







# **FARM TO FOOD PANTRY**

**Evaluation Report**FY19 Colorado Food Pantry Assistance Grant



Prepared for Hunger Free Colorado By Trish Abalo February 2020





## **Acknowledgements**

The evaluation would not have been possible without the involvement and assistance of many people. Many thanks to Hunger Free Colorado and the Congressional Hunger Center for the opportunity to engage in this project. A special thanks to Sandy Nagler, Jason Harrison, Lindsay Koerner, and Marc Jacobson for their invaluable guidance, insights, and expertise throughout this process. Jon Wogman and Sakeenah Shabazz, at the Congressional Hunger Center for their leadership within the Emerson Fellowship. Nicci Crowley, at the Onward! Foundation for her support and leadership in administering the Food Pantry Assistance Grant program. Wendy Peters Moschetti at LiveWell Colorado, Rachel Landis at The Good Food Collective, Nick Levendofsky at Rocky Mountain Farmers Union, Ciara Lowe at Uproot Colorado, Rosalind May at Rocky Mountain Local Food, Lyndsey Williams at La Puente, and Jess Harper at Metro Caring, who provided critical framing for the project from the start. Benjamin Kupersmit at Kupersmit Research, and Becca Jablonski at Colorado State University, for their invaluable input on data collection. Emerson Hunger Fellow Rachel Flores, for her unwavering support and assistance throughout the field work. And most importantly, thank you to all the food pantries, producers, and community members who took part in the evaluation. Their time and hard work to build community and end hunger each day in Colorado is gratefully acknowledged.

### **HUNGER FREE COLORADO**

1355 S Colorado Boulevard #201 Denver, CO 80222 www.hungerfreecolorado.org



### **CONGRESSIONAL HUNGER CENTER**

c/o WeWork Apollo 810 7<sup>th</sup> St NE Suite 02-146 Washington DC 20002 www.hungercenter.org



## **Table of Contents**

Executive Summary	6
1. Introduction	13
1.1 Food Pantry Assistance Grant Program	13
1.2 Inception & Design	13
1.3 Program Theory	14
1.4 Purpose of the Evaluation	
2. Evaluation Design	20
2.1. Key Questions	20
2.2. Methodology	20
2.3. Limitations	
3. Evaluation Findings	25
3.1. Program Achievements	25
Demographics	
Procurement Patterns	
3.2. Outcomes & Impacts	
Program Models  To what extent did strategies influence possible health benefits within vulnerable communities?	
To what extent did strategies influence possible economic contributions?	
/. Decompositions	49
4. Recommendations  4.1. Technical Assistance	
4.2. Leveraging Opportunities to End Hunger	
4.3. Future Evaluation & Research	
4.3.1. Analysis of Food	
4.3.2. Economic Impacts	53

## **Acronyms & Abbreviations**

AMS Agricultural Marketing Service (U.S. Department of Agriculture)

DUFB Double Up Food Bucks

CCCDA Colorado Charitable Crop Donation Act

CDHS Colorado Department of Human Services

CFPN Colorado Food Pantry Network

COFSAC Colorado Food Systems Advisory Council

CSFP Commodity Supplemental Food Program

CSA Community Supported Agriculture

CSU Colorado State University

ERS Economic Research Service (U.S. Department of Agriculture)

F2FP (Washington State) Farm to Food Pantry

FFPI Farm to Food Pantry Initiative

FMNP Farmers Market Nutrition Program

FPAG Food Pantry Assistance Grant

FPFL Full Pantries, Full Lives Leadership Institute

HEALFS Health, Equity, and Access in our Local Food Systems

NASS National Agricultural Statistics Service

SNAP Supplemental Nutrition Assistance Program

TEFAP The Emergency Food Assistance Program

USDA United States Department of Agriculture

WIC Special Supplemental Nutrition Program for Women, Infants, and Children

## **List of Tables**

- **Table 1**. Distribution of FPAG Grant Amounts (n=94)
- **Table 2.** Items purchased using FPAG funds (n=78)
- **Table 3.** Examples of foods purchased for FPAG
- Table 4. Scan of select ranchers and meat processors purchased from with FPAG
- Table 5. Summary of Core Program Activities and FPAG Models
- Table 6. Featured Newly Launched Nutrition Initiatives through FPAG

## **List of Figures**

- Figure 1. Program theory showing the three core strategies
- Figure 2. 2019 Glimpse of Colorado Agriculture
- Figure 3. Logic Model of constructed on September 25, 2019
- Figure 4. Average number of households served in a month by FPAG food pantries and food banks
- Figure 5. Role of Person Coordinating FPAG
- Figure 6. Fresh Food Access Health Outcomes

## **Mini Case Features**

Mini case features are scenarios from the field that indicate promising economic benefits

- Case 1: Pantry Payment Reassure Farmers
- Case 1-A: Worth the Drive
- Case 1-B: Diversification & Aggregation
- Case 2: A Home for Seconds
- Case 3: Making it Work for Farmers
- Case 3-A: Stacking Orders
- Case 3-B: Shared Cool Storage
- Case 4: A Low Income CSA Model
- Case 5: Equitable Foods
- Case 5-A: Seniors
- Case 5-B: Nutritional Versatility & Culturally Appropriate Foods
- Case 6: A Spectrum of Production Effects
- Case 6-A: Enthusiastic Gains
- Case 6-B: Modest Boost
- Case 6-C: Mitigating Unintended Effects

## **Executive Summary**

Inequitable food access disproportionately affects vulnerable communities throughout Colorado. The charitable/emergency food system plays an important role in addressing this challenge, and more and more is focusing not just on hunger, but how addressing hunger must emphasize fresh, quality, and nutritionally diverse foods. This kind of healthy food access for communities experiencing food insecurity is a key issue for Colorado, and sourcing food that is local is a potential solution for communities, while supporting those who produce food.

## **The Food Pantry Assistance Grant Program**

This evaluation investigates how an innovative food security program, the Colorado Food Pantry Assistance Grant (FPAG), is influencing health and economic well-being among community members, food pantries, and producers throughout the state. The program supports food pantries to procure local, healthy produce, meat, and dairy products from Colorado Proud-designated producers. This is an analysis of the implementation of the program's first year of funding, allocated during the 2018 Colorado legislative session and implemented from January to June 2019, with some recipients receiving food throughout the summer and/or fall until November 2019. The program integrates three core approaches: access of nutritionally diverse foods for vulnerable communities, localized food pantry procurement strategies, and support for local Colorado producers.

## **Program Theory**

FPAG is a program that strives to empower food pantries to procure local meat, dairy, and produce from Colorado Proud producers. The three approaches of FPAG work together to catalyze and strengthen pantry-producer relationships towards increased food security, agricultural productivity, and local food systems collaboration:

- 1. Local procurement activities at the pantry level helps producers get their foods to low-income communities at a fair price to producers. Producer contributions strengthen pantry abilities to operate with more control over healthy food distribution and operations. Pantries operate as a trusted community center with convening power, community support/volunteers, and existing infrastructure. They offer additional support for producers, such as minimal cost food recovery via donations, volunteers for gleaning, centralized cool storage or community pick-up site for community supported agriculture (CSA) shares, and utilize marketing power to uplift work of producers.
- 2. Vulnerable communities receive healthy foods and gain exposure to local Colorado foods. They learn about farm and ranch history, farming practices, and support producers through other market channels, while spreading the word about producers who contribute to food pantries. Pantry-goers develop enhanced trust with food pantries through access to high quality and diverse foods.
- 3. Producers gain a new market channel, while contributing to health of their local community. They work with a highly flexible customer, who can provide increased financial security.

## **Purpose of the Evaluation**

The main objective of the evaluation is to examine the initial outputs, outcomes, and impacts of the FPAG from January 2019 to November 2019. It shares findings from 42 interviews with 51 food pantry staff and producers, and surveys with 79 food pantries and eight producers. This is the first formal evaluation conducted to examine the impacts of FPAG, with a focus on participating food pantries and producers. It fulfills three purposes:

- The evaluation serves as a learning tool to provide evidence to its main stakeholders, including food pantries, technical assisters, the Colorado legislature, Hunger Free Colorado and its Farm to Food Pantry Initiative (FFPI), about how the program is working, who is benefiting, why, and what can be improved.
- The evaluation presents evidence of the reach of the program, possible health benefits, and preliminary economic activities to program stakeholders.
- The evaluation shares knowledge on the 'farm to food pantry' model
  with the broader community of food access practitioners to foster widespread use
  and adaptation of this knowledge in other settings

## **Evaluation Methodology**

A mixed-methods approach was used, which integrates results from interviews with key informants, survey data, and document reviews.

- Interviews: From October 2019 to January 2020, 42 interviews were conducted with 51 FPAG producers (n=24) and food pantries (n=27).
- **Surveys:** The survey sample consisted of 94 food pantries who serve all 64 Colorado counties, with an 84% response rate (n=79). A field survey was tested with eight producers and was analyzed with interviews to create case features and preliminary analyses.

The evaluation used a non-random sample, focusing only on food pantries that had participated in the FY19 FPAG. Sampling strategies included a mix of purposive and snowball sampling to select six key informants to guide interview selection.

The following evaluation activities were carried out:

- 1. Document review of available reports and artifacts
- 2. Scoping interviews with key stakeholders
- 3. Creation of a preliminary logic model to create boundaries for the scope of the evaluation's outcomes
- 4. Qualitative interviews with grant program recipients (food pantries and producers)
- 5. Quantitative survey completed with food pantries who received grant funding
- 6. Test survey with producers

## **Key Findings**

- In its first year of implementation, 132 confirmed producers and 94 food pantries participated in 64 counties that collectively serve an average of 85,180 clients a month
- Beef and vegetables were the most frequently purchased food items
- Beef was the #1 food item with the most quantity purchased by food pantries
- 64 pantries, or 81% of reporting pantries, stated that they **increased the amount of perishable foods** available in their pantry for the individuals they serve.
- About one half of food pantries reported that they either launched a new initiative or enhanced an existing nutrition initiative using FPAG food. These initiatives ranged from a low-income market, providing take-home meals for parenting and nutrition classes, 'know your farmer' pop-up events, and tailored cooking recipes/food handling instructions.
- For those that launched a new nutrition initiative, the difference between the funding for food requested and the funding received for these pantries was over \$198,000.
- Producers who were supported with technical assistance exhibit behaviors that indicate they are more able to create and/or sustain more amicable relationships with food pantries.

