

# FOOD ACCESS SCAN of Child Care Centers:

Identifying Challenges and Opportunities  
for Improving Healthy Food Access in Colorado



Colorado Department  
of Public Health  
and Environment

Child & Adult Care Food Program

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\*\*\*All appendices and supporting documents are available through the Colorado Department of Public Health and Environment. Please visit [www.XXXX](#).



# I. INTRODUCTION

## A. Project Background

In the fall of 2013, the Child and Adult Care Food Program (CACFP) at the Colorado Department of Public Health and Environment released a new package of nutrition policies, collectively referred to as the Healthier Meals Initiative (HMI) for child care centers enrolled in CACFP.

The goal of HMI is to support child care providers in meeting higher nutrition standards that are consistent with the most recent national nutrition recommendations for meals and snacks served to young children. The policies are also in line with requirements that are expected to be released by the United States Department of Agriculture in 2014 for all CACFP sites.

The HMI policies require the following:

- 1% or fat-free milk for children ages 2 years and older (this is already a CACFP/USDA requirement)
- Limit 100% fruit juice to twice per week<sup>1</sup>
- Limit processed and pre-fried meats to once per week<sup>2</sup>
- At least one whole grain product per day<sup>3</sup>

According to a July 2010 survey conducted by CDPHE-CACFP, Colorado CACFP child care providers perceive several potential barriers in meeting these requirements. Some of the poten-

tial barriers include finding healthy alternatives, food availability, transportation challenges, and increased cost.

## B. Food Access Scan Intent

In order to better understand some of the barriers and to identify how best to support providers navigating required HMI changes, the Child and Adult Care Food Program hired external contractor WPM Consulting to perform a food access scan of providers across the state of Colorado.

The intent of the scan is to understand: 1) to what degree *accessibility* of the food items required by HMI may pose challenges; 2) to what degree *affordability* of the food items required by HMI may pose challenges; and, 3) to what degree do -- or could -- local and regional food systems help provide the healthy food items required through HMI.

This report provides key insights to the food access situation of child care centers around the state of Colorado based on the stories and feedback heard from providers through face-to-face interviews, collecting stories of both challenges and successes. Additionally, this report offers recommendations and notable opportunities for increasing healthy food access to child care centers based on a scan of national best practices and regional assets.

# II. METHODOLOGY

In order to better understand child care providers' primary barriers, interests, and opportunities to increase access to healthy food items, the project team completed the following:

- A review of national trends regarding healthier food offerings in early child care settings through partnerships with regional food systems;
- In-person interviews with child care centers; and,
- An assessment of regional food systems assets (food production, processing, and distribution) throughout Colorado that might serve as resources for child care centers.

## A. Interviews with Child Care Providers

Interviews were conducted in the six regions as identified by CDPHE-CACFP to organize and provide technical assistance to participating CACFP sites. The regions are:

- Region 1: Adams, Arapahoe, Denver, Douglas, Jefferson, Boulder, Broomfield
- Region 2: Teller, El Paso, Fremont
- Region 3: Saguache, Rio Grande, Alamosa, Conejos, Costilla, Las Animas, Huerfano, Custer, Pueblo, Crowley, Otero, Bent, Baca, Prowers, Kiowa
- Region 4: Archuleta, Mineral, Hinsdale, Gunnison, Chaffee, Pitkin, Lake, Delta, Mesa, Montrose, San Miguel, Dolores, Montezuma, La Plata, San Juan, Ouray
- Region 5: Routt, Rio Blanco, Moffat, Jackson, Park, Summit, Gilpin, Grand, Garfield, Eagle, Summit, Clear Creek
- Region 6: Larimer, Weld, Morgan, Logan, Sedgwick, Phillips, Yuma, Kit Carson, Cheyenne, Lincoln, Elbert, Washington

In order to guarantee a mix of interviewees that represent the diverse range of child care providers in the state, contractors worked with CDPHE-CACFP to randomly select interviewees. Interviewees were selected from a list of all child care centers participating in CACFP in the state of Colorado with the exception of centers that are vended (centers that have their meals catered). Three filters were then applied to this comprehensive list, allowing for more diversity in the random selection process. The filters were enrollment size of center; geographic location (or region by county according to the list above); and, for-profit vs. nonprofit status. Once these characteristics were controlled for, 10 centers were randomly selected from within each region (60 total) using a computerized selection process.

These 60 centers were then contacted by CDPHE-CACFP with a request to participate in the interview process, with an immediate follow up from the WPM team. Interviews were then scheduled in all six regions, with the goal of confirming at least 4 interviews in each region. For additional information regarding the centers that were selected to participate in interviews, see section III "Overview of Interview Participants" and Appendix A for detailed information on each interviewee. To view a map of all interviewed centers, see Appendix B. Each participant was asked a list of detailed questions about challenges and successes regarding purchasing and preparing meals at their center, as well as any challenges or opportunities that may arise when instituting the HMI policies. Interviewees were also asked about any connection with local and regional food systems and their level of interest in securing more food items

<sup>1</sup> This policy promotes the substitution of whole fruits and vegetables as a reimbursable item.  
<sup>2</sup> This limits the offering of foods such as hot dogs, chicken nuggets, and bologna and promotes more scratch cooking from fresh food selections.  
<sup>3</sup> Items served could include brown rice, whole grain bagels or cereals, and whole wheat tortillas.



from local or regional sources. To view the full child care center interview tool, see Appendix C. For quantitative results from the interviews, see Appendix D.

\*\*\*For all appendices, please visit [www.XXXX](http://www.XXXX).

## B. Regional Scan of Food Systems Assets

In order to assess any existing or potential connections between local and regional food systems<sup>4</sup> and child care centers, a survey was sent to food systems stakeholders all across the state. Survey respondents included members of food policy councils; LiveWell Colorado Communities; CSU Extension staff; child care councils; and, agencies involved with farm to school. In addition, the contractor team developed a spreadsheet of known food systems assets to overlay with survey results.

The goal of the survey was to identify what is already being done to connect child care centers with local and regional foods; to understand the potential of and interest in increasing these connections; and, to develop an asset map of major production, processing, and distribution assets and gaps in each region. Twenty-eight stakeholders completed the survey, from all across the state. For the Food Systems Stakeholder Survey Tool, see Appendix E. Appendices F, G, H, and I include Food Systems Survey Respondents, Raw Survey Results, and Regional Results. A complete analysis of regional gaps and assets in relation to child care centers is included in section VII of this report.

\*\*\*For all appendices, please visit [www.XXXX](http://www.XXXX).

## III. NATIONAL TRENDS: AN INCREASING FOCUS ON EARLY CHILDHOOD

It is well established that diet and physical activity habits established in early childhood are critical indicators for obesity and other diet-related health risks later in life. The onset of obesity and related conditions has increased dramatically in young children over the past three decades and since so many children spend a good part of their day in child care settings, focusing attention on foods they eat and the habits they form can have profound impacts on prevention. While overall obesity rates in the country have remained high, a new report released by the Centers for Disease Control and Prevention (CDC) in August shows 18 states and one U.S. territory experi-



enced a decline in obesity rates among preschool children from low-income families. Thus, developing a healthy relationship to food is a high-leverage opportunity for public policy and public programs.

The CACFP HMI is a good example of an intervention that can have profound impacts if fully adopted in the child care and home care settings. Success is dependent on child care providers clearly understanding the context of the recommendations and educating and obtaining buy-in from staff, children and parents. Agencies and organizations can assist by identifying obstacles providers face and providing resources to help facilitate adoption of serving healthier food. Much of this report focuses on these obstacles and the best practices and recommendations to address them.

Nationally, institutions and organizations are providing resources, research, and models to help promote policy changes for the implementation of healthy food in child care settings. Below we list a few exciting examples. More resources, and all web links, are included in Appendix J: National Resources on Healthy Foods in Child Care Centers.

