction
<i>Mililani Waena Elementary School</i>	10% reduction	46%	35%	11% reduction

May Waste Spot Check



<i>Percent of Food Waste</i>	<i>Target</i>	<i>Non 'Aina Pono</i>	<i>% Reduction – May spot check</i>
<i>Mililani High School</i>	10% reduction	19%	7% reduction
<i>Mililani Uka Elementary School</i>	10% reduction	36%	11% reduction
<i>Mililani Waena Elementary School</i>	10% reduction	46%	N/A*

*Mililani Waena Elementary School was unresponsive to requests to conduct a spot check audit.

The following raw numbers do not account for the number of meals sold or the pre-weight of the meal:

Average pounds of waste for the THREE schools during the waste audit period:

269.1 pounds per day on non-'Aina Pono days

169.8 pounds per day on 'Aina Pono days

Waste audit numbers per school:

Mililani High school

8 days non-'Aina Pono = 142.4 average pounds per day

1 day 'Aina Pono = 31.6 pounds

Mililani Uka Elementary School

3 days non-'Aina Pono = 305.4 average pounds per day

2 days 'Aina Pono = 211.8 average pounds per day

Mililani Waena Elementary School

2 days non-'Aina Pono = 359.6 average pounds per day

2 days 'Aina Pono = 266 average pounds per day

Waste Audit Note:

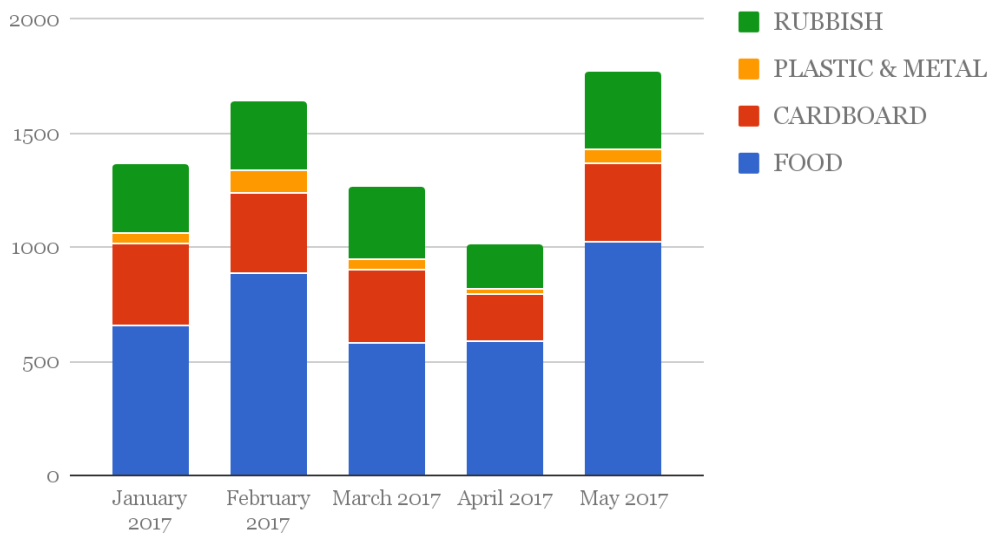
An average of 42 milk cartons were thrown away unopened each day of the waste audit at Mililani Uka and Mililani Waena combined.

Reduction in Back of House Waste and Overproduction

In January 2017 BGP started tracking all waste produced from the Kohala kitchen; this is referred to as back of the house (BOH) waste. It is divided into rubbish, plastic and metal, cardboard, and food. The Complex already had a recycling and composting program in place prior to the Pilot Project start date. BGP's goal was to drive efficiencies so that less waste would be produced. The chart below shows the trend in BOH waste production and the weight of each component.

Kohala Back of House Waste

BOH waste; monthly totals in lbs

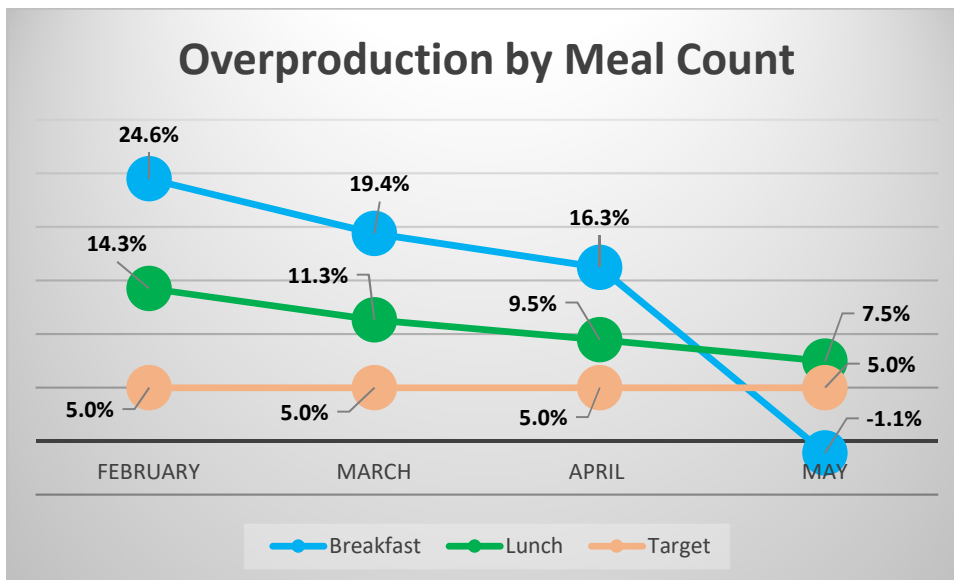


As April and May rubbish increased the amount of waste not diverted from the landfill increased too. Overall waste diversion from the landfill dropped significantly. The percentage of combined waste from FOH and BOH is still very high at 71.4% as an average for Jan-May 2017.

Kohala Waste (Combined FOH & BOH)			
Month	Diverted; in lbs	Landfill; in lbs	% Diverted
January	4,264.55	1,360.5	75.8%
February	4,543.1	1,489.5	75.3%
March	4,249.6	1,489.6	74%
April	4,293.2	1,612	72.7%
May	5,304.3	3,124.8	63%
Totals	22,654.75	9,076.4	71.4%

Overproduction was also tracked at Mililani. The chart below shows the percentage variance of overproduction counts when compared to the goals for each month. As a review of the numbers, in April, staff made over 100% more lunches than the goal for overage (3,696 made compared to 1,764 as a goal), so they made double the number of unused lunches than planned. In February, they made six times more breakfasts than the overproduction goal.

Mililani Schools Overproduction				
	Actual Overage (portions)	5% Overage Goal (portions)	Variance	%
Breakfast				
February	1,454	223	1,231	551%
March	949	197	752	382%
April	1,123	289	834	289%
May	(40)	182	(222)	-122%
Lunch	Actual Overage	Goal	Variance	%
February	4,703	1,410	3,293	234%
March	3,216	1,257	1,959	156%
April	3,696	1,764	1,932	110%
May	1,667	1,033	634	61%



While there has been great progress, there is more to be done and the staff cannot get complacent on accurately forecasting meal counts.

Overproduction as it Relates to Labor Hours

Overproduction results in labor loss in addition to food loss.

