



CASE STUDY:

## The Gamm Initiative

### Nourishing Toddlers Pilot 2014–15

Boulder Valley School District  
Food Services Department  
Boulder, CO

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## Table of Contents

- Backpack Program Description ..... 4
  - Site-Level Coordination..... 5
  - Bag Program Parent Feedback..... 6
  - Bag Program – Successes and Challenges..... 7
  - Bag Program – Opportunities ..... 7
- Preschool Lunch Description..... 8
  - Service Models..... 8
    - Creekside Elementary – Classroom Dining ..... 8
    - Columbine Elementary – Cafeteria Dining..... 10
    - University Hill Elementary..... 12
  - Lunch Program – Successes and Challenges ..... 13
  - Lunch Service – Opportunities ..... 14
- Revenues and Expenses ..... 15
  - Weekend Food Bags ..... 15
  - Preschool Lunch ..... 15
- Potential for Replication ..... 16
  - Weekend Food Bags ..... 16
  - Preschool Meals..... 17
- Outcomes..... 17

## Table of Figures

Figure 1. Enrollment and eligibility for the pilot locations .....	3
Figure 2. Harvest of the Month card included with food bag.....	4
Figure 3. Contents of food bag from March 2014 .....	5
Figure 4. Pack-out bins and bag distribution at the bus pickup area .....	6
Figure 5. Creekside setup for meal delivery .....	9
Figure 6. Meal delivery to a classroom at Creekside .....	9
Figure 7. Creekside classroom dining .....	10
Figure 8. Bussing tables and meal cleanup at Creekside .....	10
Figure 9. Cafeteria-based preschool lunch at Columbine.....	11
Figure 10. Columbine water cooler and bussing / compost area .....	11
Figure 11. Classroom-based meals at University Hill.....	12
Figure 12. Analysis of preschool lunch with actual meal claim revenue, labor and food cost.....	16
Figure 13. Cost by Site data provided by BVSD Food Service accounting shows all locations operating with a surplus for 2014-15.....	16
Figure 14. Lunch in the classroom at Creekside Elementary .....	18



Project Description

In October 2014, Boulder Valley School District (BVSD), located in Boulder, Colorado, implemented a pilot project for preschools to provide lunch as well as weekend food bags<sup>1</sup> in three of its high-needs preschools. The Gamm Initiative—Nourishing Infants and Toddlers Pilot Project was funded by a startup grant of \$120,000 from Gordon Gamm, a local Boulder resident, lawyer, and philanthropist. The pilot’s goal was “to ensure all children in the program have access to healthy foods during school and on the weekend.” Prior to this pilot, the participating schools (with the exception of University Hill’s morning preschool class) offered only snack<sup>2</sup> as part of the half-day preschool program. The access to full lunch and the extension of nutrition into the weekend via food bags distributed on Fridays offered a means of bridging potential gaps in food access experienced by lower-income families living in the City of Boulder. According to the US Census Bureau, approximately 22% of families in the City of Boulder are living in poverty, as compared to 14.5% nationally.<sup>3</sup> The schools selected had the highest free- and reduced-eligible enrollment in preschool within the City of Boulder (fig. 1), and are all part of the Early Childhood Education program in BVSD.<sup>4</sup> This is a tuition-based program, with scholarships available for eligible families through the Colorado Preschool Program.<sup>5</sup>

The project consisted of two distinct parts: the lunch program and the backpack (or in this case, bag) program. Funding for the project specifically targeted the costs of equipment to implement the programs (carts, bags, bins), the food and labor cost for the “denied”<sup>6</sup> student meals, and the entire food cost for the bags, which were distributed regardless of income eligibility. The families were alerted to the project rollout via letters and/or direct communication with school-based community liaisons. The initial implementation began with lunch on September 30, 2014, followed by weekend bags in early October.