## **Key Recommendations**

### Technical Assistance

- Recommendation 4.1-1: Promote decentralized technical assistance. Flexible, context-specific models of technical assistance are one of the major successes of this program. The evidence recognizes the importance of decentralized systems to create a personable and more informed pantry-producer relationship. Any centralizing of structures for efficiency must consider (a) the geographic distance from producer(s) that an awarded food pantry has; (b) the potential for a 'connector' within the area who is familiar with both the needs of food pantries and producers. The evaluation indicates the importance of this in being able to negotiate at a price point that works for both parties, as well as help producers better understand the programs they're supporting; (c) staff/volunteer capacity of food pantries to engage in negotiation and procurement processes.
- Recommendation 4.1-2. Build a reliable timetable for producers and consumers. A reliable timetable for the program will be important for maintaining and expanding participation with local producers. Knowing that the program will be taking place and that pantries will be placing orders again was consistently important to farmers who expressed a desire to participate again. This will simultaneously help pantry-goers in the consistency of fresh foods. A consistent timetable is especially important for beef ranchers who take their cattle for processing a limited number of times in a year, and rely on being able to plan early to control their supply; and fruit farmers, who could potentially invest in expansion of orchards and whose fruit trees do not go into full production until three to six years+.

- Recommendation 4.1-3. Embed active producer promotion from food pantries. Activity to actively promote the specific producers should be built into the program. This could include marketing of partner farms and ranches' background, history, growing practices, and/or other information that bring pantry-goers closer to producers and the food they're consuming. This aligns with the success of other farm to institution models who also promote local producers, as well as the potential for marketing opportunity for producers to increase the economic reach/potential benefit of the program. The extent to which FY19 FPAG recipients actively marketed their producer partners varied, largely due to capacity.
- Recommendation 4.1-4. New and beginning producer participation. The program is an opportunity for new or beginning farms to participate in enhanced economic activity. The program may be a good fit for farmers who have recently acquired land or moved to a new location, due to the opportunity to engage in a flexible payment schedule, capital at the beginning of the growing season, and gaining more experience deciding what markets they want to pursue. Because beginning farms are more likely to operate at a small scale initially (almost 70% of small farms producing less than \$10,000 worth of output<sup>1</sup>), FPAG could provide a unique opportunity for capital.
- Recommendation 4.1-5A. Strategies for procurement and spending strategies. FY19 food pantries utilized diverse spending strategies. Some invested their funding into a single producer, while others spread their money around to multiple farmers. For farmers, packers, and ranchers operating for several years with diversified markets: even when the grant amount wasn't a significant portion of their sales, they reported satisfaction in being able to get something financially. Further study is required to understand overall economic effects, but preliminary findings suggest that depending on the logistics of communications and delivery for the producer, small amounts spread out over multiple producers may not be as financially beneficial for producers as larger purchasing with fewer. When working with smaller producers, working with multiple food pantries, or a single food pantry investing more deeply could make more of an economic difference. Pantries know what they need best, but seeing what other pantries have done may help in developing their spending strategy.
- Recommendation 4.1-5B. Build pantry support. Opportunities for pantries to
  exchange best practices should continue. Having producers involved with this will
  assist with program success. This can be done regionally, as demonstrated in
  Southwest Colorado and along the I-70 Corridor, as well as statewide, such as with
  the Colorado Food Pantry Network's annual gathering of food pantries.
- Recommendation 4.1-6. Longer timeline for pantry spending. Some pantries
  shared that they had to report on the grant, before they even started receiving and
  distributing their food. This is also tied to the Colorado peak growing season for many

9

<sup>&</sup>lt;sup>1</sup> Key, N. & Lyons, G. (2019). An overview of beginning farms and farmers. USDA Economic Research Service, Economic Brief Number 29. https://www.ers.usda.gov/webdocs/publications/95010/eb-29.pdf?v=8829.1

fruits and vegetables in areas throughout the state. A longer timeline for reporting could help capture key outcomes.

- Recommendation 4.1-7. Equitable distribution of foods. For pantries with satellites
  or provide food to target populations through partner organizations (such as resource
  centers, etc.) a plan should be in place for equitable distribution of FPAG foods. This
  includes adequate technical support to ensure communication and distribution
  practices can be developed.
- Recommendation 4.1-8. Evaluation for multiple-year funding. If funding is
  allocated for multiple years, it is recommended that a pre/post measure of healthy
  foods and potential healthy food behaviors be put into place, if said measure can be
  implemented as non-intrusively as possible to the variety of food pantry operations
  across the state. An economic multiplier may be generated where possible to measure
  the effects on local producers. Details on this are available under "Future Evaluation &
  Research."

## Leveraging Opportunities to End Hunger

- Recommendation 4.2-1: Harness momentum to focus on nutrition: Pantries should utilize FPAG to widen their approaches to how they prioritize fresh foods. It may be helpful to include examples of this to share with participating food pantries (Table 7). While many food pantries express they would like to offer fresh foods for pantry-goers and are extremely adept in utilizing current approaches, they need financial and technical support in pursuing short and long-term novel strategies to fresh food procurement. FPAG may be used to encourage food pantries to move beyond traditional collection-based models, and explore sustainable approaches to nutritionally diverse, fresh foods.
- Recommendation 4.2.-2: Emphasize SNAP and other federal programs. Recent research and policy momentum in Colorado is focused on increasing the number of food vendors throughout the state that accept as Supplemental Nutrition Assistance Program (SNAP) and Supplemental Nutrition Program for Women, Infants, and Children (WIC) benefits.<sup>2</sup> Farmers are important partners in these food subsidy programs. The FPAG complements the goals of these food subsidy programs, as well as nutrition incentive programs, such as Double Up Food Bucks (DUFB) or the Farmers Market Nutrition Program (FMNP). A key recommendation would be for food pantries to utilize FPAG fresh foods to, where possible, support enrollment in and awareness of these programs. Food pantries often provide wraparound services, ranging from health insurance assistance to early childhood support to financial aid for rent. For some, this also includes application assistance and education on federal food subsidy programs, such as well as nutrition incentive programs, such as DUFB or FMNP.<sup>3</sup>

<sup>3</sup> The State of Colorado currently participates in the Senior Farmers' Market Nutrition Program through the Colorado Department of Human Services' State Unit on Aging, but does not currently participate in WIC FMNP.

<sup>&</sup>lt;sup>2</sup> COFSAC (2019). Improving healthy food retail for Coloradans. <a href="https://cofoodsystemscouncil.org/wp-content/uploads/2019/06/ImprovingHealthyFoodRetailssueBrief\_Final.pdf">https://cofoodsystemscouncil.org/wp-content/uploads/2019/06/ImprovingHealthyFoodRetailssueBrief\_Final.pdf</a>; Moyer, D.C. (2013) Denver Food Deserts and the Impact on Public Health. University of Denver Institute for Public Policy Studies.

• Recommendation 4.2-3: Work with existing legislation to increase food pantry autonomy. The FPAG was funded within three years of the Colorado Charitable Crop Donation Act (CCCDA), which offers up to a 25% tax credit for the wholesale value of the foods they donate to Colorado taxpayers, targeting producers, who donate to food banks from 2015 to 2020. A 2017 policy audit recommended that food pantries who are 501(c)(3) designated, and not just food banks, should also be able to sign and issue tax-credit certificates to farmers<sup>4</sup>. The FPAG and CCCDA represent two opportunities for producers to flexibly route their foods towards donation to food pantries within their communities, while retaining financial viability, emphasizing the role of food pantries in being a direct interface with producers when appropriate.

### Future Evaluation and Research

### Analysis of Food

For future studies, there is potential to build a pre/post approach to more quantitatively measure the types of food purchased and their effects on pantry-goers. An example would be an adaptation of the Health Food Pantry Assessment Project, which aligns with a federally recognized SNAP-ed framework. Potential indicators include Readiness and Need (ST5); Organizational Partnerships (ST7); and Nutrition supports (MT5)<sup>5</sup>. However, the survey tool in its original form is very long, and would likely need to be adapted. Tracking of foods shouldn't be overly cumbersome when FPAG food items make up only a portion of foods distributed. The FPAG operates as one strategy amongst several for pantry food procurement, and pantries operate differently in allocation and aggregation of food, as well as data tracking.

## **Economic Impacts**

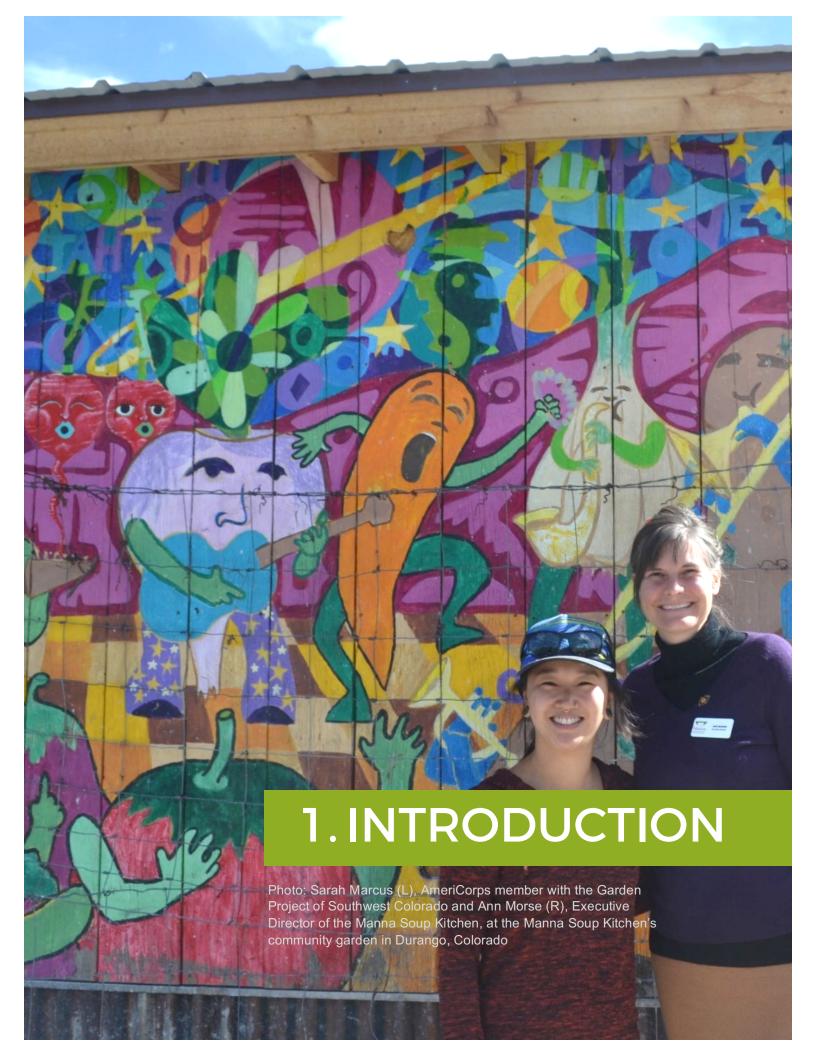
This evaluation details preliminary economic activities and compiles the first comprehensive list of producers involved in the FY19 FPAG. It is recommended that next steps utilize to a fuller extent the capacity of the USDA AMS Toolkit, including economic modeling, generation of economic multipliers, and social network analysis to probe into economic analyses. With 132 Colorado Proud location-confirmed and unduplicated participating farms and ranches, it's important to be careful in differentiating between economic benefits/contributions and impacts, before confidently stating whether or not an economic activity was net positive. Because the program is so new, further economic impact analysis can hopefully be integrated into future evaluations of the merits and challenges of the program. There is also an opportunity to measure the environmental impact of local food miles, or food miles traveled by different food items compared to distance they otherwise would have traveled if not purchased locally<sup>7</sup>