BGP worked with cafeteria staff at Mililani High School to identify the labor hours for each meal served to the three Mililani area schools served by the High School to estimate labor loss. All food production happened at the production kitchen within the Mililani High School kitchen. There was no production done at Uka or Waena Elementary Schools.

Based on production times for the different meal items over the course of the semester, labor hours per meal item were estimated. These estimates were then applied to the May menu for both the actual food produced and for the overproduction of food (as if the correct forecasting was not instituted) and labor dollars were calculated for each scenario.

As an example – Biscuit with Cinnamon Swirl takes four hours to make and the fruit side takes two hours to make for a total of six man-hours for this breakfast entrée. If you were to make 25% too much of those items, you would have wasted an hour and a half. That hour and a half saved can go towards making lunch, prepping for the next day if appropriate or cleaning. Or could be saved and the money applied to other expenses like local food or new appliances or equipment.

The total potential lost labor hours from 25% (rounded up for ease) breakfast overestimation/overproduction would equal 26 lost labor hours or over three 8-hour work days per month. Without the training BGP conducted to reduce overproduction, this trend would have resulted in 31 lost labor hours or almost four 8-hour work days in the month of May.

The total potential lost labor hours from 13% lunch overestimation/overproduction would equal 141.2 lost labor hours or ~ (18) 8-hour work days per month. Without overproduction training, this trend would have resulted in 182 lost man hours or ~ (23) 8-hour work days in the month of May. The “saved” labor hours went into the production of better food items.

Fortunately, BGP training prevented this trend to continue and overproduction went from 24.6% at breakfast in February to underproducing by 1% in May while lunch decreased during the same time period from 13% to 7%. The lesson learned from this explanation is that the additional labor required to cook from scratch is offset by reducing the time spent on making unneeded servings of menu items.

Overproduction was significantly reduced for both meal periods between February and May but was still above the goal for lunch at the end of the school year. Continued vigilance is needed as complacency can creep back in and food waste is a significant contribution to overall financial loss.

While scratch cooked items are more time intensive to prepare, the combination of more efficiencies in production techniques and correct production amounts can offset any potential increase in labor hours. In conclusion, you should not need any more labor hours to produce the correct amount of fresh, scratch cooked food.

OUTCOME: INCREASE LOCAL FOOD

INDICATORS: Increase in quantity of fresh, local food procured for school meals at project schools.

TARGET: 40% Local food.

Overview:

During the 2016-17 and 2017-18 school years, SFSB did not have contracts for fresh produce. Our understanding is that they have not had such contracts for the past decade. As a result, managers are required to purchase fresh and local foods either through DOD Fresh or by contacting a DOE approved vendor, obtaining three bids, and completing a 10-B form.

The DOE requires that 3 competing quotes are obtained from vendors. The proof of quote is recorded in a 10-B form. For locally sourced items, it was recommended in the description (Part A) to use the term "Regionally Sourced" in front of the items.

In Section B, filling in the all the information, makes the comparisons.

Sending out for three bids is the requirement, but if no response is obtained from one of them, the process is still valid.

If an item is local and is slightly higher priced, that does not rule it out. If an item is slightly higher priced as the local item and falls within the parameters, in part D, the term that needs to be used is "Geographical preference."

Managers are not accustomed to contacting vendors to find out what they have that's local, and there is not a system set up to identify locally produced food items. Additionally, it is challenging for managers to complete all the necessary steps required to fill out and submit 10-B forms to purchase local food. The managers lack commitment to compliance and have not been trained properly to do this work.

Cafeteria staff, not unlike most people in today's world, are not connected to the local food system and therefore, do not see value in purchasing local food. They do not eat local food at home and need training to realize the importance of contributing to growing the local food system. BGP took the cafeteria staff to Mari's Garden and the Lieutenant Governor's Office set up a tour of Hartung Brothers to connect staff to the food system. Further education and farm tours are needed to develop relationships with farmers and distributors to increase the amount of local food in school cafeterias. The Mililani High School cafeteria manager would order local fruit and the distributor would bring fruit from the mainland in several instances. In many ways, SFSB is at the mercy of the distributors and it would benefit the schools for SFSB to secure influence over the distributors.

School staff are not habituated to communicating about local food being served. BGP worked with cafeteria staff to identify local food and 'Aina Pono items on the published school menu. BGP also worked with cafeteria staff to create signage for the cafeteria to identify local food.

When local foods were brought into the cafeteria, the kids could tell the difference on the plate and they ate more of their food.

Data:

Invoices at Mililani are submitted to FMS in a very unorganized way which makes the data entry difficult. A more organized submittal process will make data entry easier which will create clear reports for SFSB and the cafeteria to review to understand where they stand in reaching their goals and if additional actions are required.

In Kohala, BGP was able to tabulate data based on the date of the invoice. This was possible because BGP employed a full-time data person that worked in the Kohala kitchen and could record invoices as they came in. A dedicated data person for the second year of the contract was promised but was never provided to BGP.

They are also not submitted to SFSB so there is no review or tracking on purchases done to ensure financial goals are being addressed.

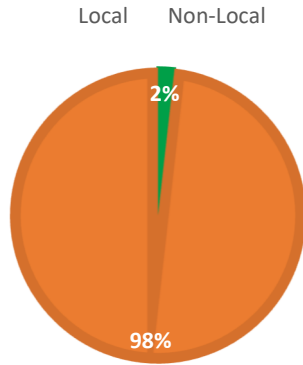
Vendor invoices are gathered together by the kitchen manager and sent as an ATP Report. There is not a set way for these reports to be sent. Reports can span weeks if not months, so data can be entered into the accounting system late. Monthly reports should be reviewed within a week or so of month end to see if there are trends that need to be addressed. If expenses are entered late, they will not show up in the monthly report in a timely manner and a falsely positive financial situation may be initially reported.

Local food comes from information on the invoice identifying the country of origin as "Hawaiian Grown".

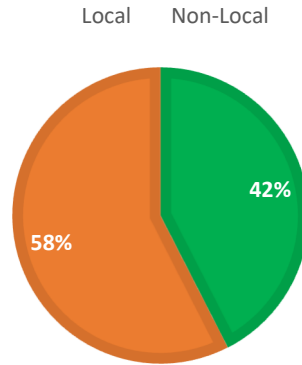
With the help of Jeff Melrose, BGP’s team was able to procure local food for the Kohala Complex kitchen. Often times, vendors distribute a price sheet of their items on a regular basis. Some are weekly, some monthly, and some are updated daily online. Determining if a product is local or not may require reaching out to the vendor to obtain clarification. It is then often seen on the invoice, but not always. Sometimes by calling the distributor it is possible to find out the farm from which the product came. The farm may change regularly depending on who has what product available and when. We paid close attention to the invoices as well. Some items were listed as local and would then say USA. This was not local as defined by this program. If it was local, it would have to say local-Hawaii, or just Hawaii. Another thing we watched for were items that would say packaged in Hawaii. These were item that would be brought in large quantities and then repacked into smaller lots. Packaged in Hawaii was not considered local for this project. It needed to be grown, made, or raised in Hawaii.