<b>Avg Enrollment by Eligibility</b>	<b>Free</b>	<b>Reduced</b>	<b>Paid</b>	<b>Total</b>	<b>F/R%</b>
<b>Creekside Preschool</b>	<b>21</b>	<b>1</b>	<b>31</b>	<b>53</b>	<b>42%</b>
Creekside K-5	95	18	186	299	38%
<b>Columbine Preschool</b>	<b>34</b>	<b>0</b>	<b>20</b>	<b>54</b>	<b>63%</b>
Columbine K-5	295	23	138	456	70%
<b>Uni Hill Preschool</b>	<b>28</b>	<b>2</b>	<b>20</b>	<b>50</b>	<b>60%</b>
Uni Hill K-5	216	26	158	400	61%

Figure 1. Enrollment and eligibility for the pilot locations

<sup>1</sup> <http://www.hungerfreecolorado.org/wp-content/uploads/2012/08/HFC-Toolkit-for-Starting-Backpack-Food-Program.pdf>

<sup>2</sup> The preschool snack is served under the auspices of the Child and Adult Care Food Program (CACFP) administered by the USDA.

<sup>3</sup> <http://www.census.gov/quickfacts/table/IPE120213/00,0807850>

<sup>4</sup> <http://ece.bvsd.org/Pages/default.aspx#Bottom>

<sup>5</sup> <http://ece.bvsd.org/PPP/Pages/default.aspx>

<sup>6</sup> “Denied” aka “full-pay or paid” indicates a student that does not qualify for federal assistance in the meal program.

## Backpack Program Description

Backpack (or bag) programs are a common way to provide nutrition options to children in need during times when schools are closed, like over weekends or holiday breaks. These food programs are most often organized by nonprofits dedicated to hunger relief, or are directly managed by a local food bank or food rescue. They generally rely heavily on volunteer labor for shopping, packing, and distribution. A cooperative relationship typically develops among the nonprofit or food bank, the school district food service, and the administration and teachers at the school locations. The most common models, which target elementary-age children, offer food bags filled with “kid-friendly” meals (often two breakfasts, two lunches, and two snacks) that a child can access without the assistance of a parent. In BVSD’s case, the team utilized Hunger Free Colorado’s toolkit for backpack programs<sup>7</sup> as a guide for their own setup.

Differentiating factors for the BVSD program included the age group – it targeted preschool-age children – and the district’s commitment to offering meals sourced from whole, unprocessed ingredients; as indicated above, meals provided by most backpack programs follow some nutrition guidelines but are essentially ready-to-eat.<sup>8</sup> Boulder’s approach was to provide some shelf-stable whole, unprocessed fresh foods that families could assemble as part of their regular meal preparation at home. Weekly bag offerings included organic brown rice, pasta, organic canned tomatoes, dried pinto beans, and a selection of fresh fruits and vegetables. Onions were always supplied as a vegetable, and fruits or vegetables that were part of the district’s Harvest of the Month program, along with the accompanying “trading card” with information about that item, were often included (fig. 2).



Figure 2. Harvest of the Month card included with food bag

<sup>7</sup> <http://www.hungerfreecolorado.org/wp-content/uploads/2012/08/HFC-Toolkit-for-Starting-Backpack-Food-Program.pdf>

<sup>8</sup> [http://backpackbeginnings.org/wp-content/uploads/2015/04/Assembly-Instructions\\_Bags-of-Food.pdf](http://backpackbeginnings.org/wp-content/uploads/2015/04/Assembly-Instructions_Bags-of-Food.pdf)





Figure 3. Contents of food bag from March 2014

In initial planning for the Gamm program, organizers determined that purchasing and using backpacks was not appropriate, primarily due to cost and the fact that an alternative would be required if the backpack was not returned. In addition, the children were too small to carry a backpack loaded down with more than five pounds of food. The alternative was to use recyclable grocery bags (fig. 3), as they can be purchased in bulk very inexpensively and are easy to replace if lost or not returned. Except for the produce offering, the contents of the bags did not change. The district also experimented with sending five-pound bags of masa (corn flour) and later tried oatmeal, but the masa received mixed responses so it was removed from the program. The oatmeal was determined to be a success, and was included at least once a month.