**Let's Move Childcare** was developed by the First Lady and the USDA to provide resources and tools for centers and home care providers on strong nutrition practices.

The Centers for Disease Control and Prevention added emphasis on nutrition in early childcare settings in its **2013 Fruit & Vegetable Indicators Report** including these new indicators: State child care regulations align with national standards for serving fruits; State child care

regulations align with national standards for serving vegetables; and, State-Level Farm to School & Preschool.

The 2013 Robert Wood Johnson Foundation **Commission to Build a Healthier America** Commission announced early childhood health (including nutrition and physical activity) as one of its two primary policy priorities.

The Food Research and Action Center (FRAC)'s **Child Care Wellness Tool Kit: Child and Adult Care Food Program (CACFP)** is a tool for advocates, CACFP and licensing agencies, state and local health promotion and obesity prevention initiatives, child care providers, and others. It focuses on strategies for implementing good nutrition and physical activity policies and standards at the state and local level.

The National Farm to School Network has a **Farm to Preschool Subcommittee** that is focusing on education and technical assistance for local foods in early care and education.

The Institute for Agriculture and Trade Policy's (IATP) **Farm to Child Care Pilot** worked with the New Horizons Academy in Minnesota last summer with plans to expand all sites. The resulting report explores the feasibility of expanding Farm to Child Care (F2CC) initiatives, the dynamics that surround foodservice in various child care contexts, and lessons learned from early efforts around the country.

New York City's (NYC) **Growing Healthy Children Guide** assists child care centers in complying with regulations and enhancing their nutrition and physical activity policies. The document outlines

<sup>4</sup> For the purposes of this project, local food systems could include on-site gardens, community gardens, or regional farming, or local food processing.

all the intersecting regulations in NYC and gives suggestions for implementation and enhanced policies.

The Arizona Department of Human Services has linked discounted licensure rates for early child care centers that sign up for the **EMPOWER** program. The EMPOWER program requires centers limit serving fruit juice to no more than two times per week, serve meals family style, and do not use food as a reward.

The **Healthy Eating Minnesota Network** began as an online forum devoted to early childhood and child care centers. It is a community for those interested in healthy food access and healthy eating for the youngest Minnesotans (ages 0-5).

## IV. OVERVIEW OF INTERVIEW PARTICIPANTS

Throughout the month of July 2013, the contractor team interviewed 28 child care centers participating in the Child & Adult Care Food Program (CACFP). For a list of centers interviewed, see Appendix A. For a map of all centers interviewed, see Appendix B. Each interview took between 45 and 90 minutes, depending on how much information the provider wished to share with the interviewer(s).

Interviews were conducted at the center, most often with center directors and cooks or kitchen managers. Participants by region included:

- Region 1 (Front Range): 5 interviews
- Region 2 (South Central): 4 interviews
- Region 3 (Southeast): 6 interviews
- Region 4 (Southwest): 4 interviews
- Region 5 (Northwest): 4 interviews
- Region 6 (Northeast): 5 interviews

Of the 28 centers that participated in interviews, 11 were Head Start centers or hosts of Head Start programs that also provided licensed day care or pre-school. Nine were nonprofit, licensed child care centers; six centers were private, for-profit centers; and two centers were after-school care programs.

The majority of child care centers interviewed serve breakfast, lunch, and one snack. A select few centers serve different meals such as breakfast and lunch only, lunch and two snacks, lunch and one snack, and breakfast and one snack.

Of the 28 centers that participated in interviews:

- 2 centers have over 201 children enrolled
- 9 centers have between 101 and 200 children enrolled
- 14 centers have between 26 and 100 children enrolled
- 3 centers have between 6 and 25 children enrolled

Interviewees reported a wide range in the percentage of enrolled children who are eligible for reimbursable meals through CACFP<sup>5</sup>. Of the 26 centers that responded to this question:

- 9 centers report that 76-100% of their enrolled children receive free and reduced benefits
- 6 centers report that 51-75% of their enrolled children receive free and reduced benefits
- 6 centers report that 26-50% of their enrolled children receive free and reduced benefits
- 5 centers report that 0-25% of their enrolled children receive free and reduced benefits
- For more detailed tables on all of these quantitative findings from child care centers, see Appendix D.

## V. KEY FINDINGS ON FOOD PREPARATION, ACCESS & AFFORDABILITY

Conducting face-to-face interviews with 28 child care centers provided a unique opportunity to gather detailed stories of the challenges and opportunities providers face when purchasing and preparing meals at their centers. This section includes a summary of both statewide and regional trends on numerous topics from food availability to storage and preparation taken directly from the experiences of providers.

### A. Menu & Meal Planning Patterns

#### Overview

Child care centers in Colorado receive cash reimbursement for serving meals that meet federal nutrition guidelines. Centers use the CACFP and HMI meal patterns to carefully plan meals that are healthy and “reimbursable”. At smaller

centers, meal planning and menu creation is primarily completed by the director of the center and the center cook, while at larger, more institutional centers meal planning is often completed by a corporate office (e.g., La Petite Academy) or by a Registered Dietitian (e.g., at a Head Start) who tend to have more formal training in CACFP food regulations and reimbursable foods. Private centers tended to gather more input from children, teachers, and parents than public centers. One center reported using Minute Menu, a child care software package, used to develop CACFP-reimbursable menus.

#### Challenges & Constraints

While most providers reported that they could, most of the time, find foods that meet meal requirements, many providers did discuss how the availability of certain foods impacts their menu planning. Many centers reported having to make changes to their menu based on what foods were available through their delivery service or at the stores where they shop. Most often, these changes resulted from lack of fresh fruits and vegetables, canned produce options, low-cost meats, and whole grain products.

*“We need experience cooking from scratch so our kids know what real food tastes like, so the next generation doesn’t grow up on processed food”*

— Center director from the western slope

Such restrictions lead to decreased consumption of fresh produce in the winter and spring, and a dependence on only a few types of canned fruits and

<sup>5</sup> According to the USDA, eligible public or private nonprofit child care centers, outside-school-hours care centers, Head Start programs, and other institutions which are licensed or approved to provide day care services may participate in CACFP. For-profit centers must receive Department of Human Services Title XX funds for at least 25 percent of enrolled children or licensed capacity (whichever is less) or at least 25 percent of the children in care must be eligible for free and reduced price meals. Meals served to children are reimbursed at rates based upon a child's eligibility for free, reduced price, or paid meals.



vegetables. Other factors mentioned by providers that affect menu planning include child allergies (e.g., peanut, milk or gluten), parental demands, or specific styles of food service (e.g., family style or snack service).

### Assets & Supportive Factors

Smaller centers and private centers tend to report more flexibility in menu design, allowing for rotations of menus to occur monthly, as opposed to larger centers which commonly have 5 to 6 week seasonal menu rotation. Centers noted that the rotation of menus allows for the introduction of new foods to children, as some centers noted that too much repetition in the longer rotations led to food fatigue in children.

## B. Food Availability

### Overview

Eight centers in total reported some degree of difficulty in finding the foods they need to serve their children. Just under one-fourth of all centers (six total) reported some challenges while two centers reported significant challenges.

Two Head Start directors from near-by towns on the Western Slope often shop at similar times and at the one grocery store known to stock items that are reimbursable through the food program. One director discussed how she went shopping after the other one one day only to find empty shelves and few products she needed.

### Challenges & Constraints

As mentioned above, seasonality affects the availability (and affordability) of food for all types of child care centers. A common theme is the limited availability (from both stores and distributors) of ripe, ready-to-serve fruits and vegetables. Centers that have minimal storage space for fresh produce need to serve produce right away, regardless of ripeness. For centers shopping only once every week or two weeks, unripe fruit causes changes in the menu and inconvenient substitutions, and ultimately leads centers to rely more heavily on less fragile, but more common fruit like apples and oranges or canned fruit.