<sup>&</sup>lt;sup>4</sup> Brandsma, A. (2017). Colorado Charitable Crop Donation Act 2017 Policy Audit. https://drive.google.com/file/d/1DeFGRNvZrd3HkiPCfLvrl5XdYxoANjAa/view

This was released in 2018 by the Regional Nutrition Education and Obesity Prevention Centers of Excellence and the Western Region at Colorado State University. <a href="https://snaped.fns.usda.gov/library/materials/healthy-food-pantry-assessment-toolkit">https://snaped.fns.usda.gov/library/materials/healthy-food-pantry-assessment-toolkit</a>

<sup>&</sup>lt;sup>6</sup> Jablonski, B.R. & Thilmany McFadden, D. (2019). What is a 'multiplier' anyway? Assessing the Economics of Local Food Systems Toolkit. Journal of Agriculture, Food Systems, and Community Development. 8(Suppl 3), 1-8). <a href="https://www.foodsystemsjournal.org/index.php/fsj/issue/view/35/vol8-suppl3">https://www.foodsystemsjournal.org/index.php/fsj/issue/view/35/vol8-suppl3</a>

National Farm to School Network. "Evaluation for Transformation: A Cross-Sectoral Evaluation Framework for Farm to School."



## 1. Introduction

Inequitable food access disproportionately affects vulnerable communities throughout Colorado. The charitable/emergency food system plays an important role in addressing this challenge, and more and more is focusing not just on hunger, but how addressing hunger must emphasize fresh, quality, and nutritionally diverse foods. This kind of healthy food access for communities experiencing food insecurity is a key issue for Colorado, and sourcing food that is local is a potential solution for communities, while supporting those who produce food.

## 1.1 Food Pantry Assistance Grant Program

This evaluation investigates how an innovative food security program, the Colorado Food Pantry Assistance Grant (FPAG), is influencing health and economic well-being among community members, food pantries, and producers throughout the state. The program supports food pantries to procure local, healthy produce, meat, and dairy products from Colorado Proud-designated producers. This is an analysis of the implementation of the program's first year of funding, allocated during the 2018 Colorado legislative session and implemented from January to June 2019, with some recipients receiving food throughout the summer and/or fall until November 2019. The program integrates three core approaches: access of nutritionally diverse foods for vulnerable communities, localized food pantry procurement strategies, and support for local Colorado producers.

## 1.2 Inception & Design

The program emerged from the combined efforts of food pantries and advocacy organizations across Colorado. In April 2014, the Full Pantries, Full Lives Leadership Institute (FPFL) launched through funding by the Denver Foundation and facilitated by Hunger Free Colorado. The two-year project supported a cohort of eight food pantry leaders in sharing knowledge, skill development through tailored training, and deepening connections to lead innovative efforts in serving food pantry clients and communities. From the endeavors of the FPFL institute, the Colorado Food Pantry Network (CFPN) was established in 2015. One of the network's key initiatives was to design and administer a Client Input Survey, a 36-item measure that seeks feedback on pantry operations from clients. From this effort over 2,200 clients across the state responded, with 83% of surveyed clients reporting proteins, produce, and dairy as the items most important for them to receive from food pantries.<sup>8</sup>

Using this information, Hunger Free Colorado secured an approval of \$500,000 in the state budget during the 2018 legislative session from the Colorado Joint Budget Committee to fund the FPAG. The Colorado Department of Human Services (CDHS) selected the OnWard! Foundation to conduct the granting application process, distribute funds, and collect reporting data. The OnWard! Foundation launched its first round of 94 grantees in January 2019, with final reporting completed by June 2019.

<sup>8</sup> Data was collected by pantries within Hunger Free Colorado's Colorado Food Pantry Network where pantries distributed the CIP to clients, yielding 2,209 client responses with 2,198 answering "What is the most important item for you to receive from a food pantry?"

## 1.3 Program Theory

FPAG is a program that strives to empower food pantries to procure local meat, dairy, and produce from Colorado Proud producers. The three approaches of FPAG work together to catalyze and strengthen pantry-producer relationships towards increased food security, agricultural productivity, and local food systems collaboration:

- 1. Local procurement activities at the pantry level helps producers get their foods to low-income communities at a fair price to producers. Producer contributions strengthen pantry abilities to operate with more control over healthy food distribution and operations. Pantries operate as a trusted community center with convening power, community support/volunteers, and existing infrastructure. They offer additional support for producers, such as minimal cost food recovery via donations, volunteers for gleaning, centralized cool storage or community pick-up site for community supported agriculture (CSA) shares, and utilize marketing power to uplift work of producers.
- 2. Vulnerable communities receive healthy foods and gain exposure to local Colorado foods. They learn about farm and ranch history, farming practices, and support producers through other market channels, while spreading the word about producers who contribute to food pantries. Pantry-goers develop enhanced trust with food pantries through access to high quality and diverse foods.
- 3. Producers gain a new market channel, while contributing to health of their local community. They work with a highly flexible customer, who can provide increased financial security.



Figure 1. Program theory showing the three FPAG strategies

## **Challenges Program Addresses**

### Vulnerable Communities Need Fresh Food

In Colorado, nearly one in 11 people (9.1%) struggle with hunger, not always having enough money to buy food<sup>9</sup>, translating into almost 520,000 people. One in 10 (10.3%) struggle financially, living below the federal poverty line (FPL). This includes more than one in eight children (13%), with those under the age of five most likely to live in poverty.<sup>10</sup> By county, Colorado has complexity in its poverty and food insecurity rates. In 2017, 17 counties reported experiencing food insecurity above the national average<sup>11</sup>.



Food pantries serve as an important bridge to getting food on the table for these vulnerable communities. Nationwide, 65.5% of households that were food insecure and reported an income of less than 185% FPL in 2018 reported receiving emergency food from a food pantry in the past year, while 76.4% reported eating a meal at a soup kitchen. While the charitable food system is an important support for vulnerable people, the experiences of those accessing it are varied and complex. They range from people experiencing homelessness, unstable housing, or struggling with rising rental costs, to seniors struggling with medical bills, to single-parent households, to those experiencing

<sup>9</sup> Coleman-Jensen, A., Rabbitt, C.A., Gregory, C.A., and Singh, A. (2019). Household Food Security in the United States in 2018. U.S. Department of Agriculture

Feeding America. Overall and Child Food Insecurity by County in 2017. Map the Meal Gap. This average was compared against the national average reported by USDA Economic Research Service in 2017.

Coleman-Jensen, A., Rabbitt, C.A., Gregory, C.A., and Singh, A. (2019). Statistical Supplement to Household Food

<sup>&</sup>lt;sup>10</sup> American Community Survey: Poverty (2018). U.S. Census Bureau

<sup>&</sup>lt;sup>12</sup> Coleman-Jensen, A., Rabbitt, C.A., Gregory, C.A., and Singh, A. (2019). Statistical Supplement to Household Food Security in the United States. U.S. Department of Agriculture. Note that persons at or below 185% of the federal poverty level are eligible for programs such as WIC and Headstart.

unemployment or seasonal working conditions, and those living at the intersections of these experiences.

### FRESH FOOD FACT

Researchers at Pennsylvania State University found that spinach stored in a refrigerator at recommended temperatures lost over half of its folate content (a vitamin B compound) after just eight days.

By the time a food pantry collects an item like this and passes it onto pantry-goers, vital nutrients may already be lost.

One of the challenges for food pantries and their communities is the availability and consistency of fresh foods<sup>13</sup>. Particularly, even for those able to rescue produce from grocery stores or purchase from food banks, the ability to provide fresh foods is reliant on unpredictable conditions. For example, pantries report that some fresh produce donations are not edible by the time that the pantry receives them, even as food banks and other donors count them as donated produce.<sup>14</sup> This can have negative health effects for the communities accessing these foods. Particularly, research shows that nutrient loss, particularly with water-soluble vitamins, occurs the longer food is stored and not consumed. 15

## Colorado Agriculture Needs Support

Agriculture in Colorado contributes more than \$40 billion annually to the state economy, employing more than 170,000 people. 16 There is great variation in Colorado's local and regional foodsheds, with diverse microclimates that includes varied terrain, water conditions and soil types, transportation needs, food system actors, and agricultural products (Figure 2). The agriculture sector is an essential part of the economy, but faces unique challenges economically, as well as environmentally. While there are promising outlooks for agriculture for 2019 and 2020, processors, packers, and others in the supply chain are reported to see most of the benefits of increases in cattle and dairy numbers in Colorado 17, and Colorado farms and ranches continue to face uncertainty in markets. 18 In 2017, U.S. farmers on average received only 14.6 cents in commodity sales of every food dollar that Americans spent, with more than 80 cents spent on off farm costs, including marketing, processing, wholesaling, distribution, and retailing. 19 This is the smallest portion

<sup>&</sup>lt;sup>13</sup> Hermes, A., Lee-Ammons, N., Brett, J., & Laskarzewski, D. (2019) Study of on-farm agricultural surplus in Colorado <sup>14</sup> Thilmany McFadden, D. & Moschettei Peters, W. (2015). Barriers & Opportunities for Healthy Food Recovery from

Grocery Retail to Hunger Relief Organizations. Colorado Food Systems Advisory Council.

15 Howard, L.A., Wong, A.D., Perry, A.K., Klein, B.P. (1999) β-Carotene and Ascorbic Acid Retention in Fresh and

Processed Vegetables, Journal of Food Science: Hunter, K.J. & Fletcher, J.M. (2002). The antioxidant activity and composition of fresh, frozen, jarred and canned vegetables, Innovative Food Sciences and Emerging Technologies, 344-406. Pandrangi, S., & Laborde, L. F. (2004). Retention of folate, carotenoids, and other quality characteristics in commercially packaged fresh spinach. Journal of Food Science, 69(9).; Rickman, J.C., Barrett, D.M. & Bruhn, C.M. (2007). Nutritional comparison of fresh, frozen, and canned fruits and vegetables. Part 1. Vitamins C and B and phenolic compounds. *Journal of the Science of Food and Agriculture*. 87(6), 930-944.