### Site-Level Coordination

The community liaisons at each school site were key partners in the program. They interfaced with the families about the program and kept track of which students receiving the bags were riding the buses versus being picked up by car or walking with a guardian, as well as students who were absent. As new students entered the district at mid-year, the liaisons made sure their families were aware of the program and had an opportunity to participate. The collaboration at the site level involved school administrators, district transportation services (bus drivers), the preschool community liaisons, and custodians, as well as the food service team.

The food-service department packed the bags and organized them into bins for transport to the bus area on Thursdays (fig. 4). Bags were distributed twice a day as the morning and afternoon classes left for the weekend. On Tuesdays, the students returned the empty bags.



Figure 4. Pack-out bins and bag distribution at the bus pickup area

Depending on the school site, bag distribution was supported by liaisons, custodians, and/or parent volunteers. In the case of University Hill, since there was no place to inventory ingredients, pack the bags, or store them, the bags were packed at a nearby school site and delivered to University Hill by a food-services driver. Overall, the orchestration of the bag routine was a cooperative effort.

### Bag Program Parent Feedback

As a part of the evaluation, a survey and in-person interviews were conducted with the parents/guardians. Approximately 38% responded to the survey. Of the respondents, 84–100% had elected to receive the weekend food bags. When asked for feedback, the most common response from families was a request for more variety, and specifically for more fresh fruit, eggs, white rice, milk, bread, and corn flour. When asked how to improve the program, some families suggested including recipes for the products (many said they were unfamiliar with or didn't eat brown rice). Some families suggested alternate pasta shapes, like spaghetti instead of penne.

Comments included the following:

*“I think the program is great, especially the bag program on Fridays. I think that helps families a lot, but the brown rice is not working for me and is accumulating a lot.”*

*“I think it is excellent because the children have free lunch and also the bag program.”*

*“Thank you for your help and the lunch that my child receives at school and at home.”*

### Bag Program – Successes and Challenges

From feedback received, the weekend bags were welcomed by the families, but a wider variety of foods should have been included. While the program provided high-quality organic and locally sourced products, the cost of the contents – averaging somewhere in the \$9.00 to \$10.00 range per bag – was high for a weekend bag program. Packing the 50 to 60 bags at each site required approximately two hours of labor. The work of delivering the bags to the buses and tracking absences was absorbed by the site liaisons, the transportation team, and parent volunteers who helped at sites like Columbine. The program would require outside funding in order to continue, as it is not associated with a USDA reimbursement. Without the generous Gamm funding that allowed bags to be offered not only to needy BVSD families but to all preschool families, this particular iteration of the bag program might be difficult to fund in the future.

### Bag Program – Opportunities

Within the current model of providing whole-food ingredients sent home to support family cooking, the most common complaint about the program was the repetitive nature of the bag contents. Some parents said they were unfamiliar with ingredients like brown rice and wanted cooking instructions. A common request was for more fruits and other fresh foods to be offered. The way bag programs are structured may pose limitations to meeting such requests. It might be possible to increase the quantity of perishable foods offered with refrigeration and careful timing, but cost and distribution are also factors that must be overcome. However, we recommend including more variety in the bags, either by varying the shelf-stable items or the adding more fresh items.

Improving communication about the products, particularly their health benefits and ways to use them in recipes, will improve the program model. Knowledge of the products and their uses could be enhanced further by developing and offering family cooking classes connected to the preschool program. These could feature bag ingredients and educate participants about opportunities for healthful eating at the same time.

The high food costs of the current bags could be mitigated by partnering with a food bank like Community Food Share,<sup>9</sup> which partners with nonprofits to provide food for people in need. Selecting a more economical source for procurement might make it possible to expand the bag program not only to other high-needs preschool families, but to high-needs families in other grade levels and at more school sites.