Spring Semester - Kohala		
Spring 2016 Local	1,729.59	1.8%
Spring 2016 Non-local	95,104.72	98.2%
	\$96,834.31	
Spring 2017 Local	\$31,862.81	42.5%
Spring 2017 Non-local	\$43,126.47	57.5%
	\$74,989.28	

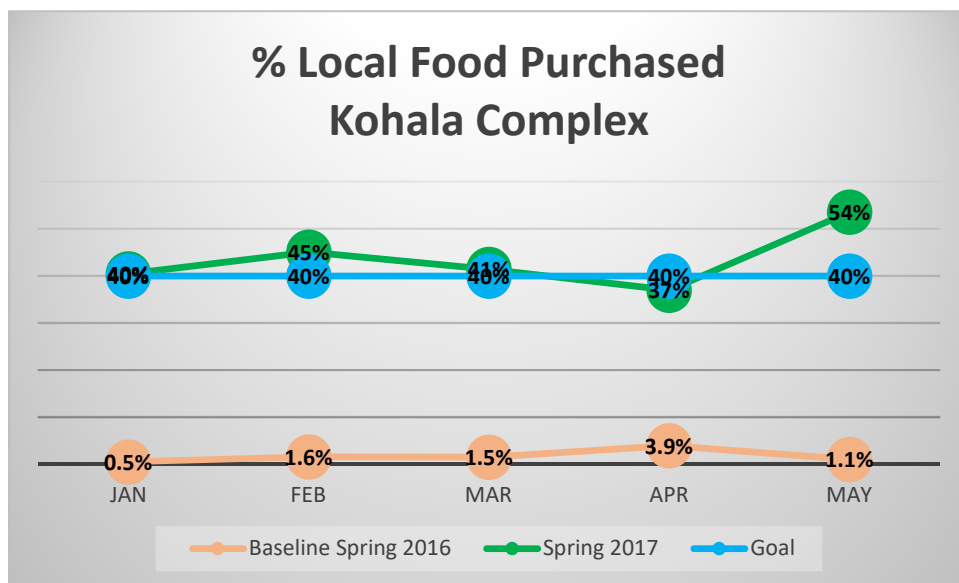
LOCAL FOOD PURCHASES KOHALA COMPLEX JANUARY - MAY 2016



LOCAL FOOD PURCHASES KOHALA COMPLEX JANUARY - MAY 2017



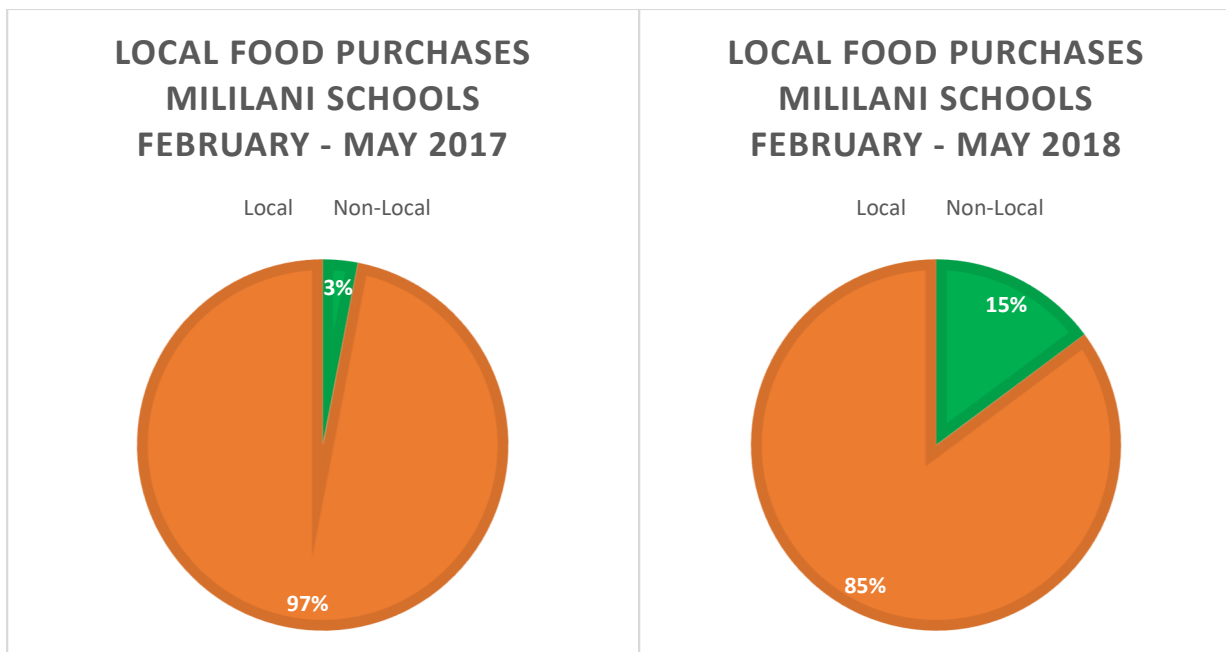
	January		February		March		April		May	
2016 Local	119.46	0.5%	379.23	1.6%	276.29	1.5%	817.70	3.9%	136.91	1.1%
2016 Non-local	21,938.16	99.5%	23,045.82	98.4%	17,681.54	98.5%	19,887.49	96.1%	12,551.71	98.9%
Totals	\$22,057.62		\$23,425.05		\$17,957.83		\$20,705.19		\$12,688.62	
	January		February		March		April		May	
2017 Local	6,139.05	40.5%	5,377.05	45.1%	4,076.50	41.4%	9,169.60	37.0%	7,100.61	53.6%
2017 Non-local	9,028.07	59.5%	6,544.73	54.9%	5,775.46	58.6%	15,622.03	63.0%	6,156.18	46.4%
Totals	\$15,167.12		\$11,921.78		\$9,851.96		\$24,791.63		\$13,256.79	



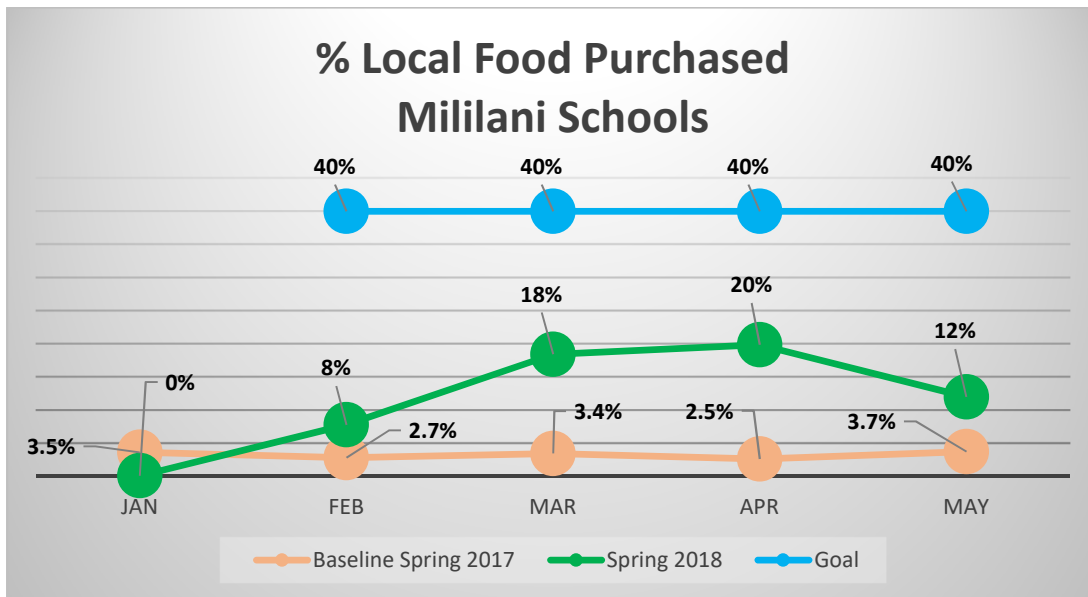
The goal to get to 40% local food was not met at Mililani but significant strides were made – local purchases increase by four times what they had been in 2017. SFSB instructed BGP to keep all purchasing the same in January, so BGP did not push staff to purchase any local food items during that time period. During February through May, buying local was difficult because the current DOE food contract with Y.Hata does not cover fresh produce or beef; managers are unfamiliar with the proper procedures for informal procurement for fresh, local food; and SFSB did not allow the addition of new vendors (new distributors and farmers) from which managers could purchase fresh, local food through informal procurement.