16 USDA NASS Mountain Region, Colorado Field Office. (2018). Colorado Agricultural Statistics Bulletin, pg 3.

<sup>&</sup>lt;sup>17</sup> University of Colorado Boulder Leeds School of Business, 2020 Business Economic Outlook pg 16.

<sup>&</sup>lt;sup>18</sup> University of Colorado Boulder Leeds School of Business, 2018 Business Economic Outlook pg 17.

<sup>&</sup>lt;sup>19</sup> USDA Economic Research Service Food Dollar Series. Retrieved on February 12, 2020 from https://www.ers.usda.gov/data-products/food-dollar-series/documentation.aspx

of the American food dollar that farmers have received since the USDA started reporting on this in 1993. This shows that there is opportunity to increase farmers' bottom line. The USDA National Agricultural Statistics Service (NASS) 2018 State of Agriculture reports that there are 38,900 farming operations in Colorado, with just over half of these making less than \$10,000 in economic sales. In 2015, Colorado State University reported that the approximately 22,500 smallest operations (reporting less than \$10,000 in annual sales each) made up 62% of Colorado's farms and ranches, but together accounted for one percent of total agricultural sales. This points to the opportunity for small and mid-sized operations to participate in greater economic opportunities.

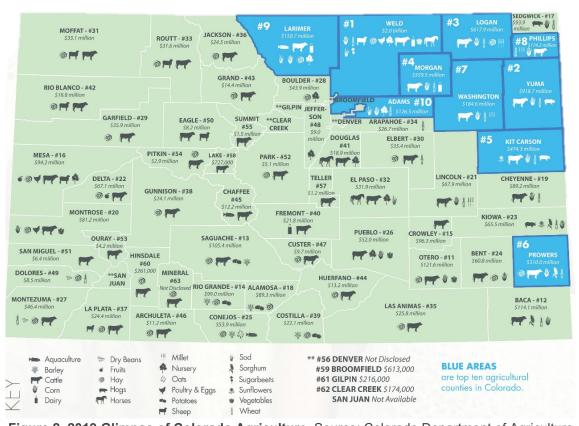


Figure 2. 2019 Glimpse of Colorado Agriculture. Source: Colorado Department of Agriculture

Environmentally, Colorado agriculture is facing issues with rising temperatures and drought, related to climate change and its effects on water and land management. The eastern part of the state relies on ground water pumped from the High Plains aquifer, which is being depleted. About 20 percent of crop land in eastern Colorado is irrigated, but reduced water availability may force some farms to switch from irrigation to dry land farming, which can cut yields. <sup>23</sup> In April 2019, the Colorado River Basin Drought Contingency Act passed to manage the Colorado River system, with the hope to proactively guard against adverse consequences of critically dry conditions, as well as

<sup>&</sup>lt;sup>20</sup> AgWeb. Retrieved February 13, 2020 at <a href="https://www.agweb.com/article/farmers-share-of-food-dollar-at-record-low">https://www.agweb.com/article/farmers-share-of-food-dollar-at-record-low</a>

USDA NASS Mountain Region, Colorado Field Office. (2019). Colorado Agricultural Statistics Bulletin, pg 8.
 Thilmany, D., Jablonski, B., & Graff, G. (2018). The 2017 Colorado Blueprint of Food and Agriculture.

<sup>&</sup>lt;sup>23</sup> U.S. Environmental Protection Agency. (2016) What Climate Change means for Colorado. EPA 430-F-16-008.

reduce the risk of dropping below critical reservoir elevations and severe reductions in use<sup>24</sup>. While the agricultural sector in Colorado is already accustomed to coping with weather and climate variability, as well as changes in markets, it is facing large uncertainties with how climate change will affect agricultural production and markets.<sup>25</sup>

## **Proposed Solution**

Local procurement by food pantries will help food pantry goers as well as Colorado producers. Each of Colorado's regions face unique geographic and infrastructural challenges in purchasing local foods. In considering the unique needs of these regions, supporting local Colorado producers is uniquely positioned to also address food pantries' needs for consistent access to fresh and quality foods. The FPAG program strives to meet these needs through local procurement of Colorado foods for vulnerable communities utilizing food pantries throughout the state. Food pantries represent a market channel opportunity that allows some of the benefits of wholesale buyers (like restaurants, schools, and retail stores), but at an accessible and manageable scale for local producers of different scales. Food pantries get the benefit of fresh foods that are coming from localized areas and at a consistent schedule for vulnerable communities.

## 1.4 Purpose of the Evaluation

The main objective of the evaluation is to examine the initial outputs, outcomes, and impacts of the FPAG from January 2019 to November 2019. It shares findings from 42 interviews with 51 food pantry staff and producers, and surveys with 79 food pantries and eight producers. This is the first formal evaluation conducted to examine the impacts of FPAG, with a focus on participating food pantries and producers. It fulfills three purposes:

- The evaluation **serves as a learning tool** to provide evidence to its main stakeholders, including food pantries, technical assisters, the Colorado legislature, Hunger Free Colorado and its Farm to Food Pantry Initiative (FFPI), about how the program is working, who is benefiting, why, and what can be improved.
- The evaluation presents evidence of the reach of the program, possible health benefits, and preliminary economic activities to program stakeholders.
- The evaluation shares knowledge on the 'farm to food pantry' model with the broader community of food access practitioners to foster widespread use and adaptation of this knowledge in other settings

<sup>&</sup>lt;sup>24</sup> Haas. Drought contingency planning in the Colorado River Basin. Retrieved February 13, 2020 at https://www.coloradomesa.edu/water-center/forum/dcp-connections-between-the-upper-basin-lower-basin-and-mexico.-<u>clean.pdf</u>
<sup>25</sup> Gordon, E. & Ojima, D. (2015). Colorado Climate Change Vulnerability Study. Pg 84.



## 2. Evaluation Design

The evaluation takes place throughout the state of Colorado with 16 counties visited inperson. Surveys were distributed online to all 94 recipients, while in-person interviews took place using seven key target regions, emphasizing a concentration of recipient pantries and rural areas throughout the state.

## 2.1. Key Questions

- 1. What models have been enacted to implement the Food Pantry Assistance Grant?
- 2. To what extent did the strategies of the Food Pantry Assistance Grant influence...
  - a. Possible health benefits for vulnerable communities?
  - b. Possible economic contributions for producers?
- 3. Based on the learnings, how can Hunger Free Colorado and implementing partners improve the program?
  - a. What opportunities arose for food pantries and producers?
  - b. What challenges arose for food pantries and producers?

Specific lines of investigation included:

- 1. Is FPAG improving access to local and fresh foods?
  - a. What was purchased? How were purchasing needs determined?
  - b. How were food items distributed?
- 2. How did food pantries select producers?
  - a. What was the scale/size of production of the participating producer(s)?
  - b. How are pantries defining 'local?'

## 2.2. Methodology

A mixed-methods approach was used, which integrates results from interviews with key informants, survey data, and document reviews.

- Interviews: From October 2019 to January 2020, 42 interviews were conducted with 51 FPAG producers (n=24) and food pantries (n=27).
- **Surveys:** The survey sample consisted of 94 food pantries who serve all 64 Colorado counties, with an 84% response rate (n=79). A field survey was tested with eight producers and was analyzed with interviews to create case features and preliminary analyses.

The evaluation used a non-random sample, focusing only on food pantries that had participated in the FY19 FPAG. Sampling strategies included a mix of purposive and snowball sampling to select six key informants to guide interview selection. These included Hunger Free Colorado staff and those identified as technical assistors or 'connectors' between food pantries and producers in communities of interest where the program took place. The latter were established in each focus region of the evaluation. Subsequent subjects for interview were selected using a snowballing method, with key informants guiding which pantries and which producers to speak with for interviews. A key element for this process was clarifying which producers were familiar enough with the program to

speak to its implementation, and which pantries had had multiple contacts with the producers they purchased from.

The following evaluation activities were carried out:

- 7. Document review of available reports and artifacts
- 8. Scoping interviews with key stakeholders
- 9. Creation of a preliminary logic model to create boundaries for the scope of the evaluation's outcomes
- 10. Qualitative interviews with grant program recipients (food pantries and producers)
- 11. Quantitative survey completed with food pantries who received grant funding
- 12. Test survey with producers

### **Document Review**

A document review was conducted over three weeks for 47 final reports submitted to the Onward! Foundation from May to June 2019. Reports were divided up into eight groups, based on grant award amount ranging from \$2500 to \$7000+. Analyses helped inform sampling strategy and craft which outcomes to explore as well. Reports were randomly selected using a random sequence generator and analyzed for the following questions:

- "What feedback did you receive from your clientele regarding the food procured through this funding? Please share a testimonial."
- "What feedback did you receive from a vendor regarding the FPAG? Please share a testimonial."
- As a leader at your entity, what story can you share about the grant?
- Please share any other information you would like us to be aware of in regard to FPAG.

## **Scoping Interviews & Logic Model Creation**

Informal interviews were pre-scheduled for the evaluator with eight key stakeholders, namely 'technical assisters' who provided background and insights on the program's field activities and anecdotal outcomes.

Then a preliminary program logic model was constructed to inform the evaluation methodology. The logic model was tested with three Hunger Free Colorado staff. The model was informed by the document review, scoping interviews with the key stakeholders, and a review of existing institutional purchasing evaluation frameworks. Namely, indicators and measures from the National Farm to School Network's *Evaluation for Transformation: A Cross-Sectoral Evaluation Framework for Farm to School*<sup>26</sup> was appraised for its applicability for the farm to food pantry model. These informed the drafting and formulation of possible outcomes and areas for impact. Outcome harvesting techniques were reviewed as a possible approach to shaping the evaluation.