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<sup>9</sup> <http://communityfoodshare.org/>



Centralizing the inventory and packing of food bags might be more cost-effective, particularly if the program is expanded. Space is somewhat limited at the regional production kitchens in Boulder, but the warehouse might be utilized to centralize the bagging of shelf-stable products at the very least.

Another option for expanding the range of perishable products offered might be to get funding for farmers' market "bucks" or credit to encourage family activity and use of the local farmers' market. The "bucks" or credits could be offered occasionally as part of the bag program or be tied in with family cooking classes.

### Preschool Lunch Description

The lunch program provided preschool students the same lunch offered to BVSD elementary-school students, with the exception of the salad bar. Different vegetables and fruits were offered daily, and sometimes raw vegetables were offered in addition to whatever hot vegetable was on the menu.<sup>10</sup> Creekside and Columbine preschool classes are housed within the main school building, but University Hill's preschool is housed across the campus; this presented some implementation challenges. The morning and afternoon classes at Creekside and Columbine shifted from offering only a snack to offering only lunch. University Hill's morning class experienced no change in meal program, as it had previously been included in the district's universal classroom breakfast program. The afternoon class at University Hill added lunch and also retained a snack.

### Service Models

Each site provided a different serving model based on the preferences of the school-based team. These were modified, however, depending on the physical challenges of the site and the food-service team's ability to accommodate those preferences while still offering a quality meal experience and meeting all USDA and local health authority regulations.

#### Creekside Elementary – Classroom Dining

Creekside initiated its meal service in the cafeteria, but shortly after the program began, the school requested that the meals be offered in the classroom. The meals were prepared and packed out in the kitchen and transported to the two classrooms via an insulated cart (fig. 5). Although meals at Creekside were packed out family-style, the teachers served most of the items onto the plates prior to placing them at each child's place. Fruit was placed on the tables for the kids to select themselves.

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<sup>10</sup> The BVSD elementary six-week lunch cycle can be found at the following link:  
[http://www.thelunchbox.org/assets/uploads/menu\\_cycles/Calendar\\_report\\_K-5\\_Lunch.pdf](http://www.thelunchbox.org/assets/uploads/menu_cycles/Calendar_report_K-5_Lunch.pdf).

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Figure 5. Creekside setup for meal delivery



Figure 6. Meal delivery to a classroom at Creekside

Students helped themselves to milk and water, which were available in small pitchers kept in the classroom. Special-education students had additional adult support in the classroom. We observed the morning class meal, which was served at the end of their session. The teachers said that when they first started the lunch service they realized right away that the students were probably not required to sit at a table at home. The students were seated at round tables. During the classroom meal we observed, the children were using silver, handling cups of liquid, serving themselves fruit, and being social and polite. If a student wanted more of a dish, they would ask for it and the teacher would serve them. The assumption in meal planning was that the students would be offered all components.

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Figure 7. Creekside classroom dining

The students also learned to bus their own plates and separate their waste for compost. And one student chose to clean the floor instead of going out to the playground after his meal (fig. 8). (The floor sweepers were purchased with grant funds to support the classroom dining.)



Figure 8. Bussing tables and meal cleanup at Creekside

### Columbine Elementary – Cafeteria Dining

Columbine Elementary served preschool lunch meals in the cafeteria. The morning class ate at the end of their day, which was just prior to regular lunch service in the cafeteria; for the afternoon class, the meal was coordinated with the end of lunch service in the cafeteria. Columbine has the busiest elementary-school cafeteria in the district, and cafeteria-based dining was preferred by the food-service department there. A vegetable was offered family-style on the tables.



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As at Creekside, the teachers were very engaged with the students in the process and accompanied them through the service line. There are bulk-service milk and water stations in the cafeteria; the teachers filled small pitchers for the students to pour their own beverages from. Students were also observed serving themselves water from the water cooler. To accommodate the variance in time that it takes the children to eat, the teachers brought books to the cafeteria so that students could read when they were done eating. The preschool students bussed their own trays through the bussing station, just as K-5 students do.