Purchasing local food will become more of a reality when SFSB tailors its menus to include locally grown foods and enters into contracts for food, specifically fresh produce and beef, with vendors on each island. As SFSB becomes more familiar with local agriculture, builds more relationships with local food producers, and enters into contracts that support buying local, purchasing local food will become easier and the benefits will be seen by both the schools and the local communities and farms.

Spring Semester - Mililani		
Spring 2017 Local	5,067.53	3.0%
Spring 2017 Non-local	\$162,058.68	97.0%
	\$167,126.21	
Spring 2018 Local	\$35,436.01	14.8%
Spring 2018 Non-local	\$203,532.62	85.2%
	\$238,968.63	



	February		March		April		May	
Spring 2017 Local	1,056.86	2.7%	1,408.63	3.4%	1,255.44	2.5%	1,346.60	3.7%
Spring 2017 Non-local	37,626.44	97.3%	40,354.83	96.6%	48,570.14	97.5%	35,507.27	96.3%
	\$38,683.30		\$41,763.46		\$49,825.58		\$36,853.87	
Spring 2018 Local	3,111.32	7.7%	11,557.33	18.4%	11,558.44	19.8%	9,208.92	11.9%
Spring 2018 Non-local	37,333.82	92.3%	51,333.54	81.6%	46,830.45	80.2%	68,034.81	88.1%
	\$40,445.14		\$62,890.87		\$58,388.89		\$77,243.73	



The following DOD local food data is not included in the Local Food Purchases chart above since there is no expense to the school. Additionally, the DOD data is not included in the Profit and Loss data in the following section. Funds from the DOD were exhausted prior to the end of the school year in both the baseline year and the current year.

Time period of DOD foods received	January-May 2017	August 2017- May 2018
Total dollar value	\$18,617.74	\$40,690.39
Dollar value of local	\$792.29	\$1,898.83
Percent local	4%	5%

Invoices from the DOD purchases for 2016 were unable to be located for a directly monthly comparison of the two school years.

Spring Semester purchases were as follows:

School Year 2016/2017	School Year 2017/2018
January 2017 = \$308.41	January 2018 = 495.23
February 2017 = 25.21	Funds exhausted
March 2017 = \$420.22	
April 2017 = \$38.45	
Funds exhausted	

Information should be available from DOD Fresh about what items are local. Within the Continental United States, the website for ordering produce shows states of origin so it can be determined if they qualify as local or not. If, at the time of order, DOD Fresh does not offer anything from the State of Hawaii, then at least focus can be put on only purchasing items through DOD Fresh that cannot be found locally through other vendors and farms. As an example, if pineapple is available locally, it should be bought from local farms and DOD Fresh money used to buy items like broccoli and cauliflower or melons during the off season.

OUTCOME: COST-NEUTRAL PROGRAM

IMPLEMENTATION COSTS WILL BE COVERED BY COST-SAVINGS GENERATED BY DECREASED WASTE AND INCREASED EFFICIENCIES.

Overview:

The existing systems do not support financial rigor at every level of the organization to the extent needed to manage a financially viable operation. Furthermore, the financial management system does not satisfy the data needs for 'Aina Pono, a program introduced to address this issue presented by USDA officials. FMS only provides year-to-date data, making for a cumbersome process involving math and leaving room for human error in determining monthly Profit and Loss status which BGP completes for 'Aina Pono schools, but the other 254 schools do not monitor this information. Even then, FMS report months do not coincide with report run dates, making monthly comparisons on a yearly basis incomparable. BGP made the decision to use paper invoices to determine P&L, but this is not a perfect solution since invoices are not necessarily submitted in the month they are purchased. Additionally, BGP does not have access to labor figures and are therefore this information is included in the P&L as estimates.

BGP did not meet anyone in SFSB or DOE who knows the profit and loss per school.

BGP introduced processes for documenting profit and loss, measuring plate waste and overproduction waste, and reviewing kitchen operations which reduced the overall net loss and brought to light opportunities to improve financial management systems. BGP demonstrated that it is possible to cook from scratch with local food and spend less money by reducing waste and implementing operational efficiencies.

Greater emphasis on financial rigor needs to come from the entire chain - the board of directors to the part-time cafeteria substitute. Specific concerns that were noted are:

- School cafeteria managers are not given a budget for the year.
- While the principal that oversees the cafeteria has a budget in every aspect of their school—every department/every function/all extra-curricular activities/grounds keeping etc. there is no budget for the foodservice operation.
- There are no inventory controls—so many schools hoard supplies and having money just sit on a shelf makes not good budget controls.
- Profit and Loss information is not shared with people who can either enforce change or affect changes that are needed.
- There is no straightforward way to know profit and loss in real time or really anytime—so making adjustments from 'know your numbers' cannot be made.
- The financial house is like a raft blowing around in the ocean –people are on the raft—but they do not know they are not in control.

Invoices are submitted to FMS in a very unorganized way which makes the data entry difficult. A more organized submittal process will make data entry easier which will create clear reports for SFSB and the cafeteria to review to understand where they stand in reaching their goals and if additional actions are required.

They are also not submitted to SFSB so there is no review or tracking on purchases done to ensure financial goals are being addressed.

Vendor invoices are gathered together by the kitchen manager and sent as an ATP Report. There is not a set way for these reports to be sent. Reports can span weeks if not months, so data can be entered into the accounting system late. Monthly reports should be reviewed within a week or so of month end to see if there are trends that need to be addressed. If expenses are entered late, they will not show up in the monthly report in a timely manner and a falsely positive financial situation may be initially reported. For example, the low loss in January 2018 corresponds to the program start when a high proportion of new work was introduced and the high loss in March 2018 coincides with spring break when the cafeteria manager had extra time to complete paperwork.

In Kohala, BGP was able to tabulate data based on the date of the invoice. This was possible because BGP employed a full-time data person that worked in the Kohala kitchen and could record invoices as they came in. A dedicated data person for the second-year contract was promised but was never provided to BGP.

Income represents all monies generated from the services provided. This includes cost at the Point of Sale and the Federal Reimbursement from USDA.

Expenses represent labor (salary and fringe), food, and supplies (paper, cleaning, clothing, office).

Kohala Data

While the Foodservices Division still lost money, the new approaches reduced that loss by 38%. As you can see from the chart below, expenses significantly decreased because of a focus on planning and proper production and inventory controls. Revenue did also decrease but that was because there was one less day of school in the Spring Semester in 2017 than in 2016. If there had been one more set of meals served to the 1,328 students enrolled in the three schools, there would have been approximately 300 more breakfasts served and 720 more lunches served, based on average semester participation rates.