<sup>&</sup>lt;sup>26</sup> Evaluation for Transformation: A Cross-Sectoral Framework for Farm to School. (2014). http://www.farmtoschool.org/Resources/Evaluation\_Transformation\_FINAL-Web.pdf

#### ACTIVITIES

- Funding awards (~\$5,000) from Dec 2018-May 2019
- CFPN follow-up and communications support
- Colorado Proud farmer registrations
- Unofficial technical assistance (grant writing, partnerships, purchasing, relationship building)

#### OUTPUTS

- 94 food pantries awarded funds
- # new or enhanced partnerships between farmers and food pantries in # counties
- 3+ models for technical
  assistance
- # farmers signed up for Colorado Proud
- \$ towards Colorado farmers
- Pounds of produce, meat, and dairy products provided to pantries

#### **OUTCOMES**

- Increased presence of quality and diverse produce, meat, and dairy products provided to pantries
- Enhanced food pantry operations to meet client health and cultural needs (Linked hopefully to decreased hunger for Colorado communities)
- Stronger relationships between food pantries and farmers
- Increased market channels for Colorado farmers

#### MPACTS

- Increased nutritional and culturally appropriate food access for Colorado individuals and families
- Increased health for Colorado individuals and families
- individuals and familiesStronger local food system
- Stronger economy

Figure 3. Logic model constructed on September 25, 2019

## **Development of Evaluation Questions**

From the logic model, key evaluation questions were designed. These helped select the data collection tools. 7 regions were designated for focus on interviews. These regions were designated using a snowball sampling technique, in which Hunger Free Colorado staff identified key informants, who then subsequently identified key persons, where the FPAG producer(s) likely were aware of the grant and could speak to their involvement.

### **Field Data Collection**

Interviews were conducted from October 2019 to January 2020 with pantries and producers. Surveys were sent to 94 food pantries that were awarded FPAG grants from November to December 2019. This data was cross-referenced with data provided by the Onward! Foundation from their reporting in May 2019. For producers, a mix of interviews, and surveys where possible, was used to begin to document producer reactions to the program.

## **Data Analysis**

81 responses were collected from food pantries, and after the data was cleaned, 79 food pantry surveys were analyzed. 40 interviews were transcribed by the evaluator and analyzed using grounded theory and outcome harvesting approaches.

- Quantitative Analysis: Surveys with food pantries were sorted according to the
  logic model created and the key evaluation questions. Where ranges were reported,
  conservative numbers were utilized in any calculations. Surveys with producers
  were combined with qualitative data and used to inform preliminary cases presented
  in the findings.
- Qualitative Analysis: Analysis was constructed using an intuitive interpretation, based on this comparison of data, as well as formal procedures to generate memos using grounded theory approach. Trustworthiness was maintained through use of detailed field notes, post-interview memos, verbatim transcriptions, and organization

of artifacts.<sup>27</sup> Individual interviews were compared with field observations, and with reporting documents. This approach allowed the evaluator to adapt an exploratory approach to expected and emergent outcomes. Three rounds of analysis were performed:

- The first round was completed during the transcription of interviews.
   Transcription was done by the evaluator to increase proximity to the data, but ten interviews were transcribed by two Hunger Free Colorado staff members.
   They were given instructions to capture observations on opportunities, challenges and miscellaneous reactions.
- This second round also included generation of post-interview memos and was verified against field notes, artifacts collected from the field, and first round observations.
- The third round verified post-interview memos against the logic model generated, as well as against the survey data collected.

## 2.3. Limitations

In the evaluation design, subjects were intentionally selected for their participation in the program. The scope is limited to participating food pantries and producers, with a snowball sampling approach resulting in a non-probability sample of Colorado farmers and food pantries. The focus for this evaluation was on food pantries, defined as "an individual site that buys food and/or receives donations of foods that are directly distributed to those in their community," and Colorado Proud producers who participated in selling to pantries.

To frame the evaluation, information was given transparently to the participants about how the information would be used for the 2020 legislative session, with potential for social desirability bias in responses. An informed consent form for interviews and explanation of how data was to be released in total percentage format were adopted to encourage respondent honesty. Additionally, responses are dependent on self-reporting, with tracking systems varying across food pantries, as well as relying on information about the past season that pantries and farmers had to recall about the grant program.

This report provides a foundation for exploration of potential economic contributions but does not strive to make assertions regarding economic impacts. The USDA Agricultural Marketing Service (AMS) toolkit, *The Economics of Local Food Systems: A Toolkit to Guide Community Discussions, Assessments, and Choices,* was used to inform the design of and analysis during the evaluation to ensure rigor.

23

<sup>&</sup>lt;sup>27</sup> Patton, M.Q. (2002. Two decades of experiential perspective. Qualitative social work, 1(3), 261-283.



## 3. Evaluation Findings

This section presents the findings of the evaluation, including program achievements, such as demographics and procurement patterns, as well as outcomes & impacts, including analysis of the main findings on program models, health outcomes, and economic contributions through qualitative and quantitative evidence.

## 3.1. Program Achievements

94 food pantries worked with at least 130 verified Colorado Proud producers across the state in all 64 counties, with 41 counties served by food pantries. \$451,250 of dollars were distributed to program recipients, with the majority going to food purchasing, and \$11,549 of those funds going towards in-direct costs which would help pantries with the logistical needs of fresh foods, including refrigerators and cooling units and gas for pick-ups from local vendors.

132 Colorado Proud Producers94 Food Pantries\$451,250 Dollars Distributed64 Counties

## Demographics

### **Households Served**

Participating food pantries reached a wide range of household numbers. The average number of households served by food pantries and food banks was split relatively evenly, shown through the variation in pantries that serve more than 800 households (20%), as well as those that serve fewer than 100 (18%). When looking only at food pantries and not food banks, 16% still served a reported more than 800 households monthly. The program seemed to fund small communities serving one county with high need, as well as larger institutions that serve broad-reaching geographic regions. The Onward! Foundation was responsible for administering the grant and included the number of clients served monthly in their grant application, but this was only one of several criteria included in its process.

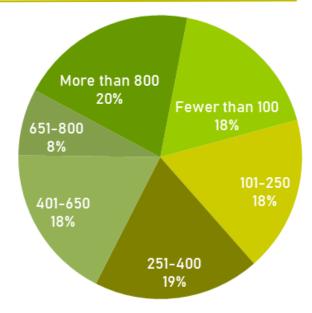


Figure 4. Average number of households served in a month by FPAG food pantries and food banks (n=78)

### **Individuals Served & Participating Counties**

Collectively, FPAG-participating food pantries reported that in an average month they serve 85,180 individuals. This number is a conservative estimate of the program's reach, as the survey included 78 of the 94 receiving food pantries and food banks. Overall, 64 counties were served by food pantries that received FPAG, including food banks. When looking at only food pantries, 41 counties were reached.

### **Procurement Patterns**

## **Funding Disbursement**

94 food pantries received grants in the total amount of \$451,250, with amounts ranging from \$2,500 to \$9,000 (Table 1). The most frequently awarded amount was \$5,500, with 25 food pantries awarded funds in this amount. The smallest amount awarded was \$2,500 with 21 food pantries receiving this amount, and the largest amount awarded was \$9,000 with one food pantry receiving this amount.

Table 1. Distribution of FPAG Grant Amounts (n=94)

Amount Received	Number of Food Pantries Receiving FPAG	Percentage of Total Grants Awarded
\$2500	21	22%
\$3500	2	2%
\$4000	14	15%
\$4500	3	3%
\$5000	10	11%
\$5500	25	27%
\$6000-\$6500	9	10%
\$7000-\$7200	5	5%
\$8000+	5	5%

For pantries who received relatively smaller amounts (\$2,500), the level of satisfaction was assessed for key aspects of negotiating and implementation to gauge the effectiveness of the program for participating food pantries receiving this amount.

Recipients who received \$2,500:

- Over 80% were satisfied or very satisfied with prices paid, and almost 95% were satisfied or very satisfied with volume of food items received.
- 88% were satisfied or very satisfied with the ease of communication with producers or vendors during the program.
- Aspects commonly affected by capacity, specifically transportation and food storage had a 75% satisfied or very satisfied reporting.
- Time commitment and process for establishing initial contact with producers and vendors both had 75% satisfied or very satisfied.

### **Food Items Purchased**

## What did pantries purchase?

More pantries focused their funding on one to three items, rather than purchasing a spectrum of different items, with almost 70% of food pantries purchasing one to three food items. The foods purchased are presented below (**Tables 2 and 3**).

Table 2. Items purchased using FPAG funds (n=78)

Table 2. Items parchased using 11 AO lands (II-70)		
	Number of	
Item Purchased	<b>Pantries</b>	Percentage
Beef	42	53%
Vegetable	42	53%
Fruit	32	41%
Dairy	36	46%
Grain	22	28%
Hogs, pigs, sheep, goat, other livestock (meat or dairy), honey	26	33%
Chickens, broilers, turkey,, duck, eggs	38	48%

Table 3. Examples of foods purchased for FPAG

Produce	Meat	Dairy
<ul> <li>Tomatoes</li> <li>Mushrooms</li> <li>Apples</li> <li>Asparagus</li> <li>Spinach</li> <li>Radish</li> <li>Apple Jui</li> <li>Onions</li> <li>Micro Green</li> <li>Potatoes</li> <li>Dry Bean</li> </ul>	ens Sausage	<ul><li>Milk</li><li>Cheese</li><li>Eggs</li><li>Yogurt</li></ul>

## What did pantries rank as the food item they purchased the most quantity of?



Pantries were asked to rank the food they purchased in order from greatest to least amount. When doing so, the food item ranked as #1 the most times was beef, with 28 pantries purchasing beef as their #1 item. Out of these 28 pantries, 61% also reported that they helped clients who expressed that they could not obtain these products elsewhere. This included 4 pantries who spent all their funds

on beef, and 20 pantries where beef made up half or more of their total purchases. It is likely that pantry-goers are not able to access beef outside of the food pantries, indicating a crucial gap for pantry-goers in accessing fresh, Colorado Proud beef and the nutritional benefits that come with it.

This also aligns with a CIP survey results that found the majority of pantry-goers preferred fresh/frozen beef compared to six other types of protein.<sup>28</sup> For all food pantries who purchased beef as one of their items, pantries reported working with ranchers and processors at throughout Colorado.

A preliminary scan of ten confirmed participating ranchers and processors that FPAG pantries purchased from, including location and distance from pantry they sold to. (This list is not extensive but curated from the partners reported by food pantries.)

Table 4. Scan of select ranchers and meat processors purchased from with FPAG.

Rancher or Processor	Food Pantry	Distances Between Organizations (Miles)
Sam's Meat and Deli (Aurora)	Aurora Interfaith Community Services (Aurora)	8.5 miles
Roan Creek Ranch (Grand Junction)	Community Food Bank (Grand Junction)	8.7 miles

<sup>&</sup>lt;sup>28</sup> Results from the Colorado Food Pantry Network's Client Input Survey conducted from 2016 to April 2018 with 47.8% of pantry-goers reporting beef as their preferred protein.