Figure 9. Cafeteria-based preschool lunch at Columbine



Figure 10 Columbine water cooler and bussing / compost area

### University Hill Elementary

University Hill's program is different in that the preschool is housed in a separate building from the main school. Food transport and dining in the outlying building has been a challenge since the food program was changed to scratch-cooking five years ago. A universal breakfast-in-the-classroom program was implemented in the morning preschool class in 2011, along with classroom breakfast for the kindergarten classes that also are housed in the building. This is delivered daily by the food service team, assisted by the custodian. Food delivery to the outlying building requires rolling the meals uphill quite a distance on an outside walkway between the buildings. In the winter this can be particularly difficult.

Since the morning session was already receiving breakfast and a snack, the decision was made not to switch the breakfast to a lunch, but to only offer the weekend bag program to the morning classes as an additional nutrition opportunity.

The afternoon classes did receive lunch, but the method of serving it was different from service at the other two sites. The kindergarten at Columbine is served in a small dining room from a bulk service. The food service team brings the food for the preschool when they come to the building for kindergarten service. The timing is aligned and when kindergarten is finished they plate the individual meals for the preschool and deliver them. On Tuesday through Friday, when preschool classes are held, a food-service team member served all meal components into individual disposable trays. This was timed so the food arrived at the classroom just as the afternoon classes were starting. Teachers kept milk in their classroom refrigerators for the lunch service. Consumption of the lunch meal at University Hill was not observed as part of this case study due to the lunch service timing on the date of the visit. Some renovations are planned for the service area at the adjacent building for kindergarten and preschool for the 2015–2016 school year; these could offer opportunities to improve on the individual pre-plated meal service that was offered this year.



Figure 11. Classroom-based meals at University Hill



### Lunch Program – Successes and Challenges

The program has attained its goal of providing additional nutrition to preschool-age children at the pilot schools. All students were offered meals and for the most part participated willingly. The goal of providing a scratch-cooked meal made with fresh whole foods was achieved. As an activity, the meals were considered part of the students' educational day, and they did provide many opportunities for educational enhancement of the age group in such areas as motor skills, language, and social interaction. Though the program was originally promoted and described as a family-style service, none of the three schools provided the entire meal in a family-style setup. The cafeteria-based lunch at Columbine provided a raw vegetable family-style; and though Creekside's meals were sent to the classrooms in family-style containers, the teachers served most of the meal components directly onto the students' plates, with the exception of the fruit.

From observation, time management was really the determining factor for the teachers or food-service staff who plated the meals. Given classes of sixteen 3- to 5-year-olds with various dining skills and levels of independence, offering the foods family-style without adequate assistance from adults would take too long. According to USDA regulations,<sup>11</sup> family-style dining is recommended for preschool-age children, but it is not a requirement. Because the meals are prepared by a school district operating the National School Lunch Program, the food-service department can elect to use service methods other than family style. According to the USDA, it's generally recognized that preschool-age children should be exposed to and encouraged to try as many different kinds of food as possible. The presumption is that serving all offered foods to the students is preferable to the "offer versus serve" model, where students must select a certain number of meal components to meet the reimbursable meal requirements.

In talking to the teachers, it appears that classroom-based meals offered the most flexibility for integration with teaching time and the school-day schedule. The need to accommodate preschool lunches in addition to the school's regular meal schedule did increase labor hours for on-site food-service teams. This labor primarily involved packing, delivering, and serving food at Creekside and Columbine.<sup>12</sup>

At Creekside, a food-service assistant arrived an hour early to assist with the packing for the two deliveries. The carts were set up with service ware and cold foods; the hot foods were added to the carts just before they were rolled down to the classrooms. Though the site only had two food-service employees, they were able to manage the deliveries and still attend to their regular cafeteria duties. At Columbine, one of the busiest elementary sites in the district, the preschool morning session eats before the regular cafeteria service begins, and the afternoon class eats after their regular service ends. The preparation and serving of 50 to 60 additional preschool meals added approximately 30 minutes of labor time per employee. At University Hill, lunch was served to the afternoon class only; because the meal was served when the food-service assistant was at the adjacent building serving the kindergarten, no additional labor hours were needed.