Surprisingly, the lack of availability of canned fruits at markets was also mentioned several times as a limitation. These challenges could potentially lead to food fatigue amongst the children and less opportunity to try new foods.

Rural centers reported these and other challenges more often than urban centers. Rural centers often find grocery store shelves void of the products they need, specifically when more than one center in a region shops at a local grocery store on the same day, forcing them to fill in gaps by driving further to get food or to free up staff later in the week to complete unfinished shopping trips. Examples of items that sometimes run out include 1% milk, ripe fresh fruit, canned foods or whole grain breads. For rural centers, distance to club stores or large grocers that have the quantities they need is also a challenge, especially in the winter months when roads are dangerous or closed, creating liability issues for centers. Small and rural centers also reported

are typically unable to use distributors, and reported difficulties in meeting a minimum purchase requirement and in coordinating a time or day to receive and put away deliveries.

A final limitation to food availability is the laborious process that the institutional centers, like Head Start, must go through to approve new vendors and to make financial transactions through specific purchase orders. This was reported as a major limitation to potentially using smaller, local vendors for products.

One rural center reported consistent challenges finding enough 10# cans of fruits and vegetables at Walmart. When this happens, she discussed how hard it can be to find enough shelf space for many small cans and how much longer it takes staff to open up several small cans rather than a few large ones.

### Assets & Supportive Factors

In general, centers are finding what they need. Twenty participants reported no challenges in finding or accessing foods that meet the meal requirements. Most discussed items they would like to have access to, but meeting the basic requirements of the program was not typically a major concern. Almost all centers reported that even when finding the right foods was challenging, it was worth it, and simply “part of the job”. Center staff’s commitment to finding the foods they need and want to serve children was consistently discussed.

Additionally, centers that have access to vendors reported fewer constraints for most foods. Distributors were reported as helpful in tracking down or ordering center requests for foods.

## C. Food Affordability

### Overview

Food affordability – and how centers perceive and define affordability – is incredibly complex. Centers are constantly and strategically balancing quality, availability, and reimbursable foods. While centers often reported that cost was their #1 factor in decision-making, this was often due to budget constraints and not values. Most centers expressed great value for other factors, such as health and quality. (For more details regarding values when purchasing foods, see Section F “Food Shopping and Purchasing”.) The new HMI policies add another layer of complexity. While centers are mostly successfully adopting the HMI policies, they reported increased food costs and claimed that unprocessed foods are more expensive than packaged or premade foods. While this concern was common, many centers found value in buying in bulk and cooking from scratch, taking advantage of low price ingredients like dry beans, rice, or flours, but such enhancements requires experienced, skilled, culinary staff.

One northern Colorado center director pointed out that CACFP reimbursements “don’t come close” to covering their costs of food. She discussed how their center, as a for-profit institution, must decide to spend more money on food than other items at their center, because their staff place great value on healthy foods for the children.

## Challenges & Constraints

The size and type of a center greatly affects its budget. For a for-profit center, food budgets determine whether the center financially survives. For non-profit centers, margins are very tight and their budgets largely depend on the number of CACFP-enrolled students: when numbers are low, they tend to purchase cheaper, lower quality foods. Centers of all sizes see changes in enrollment in the summer, specifically when the Head Start Program ends, causing food budgets that once relied on CACFP reimbursement dollars to dwindle.

As discussed above, seasonality impacts affordability of desirable and required foods as well. Fresh fruits and vegetables are largely viewed as desirable, but often too expensive for weekly budgets except in the summer and fall when most produce is much more affordable. Large bags of frozen fruits or vegetables and canned vegetables were reported to be half the cost and more shelf stable.

Again, rural centers reported more challenges in finding “good deals” than urban centers. Rural centers reported fewer options to shop for prices. They often do not have access to the same sales, promotions or bulk purchases as in larger towns. Also, if a food component runs out or is needed immediately, centers are forced to shop at the closest store, which may be a gas station or small local market, where a gallon of milk is expensive. Consequently, smaller and rural centers reported high interest in delivery from a vendor or distributor, but they are constrained by their size (required minimum orders are too large) and by the costs of such large orders.

## Assets & Supportive Factors

Though it does take time, centers are savvy in monitoring, scouting and negotiating prices for food. Many centers encourage their staff to assist in monitoring prices and sales in their communities throughout the week to help track down “the deals” and institute “price matching” at participating grocery stores. Staff time, and their commitment to finding the foods they want to serve the children, is consistently reported to be an asset.

Centers using club stores (Sam’s, Costco) are participating in discount clubs that provide incentives and rebates on food expenditures (seen at the end of the year). These stores are a great asset to the centers, offering the advantage of bulk purchases, while the smaller grocery stores provide for smaller quantities or more specialized purchases. Centers have also been able to use discount cards (e.g., buy a store card for \$100 and get \$120 worth of groceries) at typical grocery stores as well.

*“I would love to have truly healthy food, accessible and affordable to child care centers”*  
– Center director from the western slope

### D. Distance & Travel to Food Sources

#### Overview

While the majority of centers reported little to no challenges with travel, seven total centers did. Three centers reported some difficulty with traveling to where they purchase their food items

while four centers experience significant challenges with this process. Most centers made comments such as, “it is not convenient, but it is what you have to do”. Going great distances to shop (or to work) is often a part of daily life.

## Challenges & Constraints

Three out of four centers experiencing significant challenges with travel and distance were located in the northwest region of the state. This region experiences the most significant barriers to accessing healthy foods due to high prices in local markets and the distance between their center and the nearest large town or city with better resources. These centers pointed out that it is typically more cost efficient to travel far to a club store than shop at the local market, even though they do have a local grocery store.

How far center staff is traveling for food shopping depends on the size of the center and their proximity to club or well-stocked grocery stores. The largest institutional centers, regardless of location, often use vendor delivery for their milk and bulk food purchases. These deliveries are made once or twice a month, depending on the storage capacity of the center. Smaller rural center staff reported using their own vehicles to make weekly shopping trips, driving between 10-15 miles (though sometimes 100 miles round trip), to the nearest grocery store, sometimes on the way to work. Many of these centers do not have access to club stores and have to make multiple stops to fulfill their food needs.

Traveling long distances to shop for large amounts of groceries is often difficult to schedule and manage. Trips must be

carefully planned to avoid construction or bad weather. Small vehicles or lack of storage at the facility limits the quantity purchased. Because of the amount of food purchased, the (literal) heavy lifting often requires multiple staff members, or quite often the enlistment of family members, and a shopping trip become an all-day affair. Centers facing these constraints expressed frustration and inconvenience and, consequently, staff turnover at times.

To address some of these frustrations, many centers expressed an interest in, or debate around, eliminating their meal program and requiring children to bring their lunch. However, concerns with the health and quality of food that children would bring, and the loss of reimbursement, have steered centers away from this.

*“It’s a pain. I have to go on the weekend instead of spending time with my family. A company van would help with more bulk purchasing from Costco twice a month.”*

- Center director along the I-70 mountain corridor

One center in northeast Colorado has lost staff due to the extra burden shopping was placing on their time. As the director said, “No one likes doing it.”

## Assets & Supportive Factors

Most centers harbor a “do what it takes” attitude regarding the distance needed to travel to buy food. Rural centers plan day-trips with family or friends when they need to travel for food, and plan their own personal shopping around the center shopping.





## E. Food Storage

### Overview

In total, 15 centers reported some challenge due to limited storage space. Six centers reported some degree of difficulty with food storage and an additional nine centers discussed significant challenges.

### Challenges & Constraints

In general, the lack of cold storage was most often identified as the primary challenge. While most of the centers had adequate dry storage for canned, box and bulk dry goods, small (residential) refrigerators were a limiting factor for centers of all sizes. Because milk is highly perishable and bulky, it takes up a majority of the cold storage for a facility, limiting the capacity to store fresh produce. Often milk is given its own refrigerator, or a commercial refrigerator, but due to high perishability and daily use, milk is also purchased or delivered 1-2 times a week.