Rancher or Processor	Food Pantry	Distances Between Organizations (Miles)
KW Farms (Alamosa)	La Puente, Inc. (Alamosa)	13.2 miles
Homestead Meats (Delta)	Surface Creek Community (Cedaredge)	15.4 miles
La Vaca Meat Company (Littleton)	Parker Task Force (Parker)	22.1 miles
Callaway Packing (Delta)	Sharing Ministries (Montrose)	22.3 miles
Sand Mountain Cattle Company (Clark)	Lift Up (Steamboat Springs)	23.3 miles
Potter Farms (Carbondale)	Lift Up (Rifle)	39.5 miles
Sangre's Best Beef (Westcliffe)	Silver Key Senior Services (Colorado Springs)	87.8 miles
Adam's Natural Meats (Evergreen)	Prairie Family Center (Burlington)	190 miles

## 3.2. Outcomes & Impacts

Overall, the program indicated that food pantries could better serve food pantries nutritious foods, with positive reactions from the communities they serve. Perishable food access increase was indicated for 81% of pantries, meaning that this could be the first time they have been able to offer fresh foods, or that the amount they have been able to offer has increased.

Outcomes and impacts from the first year of FPAG are explored using the following three questions:

- PROGRAM MODELS: What models have been enacted to implement the Food Pantry Assistance Grant?
- **HEALTH BENEFITS**: To what extent did strategies influence possible health benefits within vulnerable communities?
- **ECONOMIC CONTRIBUTIONS**: To what extent did strategies influence possible economic contributions?

## **PROGRAM MODELS**

Several models of implementation emerged from the FY19 FPAG. Highlights include the strengthening of existing relationships between food pantries and producers, such as being able to provide funding for producers who had previously donated and/or sold at reduced costs. Another key element of the program has been the emergence of technical assistance, including non-profits and consulting agencies with existing relationships and working expertise working with both food pantries and producers. Key characteristics that promoted success were flexibility, creativity, and collaboration between food pantries and producers, with the shared goal of providing quality food for their communities.

Table 5. Summary of Core Program Activities and FPAG Models

Table 5. Summary of Core Program Activities and FPAG Models		
<b>Core Program Activity</b>	Definition	FPAG Models
PAYMENTS	The types of payment formats and schedules that were used to pay, as well as the format for negotiations.	<ul> <li>Contract, wholesale</li> <li>Vouchers</li> <li>Invoices, pay-as-you-go, monthly billing</li> <li>CSA shares</li> </ul>
PRODUCTION	The purchases and planning involved with food product affected by the program	<ul> <li>Orders fit into regular production planning</li> <li>Expansion of units and/or equipment to accommodate sales</li> <li>Scheduling in advance with processors to accommodate sales</li> <li>Negotiation for 'B' / seconds for reduced price</li> </ul>
DELIVERY	The transport of food items to food pantriesr	<ul> <li>Pantry Pick-Up</li> <li>Scheduled Drop-Off</li> <li>Multi-Client Coordinated Drop-Off</li> </ul>
COMMUNICATIONS	Initial contact, negotiations on item availability, pricing, and logistics	<ul><li>Farmer Convening</li><li>Pantry Outreach</li><li>Cold Calls</li></ul>
SHARING WITH CLIENTS	The processes and experiences of allocating, distributing, and sharing food items to pantry-goers	<ul> <li>Client Choice Market</li> <li>Hub and Spoke</li> <li>Emergency Food Box</li> <li>Farmer Awareness Activities</li> </ul>

## **Payments**

"It definitely helped this year. It felt like it was just a really consistent order, every week. And that adds up. Even if it's just a little bit every week. [The food pantry] became a really good client of ours, and we ended up selling a lot. I don't think it makes or breaks the business, but it certainly helped on a difficult year. It helped our year not be so difficult."

## - 2019 participating producer

Payment agreements were generally reported positively by both food pantries and producers. The nature of the food pantries as a non-profit can put producers at a lower price point as compared to traditional retail, but within a range that's fair pricing, as a wholesale account that can provide significant activity (depending on the amount purchased), or act as a stable account for new/beginning producers.

Producers shared that a very positive part of the program was an outlet to get paid upfront, in the Spring. The grant timeline required food pantries to spend funds before May 31, 2019.

This translated into several food pantries purchasing CSA shares or contracting to purchase ahead of time for the season. It is important producers can negotiate as needed with pantries to find a price that works for them. 83% of pantries reported being satisfied or very satisfied with payments. While this evaluation focused on the effects of food pantry recipients, concerns from participating food banks were shared regarding a need for potential streamlining of procurement and negotiations using existing food bank infrastructure and resources.

## CASE 1: PANTRY PAYMENTS REASSURE FARMERS

Pantries provided that extra bit of income that make expansion of producer activities economically viable.

#### 1-A: Worth the Drive.

The Community United Methodist Church is a 20+ year old pantry in Pagosa Springs. They purchased enough CSA shares that made it worth it for Tierra Vida Farms to transport their shares from Durango. Tierra Vida Farms set up at a local coffee shop, Higher Grounds, for the pantry and others to pick up their CSA shares. This helped the pantry focus their purchases on fruits and vegetables that they normally cannot offer. Pantry goers, many of who report receiving food stamps, but not enough to feed their families, gave positive feedback on nutrition, heart health, and healthy eating habits.

## 1-B: Diversification & Aggregation

"And so with the pantry coming in, it gave me assurance that no matter what comes along, I'll be able to get rid of my produce at a profit... what they did was give us an opportunity to have the security of, 'OK. Now we can do things. We can upgrade an orchard. We can order more trees.' We can do things that we would be a little nervous about doing without that." A participating farm reported they would use the FPAG to experiment with vegetable diversification that would extend their season. They also purchased and aggregated larger quantities of vegetables from other producers. "...by having the pantry there, we could go buy in larger quantities knowing that if we didn't pack it or didn't get a market with our premium customers... We realize that we have an outlet for it... helps [pantries] buy more food. And it helps us in that we get to move more produce."

## **Production**

Expansion in production for farmers and ranchers is one measurement of economic profitability. Farmers reported that they would be willing to incorporate food pantry orders into their production planning for future seasons. The FY19 program largely had little to no effect on *expanding* the production process for the majority of participating producers interviewed. However, this is largely attributable to the timing of the grant, where producers reported that they were unable to plan earlier for orders from food pantries during production planning.

There were select significant cases, largely for livestock, where pantry orders could necessitate the purchasing of additional animals or processing of an additional animal. Again, producers expressed that should they know earlier in advance, they would be apt to accommodate the pantry orders into their production and processing plans for the season. This could be important for potential expansions.

## **CASE 2: A HOME FOR SECONDS**

For farmers growing at certain production levels, there are oftentimes 'seconds' or 'B' quality items that they produce.

For farms producing at a scale where seconds are produced, it can be hard to find a profitable outlet for them. These seconds are those food products that are affected aesthetically or in size by the natural production process, but are still fresh and nutritiously dense.

Many producers find ways to upcycle these items, for example through compost, returning nutrients to the soil or being fed to animals. However sometimes it takes work to find a suitable 'home' for seconds. The Environmental Protection Agency's food waste recovery recommends that where possible, the volume of food generated be reduced. Where this is not possible, the next most preferred option is to donate the food to hungry people. Sometimes these items can find their way to market channels at a discount price, but are still nutritious and useable.

One example practiced in the FPAG came from Ab Yoder Family Farms and the San Luis Valley Food Bank Network, a program of La Puente, who have worked together for several years. Ab calls La Puente when he has surplus eggs. This year, through FPAG, La Puente was one of two wholesale accounts for Ab that allowed him to move his small eggs. that usually have no mainstream market. Ab describes his practices as 'beyond organic.' La Puente negotiates a discount price, does the labor of moving the eggs, saving on delivery costs for the farm, while the pantry gets to visit the farm, see his chickens, and procure what is sometimes the only source of fresh protein available at the food pantry.

## **Delivery**

Getting food from Point A to Point B was a contextual activity for many food pantries and producers. Some food pantries reported picking up their food items themselves, including getting to go visit the farm or ranch and see the environments their food had been grown in.

Producers at times included the pantry order with their other deliveries, sometimes charging a delivery fee and other times not depending on discount negotiations and how the delivery for pantries was able to be included with other orders from other purchasers.

When pantries don't have to pick up, it's useful for them to reallocate their volunteers, employees, gas and vehicles. Similarly, when producers don't have to pick up, it saves them on distribution costs.

"And so really, I think when it comes to buying local and creating a local sourcing plan the number one thing you have to do is **be willing** to think outside the box. And be willing to work together and find the people who are, on the flip side also willing to work together. Try things and let them work and try things and let them not work.

We've said, 'Let's try it. Let's keep the line of communication open. You know let's see how we can make this kind of a win-win... Like they're not coming here, just for our discounted produce. You know we make sure we piggyback it on a big [hotel] order or a big farmers market weekend...

So you know it's not as convenient as just picking up the phone or getting on the computer and ordering from a big wholesaler but in the end, I mean the relationships that it builds is - are amazing. And priceless."

- 2019 participating food pantry

### Striking the right balance considers:

- **Purchasing Amount**: Is the pantry purchasing enough quantity of product that transportation costs can be offset? Are there other orders from other customers in the area that can help offset that cost?
- **Geographic Landscape & Infrastructure**: How far would one have to travel? Does it make sense and is it feasible to meet somewhere centrally?
- Storage & Distribution Schedule: Does the pantry have a convenient cooling unit capable of storing large quantities of product? How much product is going to be distributed at one time?

A key example of success for delivery arose in Case 3-A "Stacking Orders," discussed on the next page, in which the Community Market in Eagle county designed a transportation plan in conjunction with Austin Family Farms, one of their producers, to ensure that their order was being stacked onto other deliveries to other clients, including restaurants and hotels in the surrounding area. This kind of planning was made possible by the pantry's current development of a local food sourcing plan, which is being developed outside of FPAG but the program helped in expanding.

## **Communications**

Communications were indicated as an important element of the program, in being able to negotiate between producers and food pantries. Technical assistance, where possible, from key individuals in the local food system, was an important aspect in ensuring that producers can come to a consensus on pricing appropriate for the food pantries, while simultaneously enabling a living wage for producers. The latter has arisen as an essential part of the program, in being able to broker deals that would be economically viable for participating producers. This is true especially

"One of the benefits of living in a small town like this versus being in Denver or somewhere in the Front Range is once you've been here like a few years, you kind of get to know people and you know who to contact for specific things. And even if you don't, you know who to contact to find out who to contact.

## - 2019 participating producer

in areas where the existing food system already includes pre-existing relationships between hunger relief organizations, namely food pantries, and local producers and growers in creating opportunities to support food insecure people in their communities.

## CASE 3: MAKING IT WORK FOR FARMERS

Transportation is a key cost and sustainability issue.