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<sup>11</sup> [http://www.fns.usda.gov/sites/default/files/SP35\\_CACFP23-2011os.pdf](http://www.fns.usda.gov/sites/default/files/SP35_CACFP23-2011os.pdf)

<sup>12</sup> In all cases, the primary food production took place at the regional production kitchen, while the sites finished and served the meals.

All three models provided solutions to challenges specific to the sites. Considerations of efficiency, meal quality, and the assets the meal experience provides for the students must all be balanced for each situation while maintaining the original intent of the program. Timing of the meal for the afternoon classes appeared to be a bit problematic, because it was served soon after the students' arrival; according to parent interviews and the teachers, the students were not always hungry at that time because they might have eaten at home prior to their arrival. Scheduling a later meal time would only be possible if the food-service team members' schedules were aligned. This would need to be addressed at each site to ascertain whether there could be an alternative service time.

### Lunch Service – Opportunities

Being exposed to new foods, learning to use utensils, engaging with classmates, and learning to “dine” all provided a rich and positive foundation for the many years of school-based dining that these students will experience in the future. This pilot was a great start, and with the system in place, it will be possible to incorporate more tasting opportunities and food education into the program for preschoolers. There is an opportunity to target the exposure to foods in a more intentional way, however. At Columbine, celery sticks and romaine lettuce were frequently offered as the daily fresh vegetable component; and at Creekside on the day the meal was observed, both vegetables offered were starchy – mashed potatoes and corn – which is not an ideal combination from a menu-planning standpoint.

Salad bars are a key feature of BVSD menus. They offer students access to a minimum of ten to twelve vegetables plus fruits every day. Though salad bars may not be feasible for preschool lunch service, it should be possible to plan a varied rotation of different vegetables and fruits along with some that are familiar. This would represent an opportunity for exposure, acceptance, and, hopefully, consumption. Food service was using the elementary menus with K–2 serving sizes for the preschool meals, but because those menu cycles included salad bars as a choice, the sites were determining what fruits and vegetables were provided daily. Since all locations have salad-bar vegetables available, creating a rotation of vegetable choices should be fairly easy and would provide more variety for the students.

In addition, creating preschool-focused cycle menus that are tied specifically to expanding food exposure and literacy would give the program a greater educational focus than it currently has. Farm-to-school curricular links, food identification, and cultural food exposure are all educational opportunities for preschool diners. The youngest children in the program may just be learning how to use a knife and fork, but within the span of the school year, preschool children change and grow a lot. As a key educational component in their day, the lunch program provides a unique platform that can transform the students' perceptions of food for the rest of their lives.

Farm-to-school-specific recipes and products could also enhance preschoolers' exposure to and knowledge about different foods and where they come from. Schools could offer preschoolers the raw product (as it comes from the farmer) along with foods prepared using that product, and could give the teachers information about the product to discuss with the students during mealtimes. Farm-to-preschool is gaining ground as a concept, and the National Farm-to-School Network and the USDA Farm-to-School programs are supporting growth in this arena.<sup>13</sup> Since Boulder is a leader in farm-to-school

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<sup>13</sup> <http://www.farmtopreschool.org/> and <http://www.fns.usda.gov/farmtoschool/farm-preschool>

activities – from its teacher training to its gardens, procurement, menus, and marketing – creating a unique experience within a preschool meal program would be a natural direction to move in.