Several centers reported a lack of freezer storage, making it difficult to store produce or other bulk items for later use. Freezer storage is increasingly being used for meat and cheese storage, especially with implementation of the new HMI standards. Some centers reported resorting to canned or frozen produce more often because of a lack of refrigerator storage. Such large, expensive appliances are essential to food storage at any size center and must be in good working condition to prevent food safety hazards.

All other constraints relate to the size and management of the center. Smaller centers are often outfitted with home-style kitchens that are not built for bulk food storage. In these cases, less space means more shopping and less capacity to take advantage of bulk purchasing. Some non-profit centers are sharing space with other organizations, like churches, which seems to either further limit their storage capacity or drastically improve it. Those receiving large commodity or vendor delivery must have adequate space to store the food safely and many centers do not have this capacity.

## F. Meal Preparation

### Overview

Of the 28 centers that participated in the interviews, nearly half (12 centers) reported that they prepare most meals and snacks from scratch. Most other centers (10 total) reported that their preparation method for meals and snacks is a mix of scratch cooking and pre-prepared foods. Six centers reported that their meals and snacks are mostly pre-prepared, heat and serve style.

Eleven centers reported that they face some degree of challenge with preparation space and equipment, while four centers reported facing significant challenges with food preparation. Many of the challenges cited were due to small, residential sized kitchens.

*A typical lunch might include a casserole or Chicken Parmesan; bread or tortillas; fresh apples or canned peaches; green beans or carrot sticks; milk.*

*A typical snack might include cheese sticks with crackers and apple slices; yogurt and fruit; or, muffins and fruit cocktail.*

### Challenges & Constraints

While many centers are using a combination of cooking methods, staff understanding and impressions of scratch cooking varied. Some centers were resistant to scratch cooking, citing time and labor constraints as well as child and staff food preferences. The centers that reported resistance do not correlate to any region, size or percentage of reimbursable meals. The amount of scratch cooking happening at a center is linked to skill of labor and amount of labor available (which equates to adequate time). The kitchen staff at the majority of centers did not have previous food service experience, so skills are often developed on site.

Many of the center kitchens are small and can get crowded by staff during meal preparation, but the most common concern regarding facilities was the lack of counter space. A few centers also dis-

cussed their lack of equipment, specifically stovetops and oven space. There is a need to equip more centers with commercial pressure cookers, crock-pots, and food processors that fit the needs of the center and facilitate the ease of scratch cooking methods.

For centers that did experience challenges regarding preparation skills and space, canned foods were very common, with fresh used only as a substitute when available or on sale. Raw hamburger was commonly prepared on site due to versatility, cost and ease of preparation, but raw chicken was largely avoided. Some centers did report soaking and cooking raw beans and using rice cookers for brown rice.

*One director who used to work at a center in Florida talked about the bulk catering service they used there. They provided only reimbursable, heat-and-serve meals, through a partnership with the state. This director would love to see such a program in Colorado in order to spend less time shopping and save on both the time and labor it takes to cook on-site.*

### Assets & Supportive Factors

As the new HMI standards are moving many centers more toward scratch cooking, specifically in regards to meat, the reduction of processed meats has encouraged centers to try recipes they find online (e.g., on Pinterest) in order to make these items in-house. Some centers expressed the need for more standardized recipes for large-quantity meals made from scratch.

The centers most enthusiastic about scratch cooking had a center director

or cook that was passionate about food and nutrition or had formal training in food service production. The “do whatever it takes” attitude emerged again when facing the policy changes. It was noted that when the skilled staff go on maternity leave or vacation, there is an increase in heat and serve meal preparation at the centers, which validates the importance of well-trained and experienced staff in the kitchen.

A few of the centers interviewed use vendors or other institutions to distribute food to the center. Common vendors are school districts, other child care centers, or for-profit restaurants that have specialized in preparing foods that meet the meal requirements. Smaller centers facing the most constraints toward meal production expressed desire for these types of arrangements.

One Northern Colorado center listed leadership buy-in as their greatest asset. Their owner, who has a home economics degree and used to cook everything from scratch herself, is “150%” behind healthy foods. Center staff discussed how having people who believe in the value of healthy meals for children makes achieving it to so much easier.

## G. Food Shopping & Purchasing

### Considerations that Affect Purchasing

As discussed earlier, providers typically weigh many factors when making decisions. Exactly half (14) of all centers reported that cost was their number one consideration when purchasing reimbursable foods. Four providers reported that their number one consideration was

organic or minimally processed foods. There were a select number of centers that were very dedicated to this and others that valued it highly when the cost was deemed reasonable. Four providers also reported that healthy food - though defined differently by each provider - was their number one priority. Lastly, two providers cited freshness as their number one priority. The remaining providers simply discussed “quality” as their top priority, though definitions of “quality” varied from appearance, to taste, to a certain brand.

In general, centers aim to get what they believe to be the highest quality food within their budget that meet reimbursement requirements. For-profit centers, Montessori preschools, and smaller centers with unique intrinsic values in nutrition and health often did not consider cost their primary determinant in food purchasing, though they too would still make compromises in other parts of their budget in order to prioritize healthy foods.

Values related to food production such as organic, grass-fed, and hormone-free are leading centers to presumably make “quality” a top priority. Center owners who deeply believe in healthy



environments or who have unique backgrounds in food-related fields are making budget determinations to prioritize higher-quality foods. Because of this, centers have to request new, healthier options or specific attributes like hormone-free milk from their distributors or vendors.

A Western Colorado center food buyer feels limited only to use the grocery credit card she is provided since buying elsewhere — from a farmers market for example — would take additional time for reimbursement.

### Shopping & Purchasing Patterns

As discussed earlier, shopping is a balancing act between price, accessibility and ease, and shopping patterns varied greatly across all 28 interviewed centers. Also important to note is that shopping patterns often change in the summer when there are fewer enrolled children.

Many centers use both delivery and shopping to meet their needs, while only a select few (large) centers purchase food solely through delivery. A number of centers do not participate in any deliveries and shop for all their food. Some (but not most) medium-sized centers have a company van for their shopping while smaller providers use personal cars, and are typically not reimbursed for mileage. Staff members reported doing the shopping on the way to work or on weekends, often time employing friends or family members to help drive and to manage the large loads.

For the majority of foods purchases, centers primarily use club stores (Sam’s Club, Costco) and trips are made farther away

(5-10 miles one way for more urban centers and 15-30 miles one way for more rural centers) and less often (1-2 times a month). Centers are taking advantage of discount club card offerings, but reported that the food offerings change and the produce is not as high-quality as one would find at a typical grocery retailer.

Secondary to club stores and distributors are large chain grocery stores (City Market/King Soopers, Wal-Mart, Safeway), which are easily accessible (often 1-2 miles away), offer consistent product and prices, and have discount cards. Trips to these stores occur weekly and are used to access products not found at club stores. For example some Sam’s do not sell the baby food a center needs, so a trip to Wal-Mart is added to the weekly shopping for it. Grocery stores, and sometimes convenience stores, are used to fill in the gaps when centers run out of milk, cheese, bread or other staple items that run out quickly.

Additionally, centers that are large enough or lack access to a club store often use a local or national distributor (e.g., Shamrock, Andrews, McGregors, Giambrocchio, Sysco, US Foods) that delivers to centers between 2-4 times a month. While large centers can work with distributors (freeing up considerable staff time), smaller centers (most centers with fewer than 75 enrolled children) have difficulty fulfilling their minimum purchases or coordinating the time and day of delivery to receive and put away orders.