Summary	Baseline Jan. 2016	Baseline Feb. 2016	Baseline Mar. 2016	Baseline Apr. 2016	Baseline May 2016	Baseline Total
Income	\$36,065.89	\$38,521.35	\$29,374.49	\$46,277.37	\$38,037.81	\$188,276.91
Expenses	\$58,435.65	\$58,511.49	\$52,272.81	\$56,107.76	\$44,130.19	\$269,457.90
Net	-\$22,369.76	-\$19,990.14	-\$22,898.32	-\$9,830.39	-\$6,092.38	-\$81,180.99
Summary	Jan. 2017	Feb. 2017	Mar. 2017	Apr. 2017	May 2017	Total
Income	\$34,951.40	\$33,965.93	\$32,683.95	\$38,325.12	\$36,921.25	\$ 176,847.65
Expenses	\$47,128.59	\$47,352.18	\$40,021.02	\$55,101.37	\$39,553.66	\$ 229,156.82
Transfers	-	-\$1,701.23	-	-	-	\$- 1,701.23
Net	-\$12,177.19	-\$11,685.02	-\$7,337.07	-\$16,776.25	-\$2,632.41	-\$50,607.94

2017 Variance over 2016 Results						
	January	February	March	April	May	Total
Profit (Loss)	\$ 10,192.57	\$ 8,305.12	\$ 15,561.25	\$ 6,945.86	\$ 3,459.97	\$ 30,573.05

Mililani Data:

The program far surpassed the goal of being only cost neutral and resulting in an increase in profits of \$107,657.65 in the initial five-month period.

Summary	Baseline Jan. 2017	Baseline Feb. 2017	Baseline Mar. 2017	Baseline Apr. 2017	Baseline May 2017	Baseline Total
Income	\$83,266.77	\$96,570.50	\$95,911.03	\$71,407.84	\$54,667.42	\$401,823.56
Expenses	\$125,741.85	\$118,325.29	\$120,436.59	\$134,517.73	\$115,799.59	\$614,821.05
Net	-\$42,475.08	-\$21,754.79	-\$24,525.56	-\$63,109.89	-\$61,132.17	-212,997.49
Summary	Jan. 2018	Feb. 2018	Mar. 2018	Apr. 2018	May 2018	Total
Income	\$95,057.15	\$107,475.24	\$90,967.94	\$130,921.71	\$121,767.89	\$546,189.93
Expenses	\$93,282.51	\$114,220.10	\$150,786.91	\$132,163.85	\$161,076.40	\$651,529.77
Net	\$1,774.64	-\$6,744.86	-\$59,818.97	-\$1,242.14	-\$39,308.51	-\$105,339.84

2018 Variance over 2017 Results						
	January	February	March	April	May	Total
Profit (Loss)	\$44,249.72	\$15,009.93	\$(35,293.41)	\$61,867.75	\$21,823.66	\$107,657.65

STUDENT VOICE

Overview:

Giving students a voice to inform how the program unfolded contributed significantly to the success of the program and the growth of the students. By asking for opinions and reacting to them, the administrators, staff and BGP have emboldened students to express themselves and have created a strong force for keeping this program on the track to success.

Student surveys at Kohala elicited the following comments when asked “Do you eat in the café more or less than before the new menu?”

It was cool to see change in our school.

Local flavors

Because it's not junk

It's beastmode (followed by “very much” to the question of if they liked the new menu food)

Surveys were also conducted at Mililani. The following student comments describe what they gained from being a part of 'Aina Pono.

I love being able to see my classmates be excited for school lunch! I've seen posts about the lunch, and I've noticed more positivity in the cafeteria!

It's cool knowing that the adults have listened to what the students wanted for their lunch, and made it happen!

5-star meals in a high school cafeteria.

The Farm-to-School program has done wonders for student voice. This program has allowed students to have a say in what they want to eat and how they want it. It has shown students that their opinions and voices really impact the school and community as a whole.

I've gone through periods where I had a vegetarian diet due to religious/personal reasons, and I've been asking about the cafeteria serving a vegetarian meal. Low and behold they listened and they made it happen!

Before the 'Aina Pono program was brought to our school, majority of the students had no idea that there were so many farms around our community. We've learned so much about agriculture, and it's made us become more appreciative of the whole system. We love local food!

Personally, the Aina Pono program as a whole has given me so many wonderful opportunities. I have spoken with people who I never would have come close to if it weren't for this program. I have seen, firsthand, the inner works of a kitchen and the positive influence that this program has on the workers. I have gotten to speak, on behalf of many other students, about the impact

this program has on the community. My only wish now is for other students and communities to have a chance to be part of all of this.

Being a part of the program has empowered students across our campus, including myself. It's not only provided us with better lunches, but more opportunities to voice our opinions.

The 'Aina Pono initiative proves that the student body has a voice in the school, and that they can each make a difference.

I've not only connected with my peers, but have been able to build relationships with our state leaders through the Farm-to-School Initiative.

The 'Aina Pono program has brought together the Trojan nation in celebrating the future of school lunches!

Having the 'Aina Pono program has, personally, been a great experience. With it, I've eaten lunch a lot more often than ever before in high school. The past couple years I've been too lazy to ever actually wait in the long lunch lines, meaning I hardly ever ate lunch. But now, because the food is so enticing, I don't mind waiting. I eat lunch all the time. The food is absolutely delicious and I believe more people should have the chance to try it.

If our gigantic school can implement such an amazing program then all schools in Hawaii can do it.

The moment I take a bite of the food that the Cafe staff is making, I can taste the love and hard work they put into it. The food not only fills your tummy but makes your day full and makes you feel like you can conquer the rest of your classes.

I've always been one to eat school lunch. The only difference now, is that I actually look forward to it.

I rarely eat school lunch, but ever since 'Aina Pono started, I always have the urge to buy the food prepared by the cafeteria. It fits my standards of a healthy balanced meal.

'Aina Pono has made our wildest cafeteria dreams come true!

When it was first announced that our school would be a part of this program, almost all of the students had something to say. Everyone had input on what they wanted to eat, when the program would start, how soon they can tell their friends, and overall full excitement. The atmosphere of the room completely shifted and the room was filled with student participation.

I have always wanted to be a part of something big in our school and the Farm to School initiative has done just that for me. I am so glad to know that I am leaving my high school with a legacy that impacts the entire community.

Quality AND Quantity. I want both, and Aino Pono provides. #FreshFood4Life

'Aina Pono program is amazing and I think it's important to push it across the entire state in order to make it available for all students. It's something I firmly believe should be an option for all students to eat.

'Aina Pono has COMPLETELY altered my perspective of school lunches

I hated pineapple until I decided to try it again because of the Farm-to-School Initiative. Now I eat it all the time!!

My goal was to lose some weight but the past food wasn't able to help get me there. With the Aina Pono act, I have lost 5 pounds.

The idea of cafeteria food being bad is so repetitive, that people think that it will always be that way. But the Aina Pono Farm-to-School initiative has broken down that wall. With the help of many people, we were able to shatter that cafeteria food mentality and the students were able to experience great food in their very own school's cafeteria.