### Revenues and Expenses

The Gamm Pilot was initially granted \$188,948. Upon review of the actual expenses in January 2015, it was found that the grant was being under-spent. There were multiple reasons for this, starting with the fact that the program was not initiated until the end of September, later than planned. The original budget included the cost of serving lunch to the morning class at University Hill, but it was later decided that it was better to simply continue their universal breakfast-in-the-classroom program. The original backpack concept was abandoned due to concerns about having to handle returns, in addition to the fact that the students were too small to carry them, and the recyclable grocery bags that were chosen in place of backpacks were much less expensive. After review the grant was adjusted to \$112,484.

### Weekend Food Bags

The weekend bag program does need funding to be viable, but the estimated budget of \$17.50 a bag for the food, bag, and labor was high. In analyzing the actual Packing out 60 bags requires about two hours of labor, which at \$22.00 average an hour for wage and benefits. Food cost was approximately \$9.50 per bag, with 3.824 bags delivered, the average cost including labor was \$10.47. The bag program creates many in-kind contributions like transportation, accounting, and the time needed for the community liaison to track the families and their requests, absences, etc. All of the activities attributable to the bag program were new, and just getting a new program going required many hours and much cooperation between the school teams and food service. Furthermore, inherent to the weekend bag program is a large dose of goodwill. Offering it to all families eliminates the stigma of being “needy”; the fact that it encourages families of all income levels to cook and eat healthily is a benefit to the children. The additional cost to offer it to all families would not be possible without the commitment of the grantor.

### Preschool Lunch

The preschool lunch program for the pilot was budgeted to cover the difference in reimbursement for the denied (full-pay) students. It was assumed that the reimbursement for free- and reduced-eligibility students would cover the cost of producing and serving those meals. Isolating costs in such a small pilot, however, is difficult. The cost of adding 150–180 meals is relatively small for a production kitchen where more than 2,000 meals are produced daily; due to efficiencies of scale, the small increase in volume has little impact. As mentioned earlier, the primary obstacle in the preschool meal service is the labor required for serving the meal. The timing of meal service must be coordinated with the school sites’ schedule and the preschool schedule, and this does have a small effect on site labor. But the relatively small addition to meal counts at each site is not a constraint on the production side.

When evaluating the actual cost by site specifically for the preschool program at the three sites the actual cost, were the district to operate this without the grant came up short by \$1822.00 when isolating the activity strictly to the preschool meals. (fig. 12) However Cost by Site data analysis provided by Accounting for the overall food service programming at the grant school sites (all ages and meal types) showed that all three sites are operating in the positive. (fig. 13) This is similar to what can happen when schools add universal breakfasts to their daily meal programs: If analyzed in an isolated

## No Preschoolers Hungry Pilot Project – A Case Study

scenario, a universal breakfast program may barely break even or even show a deficit, but the overall site productivity and lunch meal counts can cancel out that “loss.” Likewise, the preschool program is utilizing the efficiencies of the current system – the regional production, the regular site labor, and the expertise and experience of the BVSD crew. The small loss when isolating the preschool meals data is cancelled out by the rest of the activity at the sites. The result is that lunches are provided to all preschoolers at no cost, with a positive effect on their education, food access, and health. It’s a win-win.

Nourishing Toddlers Pilot BVSD SY15						
Actual Revenue and Expenses for Preschool Lunch (Summarized from Pilot Start Date)						
REVENUE FOR CLAIMED MEALS	Reimbursement rate	CS	COL	UNI	All Sites	Total
Free lunch meals	3.04	2379	3120	1560	7059	21,459.36
Reduced lunch meals	2.64	116	0	113	229	604.56
Denied lunch meals	0.34	3379	2874	719	6972	2,370.48
<b>Federal Reimbursement Sub Total</b>						<b>\$ 24,434.40</b>
<b>*EXPENSES</b>						
Budgeted Food Cost lunch - F/R	1.39	2495	3120	1673	7288	10,130.32
Budgeted Food Cost lunch - denied	1.39	3379	2874	719	6972	9,691.08
Additional site labor lunch (hrly avg w benefits per day)	22.00	11	44	0	117	6,435.00
<b>TOTAL EXPENSES</b>						<b>\$ 26,256.40</b>
Ending Balance						<b>\$ (1,822.00)</b>

Figure 12. Analysis of preschool lunch with actual meal claim revenue, labor and food cost.