The relationship that centers build with local distributors is a non-tangible value. Centers are able to request new products, provide direct feedback and



receive personal assistance ordering. Since distributors work with many centers, they are versed in the policies for reimbursable foods and can suggest products that work for other centers. While the relationship is valuable, many centers reported poor quality and inconsistency of fresh produce offerings, forcing them to shop elsewhere for these items.

### Exceptions that Affect Purchases

Given how often milk is consumed and how perishable it is, it is the one product that has its own shopping and distribution patterns. Many centers have milk delivered weekly, sometimes from national distributors but often from Colorado dairies. Examples include Meadow Gold, Boulder Valley Dairy Service, Morning Fresh Dairy, and Borden. Other centers purchase milk from their food distributor or where they do the bulk of their shopping, but report having to make extra trips during the week to purchase more milk from the closest store.

Lastly, some constraints were shared by some of the public centers, like Head Start, that are interested in working with smaller, local retailers but cannot. Such institutions reported a cumbersome process to approve new vendors that includes complex financial transactions reliant on the use of standardized purchase orders. This is a major limitation to the potential to use smaller, local Colorado vendors for product.

## VI. COMMENTS ON HEALTHIER MEALS INITIATIVE POLICIES

All 28 interviewees were asked a series of questions to determine their anticipated challenges and potential opportunities that may arise when implementing the four HMI policies to be released in the fall of 2013. The following sections address each of the four policies based on perceived challenges related to access, affordability, and implementation as expressed by child care centers around the state. See Appendix D for details on how respondents rated the difficulty of meeting the various policies.

### A. Fat-free or 1% Milk

All 28 centers reported that they are already following the policy to provide only skim or 1% milk to all children 2 years and older. In general, providers reported that finding fat-free and 1% milk is easy through their vendors and at local stores, and they have noticed no changes in price.



### Challenges & Constraints

While all centers are meeting this requirement, many centers did discuss concerns or challenges. Some centers expressed difficulty for staff in overseeing mixed ages in a classroom and determining which children are to receive whole or 1% milk. A few centers cite child preferences as a limitation to enlisting the policy, such as if a child is used to whole milk at home, she will perceive 1% as too watery and not accept the offering.

Hormone-free milk was mentioned as a desired product, but many of the centers were able to access this from their distributor at a slightly higher cost. Some centers reported difficulty accessing alternative milks (e.g., soy, almond, rice) that fit the CACFP guidelines for reimbursement. A few providers reported that parents want their children to have almond milk or goat milk, but the believed that the center could not get reimbursed for this type of milk.

A few providers felt the change in milk policy was unnecessary, especially at centers where they are no concerns with obesity. Some providers view whole milk as a healthy and nutrient-dense food for children and think the policy is too restrictive.

### B. Limiting Fruit Juice

Nearly all centers (26 total) reported that they are already following the policy to limit 100% fruit juice to only twice per week. The remaining two centers reported that implementing this policy would be “not at all difficult”. In general, centers reported that meeting this policy has been relatively easy and report using juice rarely, sometimes at snack or sometimes in a smoothie.

### Challenges & Constraints

The one area of challenge discussed by centers was accessing and using more fresh fruit. Concerns included seasonal limitations; storage competing with other foods like milk; not being able to afford or access the quantity or quality needed; and, access to adequate variety. Preparation and serving of fruits and vegetables requires increased education of staff and parents to support this policy change.

One southern Colorado center discussed their efforts to increase more fresh produce since eliminating juice. The director expressed concern that since fresh produce is more expensive, they are simply buying fewer varieties of fruits and only serve the fruits that are most consistently inexpensive. They would love to serve strawberries, for example, but are only able to do so when they are on sale.

### C. Limiting Processed Meats

Over half (16) of providers interviewed reported that they are already following the policy to limit processed and pre-fired meats to once per week. Six centers reported that though they were not already following the policy, implementation would be “not at all difficult”. However, 4 centers reported that implementing this policy would be “somewhat difficult” and 2 centers reported that it would be “very difficult”.

### Challenges & Constraints

When centers expressed concern, they most often cited the lack of time, labor, and skill as significant barriers to offer-



ing fewer processed meats. Challenges arise when kitchen staff are accustomed to serving heat-and-serve meats and processed meats and feel overwhelmed by the idea of cooking more foods from scratch.

Centers also noted difficulty because children want, like, and are used to fried and processed meats. Centers worry that children will not be adequately nourished if they are not offered foods that suit their palates. Some reported difficulties are thus not related to replacing these products, but in overcoming biases (e.g., of kids, teachers and cooks).

Regarding food safety, cooking more raw meat was a reported concern by some kitchen staff, but all centers felt they had access to adequate food safety practices and training. One center noted that their local health department informed the center that cooking raw meat was not allowed on-site, contributing to confusion regarding the policy.

One metro-Denver center pointed out the particular challenges of eliminating chicken nuggets. The cooks are not bought-in to the policy change and feel strongly about making them because they know the children like to eat them.

#### Assets & Supportive Factors

The most helpful factors in meeting this policy were adequate time and education (e.g., new recipes, tips on making children's favorite meals from scratch, etc) for staff. When staff had the time and knowledge, and, leadership and interest from directors, they reported interesting new approaches, such as

replacing fish sticks with tuna salad or making chicken nuggets or fish sticks from scratch.

Also, while many centers acknowledged the high cost of processed meats they did discuss the balancing act of finding enough, varied, and affordable raw meats, so they could avoid serving ground beef over and over. Many centers did report new strategies such as freezing large quantities of meat on-site.

A rural center's food director was recently approached by a local meat processing company. While the center was interested in working with them, staff was concerned that if they started buying things locally it may cause complications in meeting the minimum order requirements from their main distributor.

#### D. Providing Whole Grain Products

Two-thirds of all 28 centers (18 total) reported that they have already implemented the policy to provide at least one whole grain a day. Six centers reported that, while they have not yet, that implementing this policy would be "not at all difficult". Four centers did report that implementing this policy would be "somewhat difficult".

#### Challenges & Constraints

Cost of whole grain products was a common concern, even for those who have or are committed to implementing this policy. Centers reported these products being 2 to 3 times more expensive at times and monthly food budgets being deeply affected.

Centers who are implementing the changes reported that children have become more accustomed to the new offerings, but whole-wheat tortillas and pasta are specific challenges, due to taste and for younger kids trying to chew these tougher items. Centers also reported difficulty in finding whole wheat tortillas at stores or through delivery.

A few centers identified challenges with replacing their baked-goods boxed mixes with whole grain mixes for things like muffins and breads. It is clear that whole grain mixes are not readily available.

Other concerns regarding whole grains included a shorter shelf-life (due to whole grains containing fat in their germ, which is susceptible to rancidity), access to products through a distributor, increased incidence of gluten intolerance or Celiac's Disease and confusion as to what constitutes a "whole grain".

#### Assets & Supportive Factors

Many centers are still making changes to the types of grains and flours they stock for cooking and baking. Some are beginning to use more diverse grains such as barley and quinoa. The use of more rice cookers and bread makers are common solutions being implemented at centers. Making breads and grains from scratch saves some centers money, but again, they have to have a knowledgeable staff member to facilitate the changes and they must be able to find a diverse array of whole grain products at the club store or through their distributor

Overall, centers could use more assistance with best practices including choosing products, where to buy the

products, and finding recipes that are most adaptable to budgets, staff skill sets, and child acceptability.

## VII. REGIONAL PARTNERSHIPS & NETWORKS

All interviewees were asked a series of questions to help identify their involvement, or lack thereof, in regional partnerships and networks that support their work as child care providers. The questions sought to identify if child care centers work together; to address food access issues; and, to understand other relationships centers may have within the region that provide support related to the meal process. This section includes a summary of findings on how child care centers use regional networks and partnerships.

### A. Current Partnerships

Nearly two-thirds (17 total) of all providers reported that their center participates in some form of regional partnership. Common partnerships include CSU Extension (specifically for food and nutrition education through the Food Friends program) and participation in Early Child Care Councils.