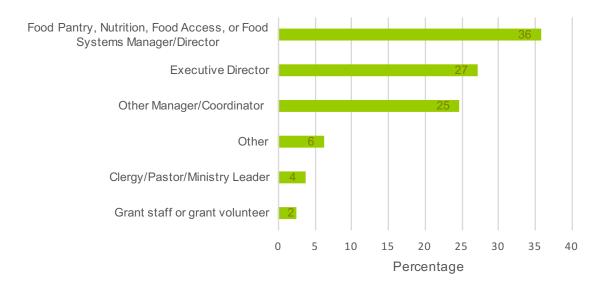
### 3-A: Stacking Orders.

Dave Austin of Austin Family Farms in Paonia delivers to several of their main accounts along the I-70 corridor. Organizations along this major highway, such as the Community Market, a pantry in Eagle County who purchased using FPAG funds from the Austins, face major transportation challenges. The Community Market built out a flexible and responsive transportation plan to ensure the transportation made sense for both parties, coupling deliveries to the pantries with orders to other customers, including local hotels and on farmers market days. The initiative led to a local newspaper article written by the food pantry, which connected Glen Austin to other local growers. They heard about his relationship with the food pantry, and then donated additional foods to the pantry with the Austins' coordination.

## **3-B: Shared Cool Storage.**

Ben Armstrong at the Farm Collaborative in Carbondale created a new drop-off site for nearby farmers while participating in the FPAG program. From communicating with the pantry and other farmers, they were able to create a new centralized meeting place for a cool storage unit. This helped other farmers save on delivery costs. This was accomplished through technical assistance from Ciara Lowe of Uproot Colorado, who helped to organize farmer convenings around programs that support food security in the region. The program was also important for Ben in helping him decide what to grow for season, having just moved to new land.

The program also indicated varying degrees of capacity for the food pantries to procure using FPAG, as well as the implementing person's previous or current relationships with producers, or knowledge and experience with local procurement. While the pantry manager was the most frequently reported coordinator for the program, many times the executive director of the organization was leading coordination, sometimes with the help of volunteer(s).



**Figure 5. Role of Person Coordinating FPAG.** Percentage of roles that person(s) who coordinated FPAG fulfilled during implementation. If multiple people were list as involved, they were also coded for responses.

## **Sharing With Clients**

"What a wonderful privilege! There were a couple of times when our paycheck was really tight and the fresh vegetables ensured we were still able to eat fresh, whole foods."

 2019 participating pantry-goer Food pantries in Colorado operate using various models, translating into a variety of distribution models for the FPAG. For many food pantries, they employ a *client choice model*, which has gained a lot of traction in hunger relief spaces for its ability to offer increased community autonomy over their food choices. For these pantries, reports from clients included high enthusiasm around the freshness of products, as well as their local nature.

Some pantries reported using a *hub-and-spoke model*, in which a centralized, usually larger facility receives the foods, which then get distributed to satellite pantries within the vicinity. These pantries typically received higher grant amounts, due to the large service areas that they cover. The ability to promote the foods as Colorado Proud was indicated

as a key aspect for clients. For producers partnering with food pantries using a hub-andspoke model, there is an opportunity for pantries to consider how that producer is being made aware of their food being distributed in the areas they reside in, to enhance relationship building.

## CASE 4: A LOW INCOME CSA MARKET

Creating markets where vulnerable communities feel welcome is important.

As more farm to institution models expand, there is an increased desire for local foods within communities. This includes an expansion in direct to consumer market channels (such as farmers markets or roadside stands, where producers are in closer proximity to the distribution of foods to clients). There is a marked importance of knowing from who and where your food is coming from, and supporting farmers and ranchers who are producing within your community. This should be something that everyone has access to, but specifically farmers markets, can be inaccessible to many due to prices, as well as other sociocultural factors. Initiatives such as Double Up Food Bucks, which is a nutrition incentive program initially started in Detroit, MI, that allows farmers to get reimbursed for fruits and vegetables purchased using the Supplemental Nutrition Assistance Program (SNAP)/food stamps, have helped in encouraging people to utilize their local farmers markets to purchase food. However, there is still a disparity in being able to access these

markets. The Manna Market program from the Manna Soup Kitchen and the Southwest Garden Project in Durango collaboratively leveraged FPAG and private funds to launch a free CSA for low-income folks that they serve. They partnered with resource centers in their areas, including a senior center and women's resource center, to deliver these CSA shares to community members. The hope is to eventually build on this model to create a low-income market, in which CSA shares are prepurchased by the organizations, and clients can purchase them through programs like Double Up Food Bucks. The pantry worked with several different producers to procure fresh, quality produce for the CSAs for their clients and found that FPAG came at a perfect time to help them procure the foods they needed to initiate this project.

# **HEALTH OUTCOMES**

To what extent did strategies influence possible health benefits within vulnerable communities?

The program shows promising preliminary health benefits for communities across Colorado. FPAG recipients report that this program is uniquely situated to fill the need for consistently available produce, meat, and dairy products for the clients they serve. FPAG has improved access to local and fresh foods, with over 80% of recipients reporting they increased the amount of perishable foods available. A variety of foods were purchased, with beef and vegetables being the most common items.

### **Fresh Food Access**

"We just believe that **our food is medicine** and that everybody
should be able to somehow get
a hold of our food... Working
with the food bank, it makes it
possible for low income
families to be able to afford our
products."

# - 2019 participating producer

One of the core goals of this program was to increase the amount of perishable foods available for vulnerable communities. 64 pantries, or 81% of reporting pantries, stated that they increased the amount of perishable foods available in their pantry for the individuals they serve.

This could include pantries that were only able to offer shelf-stable foods prior to the program, as well as those that did offer perishable foods prior, but used FPAG funds to supplement other perishable food collection efforts to increase their

overall amount of perishable food they were able to offer clients.

The pantries used funds to purchase foods that their clients were eager to cook and consume for themselves and their families. This included pantries who reported that clients quickly took home FPAG food items, and shared about an atypical positive regard and/or how they planned to use the fresher food items. 97% of food pantries reported being satisfied or very satisfied with the quality of food they purchased.

While several pantries interviewed expressed that they are typically engaged in grocery rescue efforts, they explained that the food items purchased through FPAG exceeded the quality of these items due to their ability to barter when these items would be received and the consistency with which they could offer them.



**Figure 6. Fresh Food Access Health Outcomes.** Number of pantries self-reporting health-related outcomes and the number of clients they serve in an average month. The total individuals served monthly calculated the total number of different individuals served in an average month, reported only by pantries that reported yes for each outcome.

# **Client Special Needs**

30% of food pantries indicated that they served a special dietary need or restriction of clients through the FPAG. Of those food pantries that reported serving pantry-goers with special needs, almost 80% also reported that they served pantry-goers who shared that they could not receive foods procured through FPAG from other sources.

For pantry-goers receiving these foods and who have food allergies and

"We have several clients who are dealing with health issues that are requiring special diets. Rarely are we able to offer such wonderful product and it was so appreciated. These families are often forced to eat inexpensive processed foods. What a joy it was for them to see such a high-quality fresh product to be used in preparing meals for their families."

### -2019 participating pantry

intolerances, medically ordered diets, and/or religious-associated dietary restrictions and food traditions, the program could be an important support that is difficult to attain elsewhere.

# **Diverse Populations**

The populations served by food pantries in Colorado are vastly diverse. The foods that are offered many times are calorically dense and shelf-stable, with typically little room for a focus on nutrient variation due to food budget and capacity, or challenges with consistency.

A highlight that emerged was the ability to use the FPAG funds to purchase foods that are more culturally appropriate, such as pintos beans for Native communities in the Southwest region, "[The program has] just kind of brought up the conversation more, with more people more than anything. And just having those conversations about donating good quality stuff... especially in our region like what's culturally appropriate."

# -2019 participating producer

spiced sausage and green chilis in mountain towns, or a dried bean mix that could be used as a soup mix or with rice for migrant families. Foods were available to everyone, but food pantries were able to center the needs of unique communities that make up their clientele.

# **CASE 5: EQUITABLE FOODS**

Pantry-goers make up different communities with varying backgrounds. Producers have different products that can work to ensure they receive foods meeting nutritional and cultural needs.

#### Case 5-A: Seniors

They are the fastest growing food-insecure population in the United States according to Feeding America. Specific issues for food pantries also include ensuring balanced and edible meals for seniors that they can easily prepare. It's important to consider care with planning meals that require boiling water and other hazards, and carrying heavy loads from the food pantry. Oftentimes with proteins, canned, shelf-stable foods are what's available. FPAG funded Silver Key Senior Services in Pueblo, who out of their food pantry serves over 2,200 seniors in El Paso county, one of the fastest growing counties in Colorado. With FPAG, they purchased \$5,500 of one-pound, frozen ground beef packets, a protein easy to cook for seniors. They included tailored food safety handling instructions, recipes, and the history of Sangre Beef, the rancher they purchased from in Westcliffe, Colorado.

# Case 5-B: Nutritional Versatility & Culturally Appropriate Food

The Community Food Bank in Grand Junction introduced a new product to their three day-food boxes. A dried bean mix with a variety of different beans and different ways to cook it was celebrated for its versatility, including fitting the needs of vegetarian clients. They purchased from Dan Warren, a third-generation farmer in Dove Creek. Because of FPAG, their organization is contemplating making a change to their food boxes, adding the bean mix as a permanent item offered in their food boxes for clients. They emphasized its ability to meet the needs of the migrant families they serve, especially those that come in the summer to help with harvest.



Almost half of pantries surveyed (48%) report that they used the foods they purchased to launch a new or enhance an existing nutrition initiative. Activities include, but are not limited to, providing recipes to clients, hosting a cooking class, creating a CSA program, or implementing an awareness campaign.

This included 15 pantries across 19 different counties who used the food they purchased to launch a new nutrition initiative. Namely, foods purchased helped with nutrition education and/or producer awareness. While the program did not require these activities as a condition of participation, these pantries modeled some of the experiential learning activities utilized in other farm to institution models. Namely, this is a part of the 'farm to school' model used across the country and designed to similarly provide fresh, healthy foods through institutional purchasing from local food producers at schools and early care & education sites.

One of the core elements of this farm to school model is "participating in education activities related to agriculture, food, health or nutrition<sup>29</sup>." FPAG did this in select pantries with different client populations, including families, children, and seniors. While pantries reported positive preliminary client reactions, sustainability is a key issue. Analysis of only six of the 15 recipients who launched a new nutrition initiative (chosen for their interviews, where the evaluation collected more details on the implementation of their respective nutrition activities), the difference in funding received and funding requested to meet their needs is over \$52,000 (Table 6).

For all 15 pantries that reported they launched an existing nutrition initiative, the difference in amount received and the amount requested to meet the needs of their communities was almost \$198,610. The educational nature of these nutrition initiatives demonstrates the potential for reaching more clients and supporting health outcomes through them, with enhanced funding and sustained staff capacity.