Ever since I watched a video of the type of school lunches France receives, I wanted to move there. But now, 'Aina Pono changed my mind, and I prefer to stay here.

RESULTS FROM OTHER SCHOOLS WITH AINA PONO

Kalaniana'ole Elementary & Intermediate

We learned in the three short weeks we were at Kalaniana'ole that without a strong principal and support from SFSB the 'Aina Pono rollout will not be successful. The cook and baker were the de facto managers of the kitchen — not the kitchen manager nor the principal. Neither the cook nor the baker had any interest in putting in the effort to make the program successful and the kitchen manager and principal did not enforce that this program was to be a priority. In what appeared to be an attempt at appeasement to the cook and baker, the kitchen manager actively worked against having BGP on site, and was, in the end, successful at having the program halted at Kalaniana'ole. The production kitchen at Kalaniana'ole provided meals for Ha'aheo Elementary School and Keaukaha Elementary School.

Mililani Middle School

BGP worked at MMS from mid-May to mid-June and started the Assessment of the operation and the review of menus and taste testing. We visited 12 classrooms to find out what the kids liked and did not like about the cafeteria. We also started conversations with the kitchen staff about what worked and did not work about the food they served. We were able to do a tasting of Beef Luau to both see if making this traditional meal was possible in a school setting as well as to see if it would be well received. It was a success on both fronts. We were able to standardized all their baking recipes – when we arrived, they did not have a set of standardized recipes for cooks to follow. Shortly after this we were informed that our contract that this school was being cut short.

RECOMMENDATIONS FOR SCHOOL FOOD SERVICES BRANCH

This section contains observations, impacts, and recommendations identified by Beyond Green Sustainable Food Partners (BGP) primarily during the implementation process of 'Aina Pono at Mililani High School from January-May 2018, but also includes patterns observed during time spent at the other 'Aina Pono schools from August 2016-December 2017.

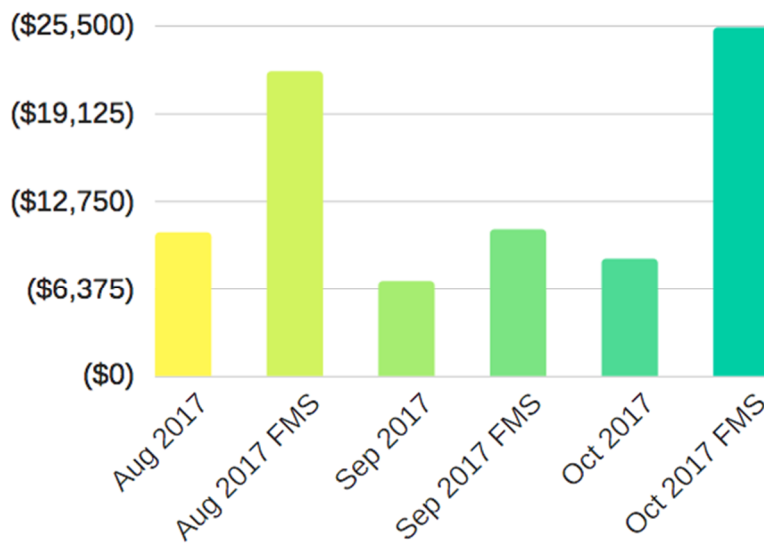
The main thing BGP learned in our first kitchen for Hawaii public schools at Kohala High School was well summed up in a quote by a staff member – “the kitchens are like a boat floating in the ocean without a rudder—there is no budget, no plan, and no goals – [at least not communicated to the staff]”. In working with four different production cafeterias and seeing ten different serving operations, BGP observed a lack of standard operating procedures being followed. The staff does what they think they are supposed to be doing and so every kitchen is doing things differently — some hoard food, some have an empty pantry; some know how to cook/bake, some don't although none have standardized recipes in any way; some do their paperwork one way, others do it another way. With the hand-written recipes, there are no yields and no recipes costed out; there is no budget and the staff have no memory of cooking or baking training. They also never talked to kids about what they liked and did not like. The principals for the most part are hands off and they are the leaders of the cafeteria — this of course has to change.

SFSB needs to lead the cafeterias for any systems change to stick and BGP did not observe a willingness or desire from them to lead this change. As an example, when BGP started the project the previous SFSB director stated that she wanted nothing to do with the project so only one person in her office knew anything about the project. SFSB needs to be directed that the 'Aina Pono Hawai'i State Farm to School Program is a priority to the State (presuming that it is) and that it needs to lead the change.

Another example is that in the two years BGP spent working in the school kitchens—no one from SFSB spent any time watching/questioning/shadowing how we made the processes happen. You cannot learn from a report how to do what we did—a manual can help but you need the hands-on experience if you are going to lead the cafeterias to the change they are in need of. We feel a huge opportunity was ignored.

OBSERVATION 1: DATA TRACKING

BGP collected data at the Kohala schools from hard copy invoices to determine profit and loss, local food percentage, and fresh food percentage. To collect data at Mililani High School, BGP hired a DOE employee who gathered the same data from FMS. As BGP began comparing data collected from receipts at Kohala to the FMS system, we identified differences as shown in the following profit and loss chart comparing August 2017-October 2017 from hard copy invoices and the FMS system.



Possible reasons for the differences include the variance of when the cafeteria manager submits receipts, and the number of days included in the FMS reports. Data gathered from the receipts are shown with the date only and FMS data is NOT noted as such. BGP believes that the receipts go into FMS as they come in—example: if a November purchase is not submitted to FMS until February of the next year—it goes into FMS in February.

FMS reports present profit and loss by year-to-date and each report is given a month name, but the data is not presented by the month which means which means a separate set of calculations must be done to determine monthly totals. Additionally, the FMS report does not reflect the calendar month. For example, the April 2018 FMS includes days from March 8-April 27 and has even been found to go months earlier.

The FMS data does not appear in the system until six weeks minimum after the concluding month. For example, January data appears no earlier than mid-March.

The process set up by BGP to secure data from schools where BGP no longer has presence is not followed or enforced. For example, as of June 2018, BGP does not have November and December 2017 data from Kohala yet.

IMPACT

The varying dates of reports in FMS make monthly comparisons across multiple years impossible.

BGP was unable to be confidently told that FMS gives accurate information for either the year or month to month. The program needs to be cost neutral, and without monthly profit and loss, no one can determine if the program is cost neutral or not.

FMS Reports are late and incomplete, and do not allow project leaders to meet funding organization reporting requirements or inform stakeholders of progress made in a timely manner.

RECOMMENDATION

1. Look into INFINITE CAMPUS software to determine if it can help SFSB with data management.
2. Invoices need to be entered into the data system during the month they are received. It would be best for the financial programs/approach utilized to attribute food invoices to the months in which they were delivered for accurate tracking. If the schools are unable to correlate spending to meals served it will negatively impact their ability to forecast and manage budgets and financial goals.
3. Vendor Payment matches expense dates to the invoice date when entering invoices into the DOE Financial Management System
4. Complete profit and loss statements for all schools using Vendors' paper invoices to include a one-year baseline and then monthly moving forward.
5. Request vendors to set up online ordering systems as opposed to the paper-based ordering system currently in place.
6. Use actual food cost instead of meal equivalents to determine food costs.
7. Finalize monthly P&L statements within seven days of month end. Data should be reviewed and appropriate steps identified and taken for any losses or other unusual results found.
8. Conduct a state-wide audit on the financials of each school going back a year and then following all schools P and L moving forward to determine actual financial performance of foodservices at each school and adopt steps where required to address significant financial shortfalls.
9. Make principals, assistant superintendent, kitchen managers and SFSB be responsible for profit and loss immediately.