While many centers do receive food donations from regional partners, they reported that donations are rarely used due to liability concerns and difficulty verifying the food for CACFP without receipts. If donations are received from regional partners (e.g., from Whole Foods, Panera Bread, board members) centers use these items to serve to parents. A few centers reported receiving fresh produce donations from parents and others in the community who have a

garden. These products are most often provided to children and families on their way out at the end of the day.

Regarding food and nutrition education, centers did not report implementing food-based curriculum for the children. Many of the center’s staff informally talk to the children about food and nutrition. Teachers eat with the children and food is often served “family style,” which provides adult modeling and facilitation in food discussion.

Some centers are, however, providing nutrition education through partnership with outside organizations. Common partners providing nutrition education include the Food Friends curriculum provided by Colorado State University, Cooking Matters, and SNAP-Ed. Additionally, CACFP provides nutrition education training for center owners (not staff). A small number of centers are participating in their region’s Early Childhood Council, which also provides resources to train the staff on nutrition education programming for the children.

The Food Friends® Fun With New Foods® program was developed at Colorado State University in the Department of Food Science and Human Nutrition. Fun with New Foods is designed to promote healthful eating habits among preschool-aged children. Children who participate in the program learn through play with the Fun With New Foods program materials, which come in a kit of puzzles, games, and other materials. Program messages and components have been thoroughly researched and tested.

## B. Opportunities for Expanded Partnerships

Over half of all 28 centers were interested in participating in additional partnerships including, potentially, co-operative purchasing with other centers. Other interests included co-op purchasing with area school districts or working with CSU Extension or Cooking Matters for food and nutrition education.

No centers currently participate in co-operative purchasing, but the interest in this arrangement was very high. Some discussed the potential for working with school districts in their region that have food distributors and purchasing protocols in place.

# VIII. CONNECTIONS TO HOME-GROWN, LOCAL & REGIONAL FOODS

## A. Background & National Trends

A key opportunity in the growing effort to enhance nutrition in early childhood settings is to use more locally-grown foods, which tend to be fresher and un-processed, along with on-site gardens where children can learn intimately about whole and healthy foods. This opportunity is called Farm to Preschool, a program parallel to the well-established K-12 Farm to School movement. As an extension of the National Farm to School Network, a subcommittee has established a new national website, <http://farmtopreschool.org/home.html>.

Farm to Preschool is a vital expansion of the K-12 Farm to School program, primarily as it can address obesity and

other diet-related conditions at this earlier age. A second major benefit is that parents are more often involved in pre-schools than K-12, so the “take-home” impact on whole families can be greater than in later school years. Third, most education at this level is experiential for obvious reasons, so gardens are perfect settings for youngsters to learn about and grow food. Benefits will accrue to the children themselves, but usually spread to their families, teachers, and as we have seen in K-12 Farm to School, to the community as a whole.

Farm to Preschool is a growing movement across the country, with over a dozen programs in nine different states. Child care providers around the country have been featuring local foods and bringing kids into the garden without knowing such activities had a name and now a movement behind them. A survey conducted by the National Farm to Preschool committee gained insights from nearly 500 child care providers, with a vast majority of sites teaching about local food, serving some local foods, and gardening with kids. Cost is often cited as a barrier, with about half of the respondents indicating some external funds were raised for these activities.

Regarding what state, local, public, and private groups can do to assist in this movement, this same survey outlined the most needed types of support:

1. Financial assistance
2. Supplies for teaching, cooking, etc.
3. Identification of growers and distributors who can supply local foods
4. Training
5. Policy and program models

Farm to Preschool holds much promise and there is a strong foundation to pull

from already. The accomplishments of K-12 Farm to School in bringing healthier food into schools could help grow Farm to Preschool in Colorado relatively quickly. In this way, local foods and gardens, the essence of Farm to Preschool, can work hand in hand with healthier meal policies to have profound impacts on our children, their diets, and their health for years to come.

## B. Methods: Assessing Connections in Colorado

In order to assess any existing or potential connections between local and regional food systems and child care centers, this section draws from both interviews of child care centers as well as a survey of regional food systems stakeholders.

In order to capture the child care center perspective, all 28 child care centers interviewed as part of this project were asked a series of questions to provide insight into the ways that centers are already participating in local and regional food systems; identify perceived and experienced challenges and barriers to integrating more home-grown foods; and understand the level of interest providers have in participating in local food systems more often.

Additionally, a survey was sent to food systems stakeholders all across the state. Twenty-eight stakeholders completed the survey<sup>6</sup>. Respondents included members of food policy councils; LiveWell Colorado Communities; CSU

<sup>6</sup>Note that while 36 people began the survey (as reported in the appendix of raw survey results), 7 people only responded to the first two questions. We use the responses from the 28 who did complete the survey throughout this report.



Extension staff; and, agencies involved with farm to school. To view the list of respondents, the survey tool, and raw survey results, see Appendices E, F, and G. In-depth analysis of food systems assets and gap by region is also available in Appendices H and I.

### C. Current Connections in Colorado

Of the 28 regional food systems survey respondents, 12 identified existing connections between local food systems and child care. The most commonly-reported existing activities include an on-site garden at a child care center (12 respondents); trips to farms or farmers markets (11); and, cooking with local foods (11). Items that are already being purchased locally include whole fruits and vegetables, grains, and meats, while very few respondents reported purchasing locally-processed fruits and vegetables. In the interviews, child care centers reported similar current activities. In addition to several farm field trips (see sidebar), 10 out of 28 centers already have an onsite garden. Children at these centers help in the garden and eat produce from the garden in snacks and meals. Gardens are used as an experiential teaching tool and for taste-testing foods, but not as a means for off-setting food purchases.

Centers participate in many food systems activities, including:

- Field trips to nearby farms for harvest festivals, holidays, pumpkin patches and hayrides
- Cooking classes with local foods
- Chef or farmer visits to the center
- Information about farmers markets through parent newsletters

Additionally, one-fourth of all 28 centers (7 total) reported partnering with local food systems on a fairly significant level. Some of these centers partner with local farmers and ranchers directly, while others shop at a farmers market or farm stand. Additionally, just over one-third of centers (10 total) work, on some level, with local foods. The most common and easiest way centers connect with regional agriculture is by purchasing local products, in season, at the grocery store, or where they are already shopping. Apples, cantaloupe, corn, lettuce, onions, and peaches are the most common Colorado-sourced products.

Existing local food partners reported by child care centers include Cheese Importers in Longmont; Boulder Valley Dairy Service; local grass-fed beef from Isabelle Farm; and, fruit from Ela Family Farms.

### D. Food Systems Assets that Could Benefit Child Care Centers

Due to Colorado's agricultural roots, some centers have notable relation-



ships with their region's producers and processors. These relationships are more common in the rural agricultural communities where there is a strong local connection to and parental involvement in agriculture.

Food systems survey results showed that extensive food systems resources exist across the state, including producers growing and selling locally, local and regional food policy coalitions, processing facilities, distribution channels, and farm to school programs. Across the state, the most common assets currently available are:

- Producers growing and selling locally
  - Farm to school or farm to institution programs
  - Local or regional food policy coalitions
- According to survey respondents and other stakeholders, perhaps the most significant asset throughout the state is the numerous farm to school programs found in all regions. Using the infrastructure already in place for farm to school provides a significant opportunity for child care centers to participate in regional

LiveWell Montezuma is a coalition of organizations and residents with a mission to collaborate with community stakeholders in order to improve the health of all residents and visitors by increasing access to healthy, nutritious foods and opportunities for a more active lifestyle. The coalition has been working with Butler Preschool, a local Head Start, to connect them to local growers. Butler received approval to integrate local foods from their regional offices, which is now assessing the program for the possibility of expanding it to other area preschools.

food systems without the need to develop systems and processes for doing so. Local food policy coalitions also exist in all regions of the state. One of the greatest needs for developing connections between child care centers and regional foods is simply starting the conversation and building awareness around opportunities. Local coalitions have and could serve as a great resource for making this happen.