Net Surplus/Deficit by Site as of April 30, 2015								
site	site name	Total Rev	total labor costs	total food costs	total costs	(surplus) /deficit	Food Costs	Labor costs
124	COLUMBINE ELEMENTARY	(274,554)	73,964	134,396	208,360	(66,194)	49%	27%
164	CREEKSIDE ELEMENTARY	(107,416)	37,923	59,161	97,084	(10,332)	55%	35%
190	UNIVERSITY HILL ELEMENTARY	(198,777)	65,580	95,313	160,893	(37,884)	48%	33%

Figure 13. Cost by Site data provided by BVSD Food Service accounting shows all locations operating with a surplus for 2014-15.

## Potential for Replication

### Weekend Food Bags

This pilot has much potential as a model for other programs. It goes beyond conventional weekend food-bag programs in many respects. For one thing, in order for the child to access the food sent home, cooking and parental interaction are required. In addition, the program is offered “universally,” meaning it is available to all families regardless of income. This supports the concept of whole-food knowledge while simultaneously addressing food access and hunger.

We recommend creating more opportunities to connect with the preschool families and identifying opportunities for recipe sharing, cooking, farm-to-preschool connections, and nutrition education. At \$10.47 per bag, the level of funding provided for the program is high by industry standards. Identifying more economical means of supplying the food products would reduce the program cost; alternately, the remaining funds could be used to develop a parent-to-preschool cooking and nutrition program to reinforce the incorporation of whole foods in everyday cooking and eating. Beyond the concepts of

## No Preschoolers Hungry Pilot Project – A Case Study

whole foods and families, weekend bag programs must have committed funding partners, as well as school-district partners for support in the areas of transportation, education, and food service; and they require excellent organization. BVSD's model, which works with its food-service department, is excellent because the district's food-service team is skilled and accustomed to distributing food. Very often bag programs are volunteer-run and have little food service expertise, so they require additional volunteer training to handle the distribution of perishable food. Managing the program through the district's food-service department provides a stable and reliable organized team, and utilizes assets and established communication pathways within the district. Bag programs that are organized and funded completely outside the district's purview are forced to rely on the district's willingness to allow them to connect with parents at the school level. Integrating the program with food services eliminates that challenge, making it the perfect distribution hub in many ways.

### Preschool Meals

Preschool meals in K–5 settings are not unusual, but they are not often seen in half-day programs. Given BVSD's productivity and expertise in fresh food preparation and service, shifting the preschool meal from snack to lunch service was not a terribly difficult transition from the food-service side. Once educators and school administrators were on board, the food-service department was able to respond to the individual needs of each site. BVSD's excellent site productivity is aided by the fact that much of the food is produced in a regional kitchen and shipped to the school sites for finishing. This is a cost asset that might not be viable in a district where all school sites must produce and serve their own meals. Furthermore, the educational component of the program cannot be overlooked, as it adds great value. The potential to educate preschoolers in nutrition, social skills, fine motor skills, language, taste, and flavor by offering a variety of freshly prepared whole foods is significant. It provides a compelling argument for establishing and supporting preschool dining as a "must."

### Outcomes

Boulder is planning to continue serving the preschool lunches at the pilot sites in 2015-16 and will expand the program to Sanchez Elementary and Birch Elementary. The district has been in discussion with Community Food Share and is working on a plan for Food Share to provide the staples in the bags while BVSD provides the fresh products. The FSD is seeking funding for that approach and hopes to be able to offer weekend food bags again 2015-16.





Figure 14. Lunch in the classroom at Creekside Elementary