OBSERVATION 2: TRAINING

In kitchens that prepare primarily processed food, the kitchen staff work in silos by completing the tasks associated with their designated role first and then helping other team members as time and interest allows.

Kitchen staff follow their own personal processes and recipes to make meals. It's typical for the cooks at each school to prepare food using recipes on scratch paper notes that are only readable/understood by the person who wrote them. There are no standardized recipes at the schools for staff to follow.

Kitchen staff and school administrators do not know and/or follow the guidelines of offer versus serve which leads to overserving and increased plate waste.

Many kitchen staff do not have sufficient knife skills to cook from scratch. They are not able to cut up large amounts of food with any speed.

Managers do not follow Standard Operating Procedures for filling out FPR's. Each school fills them out differently and often employees within the same cafeteria fill them out differently.

Kitchen staff are not required to be able to scale recipes. One cook spent 4 hours each day using the calculator to figure out recipe quantities and another cook spent 5 minutes or less each day.

Kitchen staff do not follow Standard Operating Procedures for portion control. We have seen two servers in the same school serving near each other giving different portions at the same time with the same food.

Kitchen staff estimate incorrectly the quantities to serve on a daily basis and overproduce food significantly.

SFSB supervisors are understaffed and do not have enough time to train kitchen staff. And SFSB supervisors have not themselves been trained By Greg christian so we are not sure how they can help roll it out successfully.

The *School Food Services Handbook, Vol. 4* has many processes outlined, but training to accompany the processes needs to be provided more often and more consistently.

IMPACT

The food takes longer to prepare when team members work primarily in silos as they do now and may not get done on time if the team does not work as a single unit. Additionally, recipes are not prepared consistently across the school.

Kitchen staff do not go to SFSB supervisors for issues or questions which prohibits supervisors from gaining a full understanding of what is happening in their kitchens. Understanding these issues would allow them to set up needed training or address other issues as they arise.

The USDA will find kitchens non-compliant and SFSB will be fined.

With inconsistent FPR's, overproduction will continue leading to wasted resources in terms of food waste and labor waste, which translates to losses in place of profits.

Without the math skills to scale recipes, employees who are needed to prepare food spend excessive time working on math problems rather than cooking. The high percentage of math mistakes leads to both overproduction and underproduction.

Over portioning food leads to either unhealthy kids who eat too much and unnecessary waste of resources and money through either overserving or through food being thrown away.

Overproduction leads to the loss of money through increased labor expenses and increased ingredient expenses.

RECOMMENDATION

1. Increase supervisor staff to include one supervisor present full time within each district, visiting schools and training school staff continually.
2. Create a strategic year-round training program to include:
 - Training managers on how to forecast participation by tracking estimated people to serve and actual served,
 - Training cafeteria staff to measure overproduction using a scale and logging the information on the FPR daily,
 - Training cafeteria staff to track plate waste amounts and percentages,
 - Training staff to work as a team,
 - Training staff how to use a knife with great proficiency,
 - Training SFSB supervisors to support the 'Aina Pono program; in particular the importance of teamwork and capturing data and reading data with managers to help insure they are being as efficient as possible with money spent on goods and labor,
 - Training staff on offer versus serve,
 - Training staff on *School Food Services Handbook, Vol. 4.*,
 - Math training so we know all managers/cooks/bakers can do basic math, and
 - FPRs should be made by the dietician of the state and standardized for the State of Hawai'i
 - Hire a head chef to lead the on the ground training and to write the manuals for the kitchen staff to follow in order to scratch cook local/fresh foods under budget

OBSERVATION 3: LEADERSHIP

SFSB can only give suggestions to the kitchen staff since the kitchen staff works for the principal. However, the principal does not incur financial repercussions when the kitchen overproduces food, over serves, or does not follow compliance rules.

SFSB supervisors have minimal time with each cafeteria.

Kitchen managers are often not perceived by the staff as the leaders of the kitchen. It may be the cook or baker or someone who has multiple decades of experience that is seen as the “real” manager.

IMPACT

There is no clear chain of command in the cafeteria leading cafeteria managers and staff to operate under their own preferences. Additionally, there is no clear chain of command for managing financial rigor allowing cafeteria staff to operate without a focus on spending. Having the Principal be responsible for the cafeteria and staff but not responsible for the finances leads to confusion and contributes to a lack of power for the SFSB supervisors.

SFSB, the main leaders that can improve the cafeteria, have no power to do so.

Training does not come down from the top so SFSB loses respect. However, kitchen staff perceives they do not need to listen to SFSB, but to their “boss”, the Principal.

RECOMMENDATION

1. Make school principals financially accountable for food service operations.
2. Make kitchen managers financially accountable for their cafeteria which will force managers to become stronger leaders.
3. Hire a trainer or two to work under each supervisor to continually train cafeterias in the ‘Aina Pono way.
4. Put cafeterias directly under the position of the Assistant Superintendent, Office of School Facilities and Support Services so that the School Food Services Branch Director has the power to run the cafeterias.
5. Hire a strong leader to run a team of chefs to work in the kitchens only—to bring skills to the staff.

OBSERVATION 4: OPERATIONS

The cafeterias are operating with partial staffing due to unfilled cashier positions.

The students are minimally involved in making the cafeteria better.

The cafeteria staff are minimally involved in making the cafeteria better.

No standardized recipes were able to be identified to BGP Staff.

The procurement office does not have specialized food skills.

Refer to the *Supervisor's Training Manual* for development of menus and recommendations on providing a variety in menu offerings.

IMPACT

When cafeterias are short positions, this stress is picked up by the existing kitchen staff and/or office staff.

When students do not have a voice in the cafeteria meal program, student participation rates decline each grade, student power is stripped, and the ability of the school cafeteria to positively impact student preferences for healthy food diminishes.

When kitchen staff do not have a voice in the cafeteria meal program, staff productivity and commitment decrease, staff become resentful and unwilling to listen or learn, and the contributions and knowledge that each person contains stays hidden from the program which could strengthen the program when expressed.

The kitchens currently employ people without training or skills in cooking who do not know how to cook. Without standardized recipes, cafeterias will make the same recipe different at every school.

RECOMMENDATIONS

1. Increase salary for cashiers to fill the missing positions.
2. Survey all students about cafeteria food monthly. Maintain the perspective of inquiry into how students can help strengthen the program.
3. Survey all staff about the cafeteria food monthly. Maintain the perspective of inquiry into how the staff can help strengthen the program.
4. Continually train cooks on how to read standardized recipes and follow instructions.
5. Continually train cooks and baker to offer an environment of constant learning and improvement.
6. Hire a procurement food specialist that is housed in the SFSB office to focus on purchasing fresh, local food.
7. See USDA procurement rules for Small Purchase Threshold and how to procure items using Informal Bids and Micro Purchases - <https://fns-prod.azureedge.net/sites/default/files/f2s/ProcureLocalFoodsCNPGuide.pdf>
8. Train staff to not work in a “bubble” — they need to consistently talk to the customer – the customers will help operations serve them better.