### E. Food Systems Gaps & Challenges

Many child care centers and food systems stakeholders also reported significant barriers when it comes to connecting child care to local food systems. Child care centers reported constraints to having on-site gardens including lack of space, time, maintenance, and financial support. Centers also reported confusion as to what foods they could receive (due to food safety) and use (regarding reimbursable foods) from local farmers and ranchers.

By far the most commonly reported barrier, from centers and food systems stakeholders, was the lack of awareness of each other – how to find one other, what food could be sold to a center, and how to work together.

At one Head Start preschool, they have tried to connect the children to local foods but it has proved challenging. Providing a pick-up for Community Supported Agriculture boxes was not successful since families could not afford to pay for the deliveries in advance, and finding enough transportation to visit nearby farms has been hard. This preschool is also closed in the summer, so they have never built a garden.



Survey respondents identified the following items as primary barriers to integrating more regional foods into child care:

- Child Care centers and local producers are not aware of each other and potential opportunities for working together/ Lack of knowledge about selling to child care centers
- Too expensive
- Delivery issues
- Seasonality of fruits and vegetables
- Lack of community or regional infrastructure for distributing local produce to child care centers

Specific to the issue of “infrastructure”, survey respondents most commonly identified the following gaps - despite the many assets mentioned above:

- Local distribution channels
- Food hubs
- Processing facilities

These gaps could be particularly challenging for child care centers, considering that many providers require processed products for storage and preparation purposes. In order to provide child care centers with locally processed goods, these resources may need to be developed to a greater capacity. However, there are significant concerns regarding scale and delivery; child care centers do not require signifi-

A child care center in metro Denver used to buy ground turkey from a local processing facility 15 years ago, but that facility, and many other small processing facilities, have since gone out of business in the area, and the center does not have the access it once did to high-quality meats.

cant amounts of food product, making it difficult to tap into existing distribution channels.

## F. Emerging Interests of Stakeholders

Despite some real challenges, both child care centers and regional food systems stakeholders expressed interest in finding ways to work together. Sixteen survey respondents reported a high level of interest in connecting child care centers to regional food systems. The most commonly-reported activities of interest include lessons about local food (18); inviting a chef to visit children (17); and, serving snacks and meals with local ingredients (16 each). This interest in educational activities could present very feasible avenues for integrating regional food systems into child care centers.

Similarly, 16 child care centers expressed significant interest in integrating more local foods and local food activities into their center. Many centers expressed a wish to work with the numerous producers they know exist in their region, while others reported a strong interest in learning more about what was possible. Additionally, three centers reported some interest in integrating local foods (perhaps answering this questions with a “sure, why not!” or “if local food was available where I shop, I would buy it”), while one-third (9 centers) were indifferent or not interested. Three centers out of the 16 centers that do not have on-site gardens expressed significant interest in having a garden or reported that they already have plans to develop one.

## G. Promising Opportunities for New Connections

To address primary barriers and seize potential opportunities, survey respondents identified the need for support in the following areas:

- Funding for staff
- Funding to support food purchases
- Educational materials
- Meet and greets (gatherings of local farmers and child care centers)
- Funding for food preparation and equipment

From all stakeholders across the state, funding for pilot programs was identified as a key need and opportunity.

Child care centers also identified several ideas for making these connections more plausible and achievable. Centers want access to local products where they are currently shopping (e.g., grocers, distributors, commodities). Centers were also very interested in the potential to create cooperative buying clubs, but do not have the capacity to research, plan or organize such arrangements.

Finding frozen, minimally processed local fruits and vegetables may offer the most realistic opportunity for centers since local produce provides the same price, access, quantity, distribution, and storage constraints of conventional produce. Also, starting with educational activities such as gardens, classroom visits from chefs, farmers and beekeepers may provide the most success.

In addition to support for pilot programs, opportunity exists for CDPHE-CACFP and other state partners to provide best practices or toolkits that address ways to connect with local producers or proces-

sors; food safety concerns; reimbursement and payment options; and, CACFP policies on local food procurement. For Head Start staff have to be very familiar with the accounts payable system, delivery schedule, and Purchase Order (PO) systems. CACFP could make a preference for local food part of the requirements similar to school lunch programs and incentivize the efforts.

Family & Consumer Science Agent and the Horticulture/Master Gardener Coordinator at Boulder County Cooperative Extension recently helped three child care sites in the county install gardens and connected each to a Master Gardener mentor. Extension is also connecting any parents from these centers who participate in the SNAP program with Extension’s nutrition programs.

## IX. SUMMARY OF FINDINGS

As stated in the introduction, the intent of this project has been to understand: 1) to what degree accessibility of the food items required by HMI may pose challenges; 2) to what degree affordability of the food items required by HMI may pose challenges; and, 3) to what degree do -- or could -- local and regional food systems help provide the healthy food items required through HMI.

Through 28 in-person interviews, personal observations of food access in every corner of the state, a survey of 28 leading food systems stakeholders, conversations with food systems leaders, and a scan of national efforts, this project has uncovered answers to the above questions and many more.

Some critical and common themes have emerged that can provide CDPHE-CACFP and its partners with direction on how to support child care centers as they strive to provide their children with more fresh, healthy foods. Some primary learnings from this effort are listed below.

#### Food Availability:

- Finding enough whole grains and fresh as well as canned produce present the most significant challenges to meeting the HMI policies.
- Seasonality of fresh produce reduces the availability of fresh produce in child care centers during the winter months.
- Often distributors and even club stores do not stock a diverse array of whole grain options.
- There is a lack of whole grain bulk options, including whole grain flours, available to centers.
- There is confusion about what “whole grain” includes and where to find the diverse products that qualify as whole grain.
- Most communities, even rural and fairly isolated ones, have a local grocer. Most often, these grocers are cost-prohibitive for centers and/or do not carry the quantities or quality of product required by centers.
- To avoid high costs of food sold locally, centers will drive dozens of miles -- in one instance up to 100 miles -- to shop at a club store.
- Most centers accept that this travel is “simply part of the job” but in some cases it is significantly burdensome and affects staff morale.
- There may be challenges in finding enough of reimbursable meat products, primarily because there is still confusion as to what meats exactly are allowed or not and why.

- There is a significant need to clarify what centers can and cannot buy, receive, and use from their own gardens and other local sources, including local meats, hunted meats, local eggs, donated farm produce, and more.

#### Food Affordability:

- Whole grains and fresh produce provide the most significant challenges to meeting the HMI policies due to higher costs than previously acceptable offerings.
- There is a strong commitment from centers to “make it happen somehow” and centers do not voice many concerns about providing these products. Rather, they simply acknowledge their costs may go up or budgets may have to be altered.
- Center staff are flexible and savvy shoppers. Staff will read advertisements, clip coupons, and compare prices on a weekly basis and go where they can get the best prices to get the foods they need.
- While cost is most often identified as the #1 factor affecting what foods are bought, factors of quality, freshness, health are often cited as “on par” with cost, and some centers prioritize factors such as hormone-free milk or organic produce.
- Many centers are demonstrating great creativity in adapting to new policies and have learned how to save costs on some items, like by buying fewer expensive processed meats, and allocating those savings to items like fresh produce.

#### Staff Skills & Capacity:

While not a direct charge of this food access scan, the significant role that staff interest, passion, skill and capacity

plays in ensuring that all children have access to healthy foods cannot be avoided. Some common themes included:

- When a center director prioritizes healthy options, implementation of the HMI policies is reported to be much easier – or usually already happening.
- Very few centers have trained cooks or chefs on kitchen staff. None of the interviewed centers employ or work with a dietitian.
- Lack of cooking skills is a common barrier and concern when trying to meet the new HMI policies. The most significant issue is a lack of time – without adequate skills, it simply takes too long to cook from scratch.
- There is a very limited (often no) food and nutrition education provided to kitchen staff as well as center children.
- Staff values and reluctance are often cited as barriers to implementing the new policies.

#### Regional Food Systems:

- There is significant interest – and an increasing amount of application – of connections between centers and regional food systems.
- The most common expressed need to enhance these connections is simply to become ore aware of each other and the possibilities of working together.
- The most common activities are on-site center gardens, visiting farms, and purchasing local foods when in season when they are available where centers already shop.
- Many regional assets exist that could be used to move more fresh, local, healthy products to child care centers. The most promising, and helpful, infrastructure will be that established already by the K-12 Farm to School movement as well as the support provided by local food policy coalitions.

A southeast Colorado Center that does not have their own garden has a community garden within walking distance where children are very active in growing food in the summer. The center make a point of sending produce home to familiarize the parents with these foods.

## X. OPPORTUNITIES FOR ENHANCING ACCESS TO FRESH, AFFORDABLE FOODS

#### Policy & Advocacy Opportunities:

- Explore public and private opportunities so that costs do not exceed reimbursements and income, given the new HMI policies. This could include: 1) advocating for higher USDA reimbursement rates; 2) requesting supplemental reimbursements or incentives from the State of Colorado; 3) engaging child care and food industries to contribute healthy food purchasing incentives; and, 4) increasing the buying power of institutions by forming more co-operatives or joint purchasing agreements.
- Explore the possibility to institute a geographic preference for food products as a part of the new HMI requirements, similar to school lunch programs, and incentivize such efforts through financial support and other resources.
- Work with the Colorado Department of Human Services (CDHS) to encourage larger centers to participate in the USDA Foods distribution program (rather than CLOC) as they change policy to make planning and participation easier. CDHS’s distributor, FreshPack, has committed to reaching



CACFP-participating sites in rural areas where mainline distributors do not deliver.

- Develop an outreach and advocacy platform to encourage more whole grain baked goods and bulk items offered through distributors and retailers. Or, explore opportunities to develop new distribution models of whole grain bulk items.

#### Funding & Pilot Projects:

- Research, fund and support pilot projects of regional distribution models to move more regional produce to child care centers year-round, including frozen and canned products.
- Research, fund and support pilot projects on developing more cooperative purchasing amongst child care centers. Work with Rocky Mountain Farmers' Union (RMFU) Co-Op Development Center and existing school district co-operatives.
- Provide equipment that supports the foods required by the HMI policies such as commercial-size rice cookers, food processors, and crockpots.
- Work with Feeding Colorado Food Banks to pilot ways to reach more small and rural centers to distribute wholesale foods for purchase, rather than donations.

#### Education & Capacity Building Campaigns:

- Engage counties that have prioritized early childhood health in their public health improvement planning, and provide these counties with tools and resources to support the implementation of the HMI policies.
- Work with local health departments to ensure that regulations concerning purchasing local products or unprocessed products are clearly and accurately communicated.

- Collect and share inspirational stories of how some centers are creatively adapting to the new HMI policies by saving costs on highly processed items and spending more on fresh produce.
- Develop and implement a “garden in every center” campaign.
- Develop and disseminate fact sheets on fresh produce purchasing and storage tips.
- Develop a series of “yes you can!” fact sheets with information on what centers can do, including building a garden, taking children to a farm, using garden or farm produce, receiving donations, and more.

#### Farm to Preschool Movement:

- Promote the concept and raise awareness about the possibilities! Get this on providers' radars: 1) present the concept, 2) help them realize they may be doing this already, 3) present some examples of it being done — preferably in Colorado.
- Promote and support Farm to Preschool in LiveWell Colorado communities across the state (if not done already). LiveWell community programs are well distributed across the state and have the capacity to move FTPS ahead, if willing and supported.
- Use the existing Farm to School infrastructure and resources. Connect providers with those preschools and k-12 schools in their area using local foods. Look at what assistance has been most effective in K-12 and model that. Enhance existing Farm to School resources with the special issues of FTPS added in (as on the Ntl FTPS website).

***Bright Ideas! Below are a series of case studies that illustrate creative and impactful ways to move healthy foods to people and institutions. These provide ideas that could be adapted to move more Colorado, fresh, and healthy food products to places that need and want them.***

#### Vermont FRESH Food Program

Since its launch in January 2011, the Vermont Works for Women FRESH Food Program has served more than 68,000 nutritious meals for 2 to 5-year-olds in early care and education centers throughout the Greater Burlington area. FRESH Food creates healthy and delicious menu items that exceed USDA nutritional standards and serves these meals home-style. As a member of the Vermont Fresh Network, FRESH Food works with more than 20 local and regional vendors and farmers to acquire vegetables, fruits, dairy products, herbs, meats, and honey. FRESH Food grew out of Vermont Works for Women's Transitional Jobs program, which provides skills training and work experience to help women find permanent employment.

#### Idaho's Bounty Co-op

As traditional direct to consumer marketing reaches its limits, online buying clubs have assumed a growing role in connecting farmers who want to market locally with consumers who want to buy locally. Idaho's Bounty Cooperative (IBC) is part of an emerging movement of online food cooperatives that combine online ordering with aggregation and distribution networks to connect buyers and sellers. It joins together a key social innovation—producers and consumers being equal members in the coop, with an important technological innovation—web based ordering software, allowing farmers to personalize their products and connect with consumers without bearing the burden of handling aggregation and distribution.

What makes the business structure of Idaho's Bounty so unusual is that it includes consumers and farmers as equal members in a multi-stakeholder cooperative structure.

The coop serves primarily wholesale accounts in the Boise area, while reaching wholesale and retail accounts equally neighboring areas. Each week there are 80-100 retail orders and 50-60 wholesale orders. The coop initially served retail customers, but saw growth in this market channel slowing considerably after a couple of years, and the Board decided to expand to wholesale marketing.

#### Montrose Online Farmers Market

The Montrose Farmers Market has expanded to include an on-line market as a new addition to the traditional Farmers Market it provided a secondary outlet for current Market Vendors and/or provides a new venue for small farmers and artisans who may not be able to attend the regular farmers' market. This provides Market customers a wider selection of local produced products to select from and allows busy people the opportunity to reserve that popular market item from the convenience of their home.

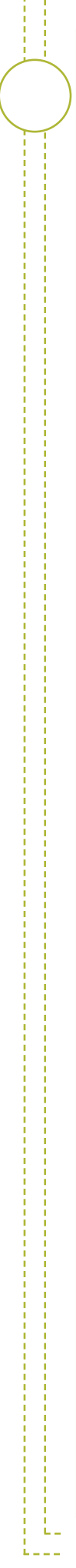
#### Alison's Pantry

Alison's Pantry is a locally-owned Utah-based business that distributes frozen and dry products to rural communities all across the Rocky Mountain West. Products are distributed to the private homes of sales reps, who gather and manage orders placed by institutions and residents in their region. This distribution system increases access to restaurant-grade or bulk items at an affordable price in areas without a large grocery store.

#### Bountiful Baskets Food Co-op

Bountiful Baskets is a non-profit food co-op for families that want to have more fresh produce for less money. BBFC distributes produce baskets, organic produce baskets, artisan bread and sandwich bread every other week to rural





and small communities all across the Rocky Mountain West. It is run entirely by volunteers, including local contacts who agree to “host” a drop-off/pick up site for the produce boxes in their community. Conventional boxes are sold for \$15 and organic for \$25, for what is billed as a \$50 grocery retail value.

*\*\*\*All appendices and supporting documents are available through the Colorado Department of Public Health and Environment. Please visit [www.XXXX](http://www.XXXX).*