OBSERVATION 5: REACHING THE GOALS

‘Aina Pono made significant progress towards meeting the goals set for the program but both continued support and additional progress is needed to keep the progress made and continue to improve. To recap, the goals set forth were:

Purchase, on average, 40% Local Food over the course of the school year

Increase student participation by 5%

Increase consumption of healthy foods by having no more than 40% of purchased foods be able to be classified as “Processed”

Reduce both plate waste and back of house waste by 10% over baseline in any/all ‘Aina Pono schools

Decrease overproduction to within 5% of projected meals

IMPACT

By reaching the goals set forth as part of the ‘Aina Pono program, the schools will be providing fresh, local food to schools statewide to reinforce the vision that Hawai‘i exists as a perpetual reminder of finite resources, fertile lands, and communities who are committed to the wellbeing of their keiki. The goals for waste reduction and reduction of overproduction will also result in cost savings so the changes can be made at a cost neutral or cost positive return.

RECOMMENDATIONS

Local and Fresh Food Procurement

1. Continue to visit farms and develop relationships with farmers. Potentially work with farmers to request specific items to be grown.
2. Start with an audit of the entire State’s cafeteria system—so the financials per school and system-wide are known and transparent.
3. Review the USDA Farm to School Toolkit for ideas and procurement requirements <https://fns-prod.azureedge.net/sites/default/files/f2s/F2S-Planning-Kit.pdf>.
4. Provide flexibility in the menus district to district so each school’s kitchen can buy local food that’s in season but that same food is not required for all schools in Hawai‘i to serve. This needs to go hand in hand with training to ensure people can cook and understand compliance so when they are given latitude to buy what’s local they know how to cook it and serve it—and be compliant.
5. Review local produce available when planning for the week’s fruit and vegetable sides so that full advantage can be taken of the local items. Potentially have a less structured menu to allow for items to be substituted when available fresh (or when something anticipated to be available is not but another option is).

6. Provide additional training for procurement procedures for ordering local produce. Provide instructions on how to ensure correct amount is ordered if local purchase is in place of typical purchase from non-local vendors.
7. Eliminate the habit of hoarding food items. Schools, to varying degrees, bought more frozen or packaged food than was necessary for their planned production and held on to it. Items need to be bought fresh whenever possible. The staff needs to be trained and the training reinforced that buying extra food to simply keep on hand is not to be done.
8. Review DOD Commodities produce information to increase receipt of local items as available.
9. Review the USDA website for their tips on procuring local foods and utilizing DOD Fresh for local produce procurement - <https://www.fns.usda.gov/farmtoschool/procuring-local-foods> and <https://www.fns.usda.gov/farmtoschool/using-dod-fresh-buy-local>

Increase Participation

1. Continue taste testings, with a focus on different preparations of vegetable or fruit sides to encourage students to continuously try different options.
2. Based on the observation that kids eat what they are familiar with, BGP recommends cooking demonstrations and programs and/or communications to support parent education about healthy eating. These demos should include both items from school as well as what items are served at home that are healthy with the potential for adding them to the school menus.
3. Encourage student feedback on all foods offered and on items that are taste tested. Wake up the voice of the kids.
4. Market menu items to students so everyone is aware of 'Aina Pono menus and new items.
5. Menus for Elementary Schools, Middle Schools and High Schools should not be identical. Most of the items will work across all schools but some items the High School students love the younger students don't like or haven't been introduced to. BGP recommends that the schools have a K-5th Grade menu and a 6th -12th Grade menu so more kids eat more of their foods. The younger kids tend to not like soupy dishes like chilis and stews.
6. Establish a Guest Chef program. Utilize the guest chefs for new menu item creation as well as a marketing program to get the community excited about 'Aina Pono.
7. If breakfast participation is to be increased, breakfast in the classroom is the key. A major communications program on breakfast and new the 'Aina Pono menu had been planned but was not implemented by SFSD. An aggressive communication program that is flexible, fluid, and constant is necessary. If SFSD is not able to provide that program, another party should be tasked with that effort.
8. Utilize USDA programs for Breakfast in the Classroom (https://fns-prod.azureedge.net/sites/default/files/toolkit_classroom.pdf) or Second Breakfast (https://fns-prod.azureedge.net/sites/default/files/cn/cep_increasingbfast.pdf).

Decrease Plate Waste and Back of House Waste (Overproduction)

1. Continue production planning.
2. Utilize past FPR's to track historical data and estimate required number of meals better.
3. Serve bulk white milk in place of individual containers.
4. Start weighing Front-of-House waste immediately to determine overproduction and adjust production plans as dictated.

Decrease Back of House Waste

1. Continue waste tracking and strengthen understanding of steps to reduce waste. All waste needs to be weighed on a scale and all information recorded, tracked and reviewed.
2. Continue production planning under the supervision of SFSB to insure overproduction stops systemwide.
3. It all starts and end with the financials—if the financial house is not in order—there is a slim chance of 'systems change' –without the financials in order systems change simply cannot happen.

CONCLUSION

School foodservices in general can be a difficult area to affect change. It is not unusual for us to find ourselves between two competing factions on the client side. Typically, there is a group that wants to bring in everything we are proposing – get the kids healthy foods that are locally sourced and freshly prepared. And they are set up against a group that doesn't want to change for a myriad of different reasons – they are unsure what to do, they might be afraid to fail, they might be afraid to look bad, they might lose money, or, bluntly, they might think they are understaffed and can't take on the challenge. For whatever reason they push back, they do. And then when the program does prove to be successful, they aren't a "big enough" person to say "mea culpa" – I didn't believe, I couldn't see but now I do and I want in, I want to help. They dig in deeper.

Over the last two years working for the State of Hawai'i, BGP has noticed a lack of employees from SFSB working along side of us so that they could learn the different processes that we were teaching the cafeteria staff. So much of the value of what BGP has to offer is the knowledge gained by working alongside Greg. If no one at SFSB understands how to do the tasks or the importance of the tasks, it will be difficult, if not impossible, for them to teach and lead their employees in what 'Aina Pono means and can offer the schools.

We believe that a full commitment needs to be demanded from the staff of SFSB and that it should be made clear to them that these items are now part of their job description and that they need to wholeheartedly focus on making this a success.

Over the last two years we have built two successful farm to school models in SFSB – and we are very thankful to the funders for supporting the program and to Albert Scales, Dexter Kishida, Anna Lisa Okoye and Jayson Watts for all of their time, brain power, and hard work.

An important thing to understand about what makes these programs successful – it is the desire of the staff and those they work with and for to make 'Aina Pono a success. The staff at Kohala was a typical school cafeteria staff – older, with limited professional cooking experience. But they had the drive to make it work and they did. The staff at Kalaniana'ole included multiple chefs with professional training and extensive experience. But they gave up on making the program work even before it had a chance for a foothold. A commitment must be made to 'Aina Pono for it to be successful. We have two final recommendations that are overarching above the tasks listed in our Recommendations Section. We propose a two-pronged solution moving forward

- 1) Let BGP hire two chef trainers, a dietician, and a data manager to work with the central district over the next year and let us rollout the models we have established. We would own all of the compliance as well as communications with Anna Lisa as the keeper of the reports and Jayson as the project /communications manager.
- 2) Hire an accounting firm to both audit SFSB school by school and as a whole and help create a strategic plan that starts getting rolled out in six months.