40

<sup>&</sup>lt;sup>29</sup> National Farm to School Network. <a href="http://www.farmtoschool.org/about/what-is-farm-to-school">http://www.farmtoschool.org/about/what-is-farm-to-school</a>

Table 6. Featured Newly Launched Nutrition Initiatives through FPAG

Table 6. Featured Newly Launched Nutrition Initiatives through FPAG						
COUNTIES	PANTRY	GRANT AMOUNT RECEIVED	GRANT AMOUNT REQUESTED	NUTRITION INITIATIVE(S)	MAIN TARGET(S)	
Pueblo	Catholic Charities	\$4,000	\$15,000	Provided food boxes with full meals for attendees of nutrition education classes and evidence- based, trauma- informed parenting class	Families, Parents	
El Paso	Silver Key Senior Services	\$5,500	\$20,000	Proteins for seniors with tailored safety handling and recipes	Seniors	
Archuleta	Pagosa Peak Open School	\$2,500	\$10,560	CSA shares and recipes for families combined with student curriculum	Families, Students	
Arapahoe, Adams, Douglas	Aurora Interfaith Community Services	\$4,000	\$4,000	Held 'know-your' farmer' pop-up events with community members	Families, Youth, Seniors	
La Plata	Manna Durango Soup Kitchen; The Garden Project of Southwest Colorado	\$4,000; \$2,500	\$20,000; \$5,000	Launched a CSA share that distributed food to clients and other non-profits in the area, including a women's resource center and senior center	Families, Seniors, Women	
Total		\$22,500	\$74,560			
	in Amounts and Amounts	-\$52,	060			

# **ECONOMIC CONTRIBUTIONS**

To what extent did strategies influence possible economic contributions?

This report presents 11 significant mini cases of key economic activity arising from the program through the cases included in the Program Models section. While the financial contributions for farmers from the first year of the FPAG were modest overall, this is likely influenced by the program's first year of implementation, and timeline not coinciding with the Colorado growing season or typical timeline for cattle processing. This mini case analysis was informed by the evaluation frameworks created by the National Farm to School Network and Colorado State University. The analysis found that the program created important economic activity, including cash upfront during the season, and flexible institutional activities, including payment schedule, a delivery system that allowed for substitutions when weather/crop failure were issues, transportation, and providing a stable account for producers that allowed purchasing of equipment early on in the season to expand operations.

# **Benefits According to Farmers**

Producers reported that the grant aligned with their moral values in being able to provide consistently for food pantries. For the many of them that reported having donated previously, they emphasized the ability to provide consistently and at a higher volume as a key highlight and incentive for participating. Being able to allocate land to food pantries in a sustainable way was expressed:

"I feel like sometimes the options at the food pantry although they might - they're there, they aren't necessarily like organic or as nutrient dense as they possibly could be. And then with the Food Pantry Assistance Grant, it made it so it would make a little bit more sense for us. We typically don't have a lot of like 'quote unquote' food rescue type of produce available, because that means we're not either selling it or over producing. Which means we're kind of degrading our land by not being an efficient farm. So this allowed us to really allocate the land to the program. And even though we were taking quite a bit less than we would typically make for the bed space, it was nice to get something for it and also to have the money up front, which helped a lot with just startup costs with farming"

#### - 2019 participating producer

<sup>&</sup>lt;sup>30</sup> Informed largely by the work of Dr. Dawn Thilmany and Dr. Becca Jablonksi, including their 2017 report "Economic Impacts of Farm to School: Case Studies and Assessment Tools" <a href="http://www.farmtoschool.org/resources-main/economic-impacts-of-farm-to-school">http://www.farmtoschool.org/resources-main/economic-impacts-of-farm-to-school</a> and the USDA AMS Economics of Local Food Systems Toolkit <a href="https://www.ams.usda.gov/publications/content/economics-local-food-systems-toolkit-guide-community-discussions-assessments">https://www.ams.usda.gov/publications/content/economics-local-food-systems-toolkit-guide-community-discussions-assessments</a>

The FPAG program offered a way for producers to be contributing to the charitable food system, while operating within a potentially economically viable framework. Producers, once they have been producing long enough, are hopefully producing at a scale where they can anticipate market demands, and not have too much leftover.

While this is most profitable for producers, it can make it difficult for producers to donate, especially for those producing at small to medium scales. Yet, the evaluation found that many producers that participated in the program were already donating in some capacity. So there is an opportunity to help ensure producers can work with food pantries to provide fresh, local foods and receive a fair living wage for it.

For one farmer, a significant change in production was being able to invest in start-up costs to increase volume of production. They were able to invest in expansion, and also expressed the desire for more:

"If I knew this was gonna be a reliable thing or all year round I would go buy a thousand chickens tomorrow and get started. I would love to support this program and it means a lot to us."

# - 2019 participating producer

Increased autonomy about which communities to sell to when moving to new land was another benefit shared:

"I knew I was scaling up production because I was moving to more land. And I always kind of thought when I start to scale up and have more food I wanted to incorporate getting it to people who need it the most more so. I always kind of felt stuck in this paradigm of wanting to get food to as many people as I could but having to sell at farmer's markets and oftentimes more wealthy people. It was really cool to see an opportunity to directly work with food banks and use their resources and networks to get it to folks who sometimes wouldn't show up to a market or go to a natural food store."

### - 2019 participating producer

### Effects on Production & Business

Overall \$451,250 dollars went to Colorado Proud producers, with \$11,549 going to indirect costs for pantries to support the needs of storing and distributing fresh foods. Farmers reported modest effects on production and/or on their business, depending on the scale they were operating at.

When asked about this, the key motivation for participating producers and vendors was to ensure that their food was going to vulnerable peoples and people in their communities where they live. They reported having this kind of funding is a unique opportunity to do that outside of their typical donations.

A theme found in the evaluation was that participating farmers donate to their pantries in some capacity normally. This could be after farmer's markets if foods are not sold, or for fundraisers for example. The key to the appeal of FPAG is in the consistency that the program allows them to offer.

### **Food Hubs**

For some pantries, they worked with a local aggregator in order to purchase their products. This included buying solely through these aggregators to purchase Colorado Proud items, as well as those that used these as a supplement to more direct relations with producers. Reports from pantries found that this method oftentimes was more convenient, but acknowledged the more direct benefit to participating producers.

Participating food hubs as well as producers also reported that the program was an incentive to sign up for Colorado Proud.

"I'd say that the benefit of the Farm to Food Pantry grant is that it allows farmers to make a fair living off the items that they're growing. A lot of our farmers in our community, despite the fact they tend to be very low income themselves, or possibly because of that, really want to bring produce to our food pantries.

And so some of them have been making deals over the years, where they're selling them basically below what it costs them to produce those items. And so this grant really allowed for farmers to get a fair price for the items that they were growing, and still help to feed their community and people that they really want to be serving with what they grow."

### -2019 participating producer aggregator

The idea that many farmers are already contributing to their pantries, but not in a financially viable way, indicates the potential for this program to support Colorado producers as they continue to navigate a difficult line of work.

# **Perceptions of Local Food**

For those that purchased outside of this range, it was largely because of geographic isolation from nearby agricultural producers. Some pantries struggled when there was a perceived and/or actual lack of agricultural producers within their area. A document review shows that at least 22 food pantries used grocery stores to purchase their Colorado Proud products. Some purchased gift cards that could be used over a

"In 20 years of running the pantry, I have never had this opportunity."

 2019 participating food pantry

period of time, while others set up an account with their local grocer. In some cases, food pantries used food hubs, grocery stores, or distributors to supplement their purchases. For those food pantries where food was procured in this way, there was less knowledge from

farmers about where their food went, and the unique experiences of food pantries within communities. While the majority of funding went right to producers, there is improvement needed to increase the number of pantries who are establishing a more direct relationship with a producer. The spirit of the FPAG was intended to create relationships for pantries and producers to contract, at a price that gives more to the farmer. 23% of pantries utilized grocery stores or large distributors to purchase Colorado Proud products. This includes pantries who purchased from a mix of local producers and grocery stores, as well as some who only purchased from grocery stores. This indicates a higher need for technical assistance to increase direct amount of funds that go towards producer, especially in areas where access to producers is constrained by geographical barriers.

This is also tied to the importance of food pantries intentionally reflecting on what local food means, including the ability to visit the farms and ranches that they procure from.

"If you're buying from the farmers here, it's such a small community that you know the farmers for the most part, like you understand their practices, you know what their farm is like... You know I had gone on a tour of [the] farm before I purchased the pork from them. So it's really cool to be able to see, like hey this is how their pigs exist. This is them happy, running around in their little mud pits. And you know, I just fully believe that the treatment of animals really translates into the food that we're eating you know. And so knowing that the animals were raised and fed more diverse diets... because actually the pigs, before we started this, we were giving the farm extra foods that were rotten you know, and feeding those pigs. And so it's kind of fun to know that you know that food later, we were able to like you know turn into food for our clients."

#### - 2019 participating food pantry

The evaluation found that food pantries should have opportunities to discuss and learn more about how local foods are defined and experienced in their own contexts.

# **Building Stronger Connections**

67% of reporting pantries stated that they plan to continue working with the producers and/or vendors that they worked with. 32% who said maybe overwhelmingly reasoned that the reason was due to uncertainty on availability of funds. Accounting for this, 99% of reporting food pantries expressed wanting to continue to work with their producers and/or vendors.

Many FPAG producers shared about how they had previously been involved with the pantry through donations of products. This includes surplus food items not sold at farmer's markets,

"It's a huge relationship builder. And that then **opens doors** that you can't foresee."

2019 participating food pantry

'B' or seconds quality produce, or responses to requests. While this effort seems to be valuable to producers to be able to get their food to vulnerable communities. Food pantries

I think it's that ability to connect. Provide that connection between where and how food is raised and grown and who's ultimately consuming it. That little bit closer connection to where does your food come from?

# - 2019 participating producer aggregator

also seem to be a less cost-prohibitive outlet, as compared to other market channels, such as restaurants or grocery stores that may or may not purchase the surplus.

A key part of building on this relationship, beyond a desire to see their food go towards low-income communities, is the type of technical assistance that was received by producers. Interviews with 24 producers and food hubs indicated that receiving technical assistance either from a food security and

agricultural specialist or from a food pantry that had worked with said producer prior, helped producers better know where their food was going in their communities.

# **Countervailing Effects**

Countervailing effects are "the idea that gross gains in production of one good must be balanced against the fact that these shifts will usually cause shifts away from production of other goods (offsets)<sup>31</sup>." Selling limited amounts of food items that producers have at a lower price point to food pantries instead of other market channels is an example of how countervailing effects may exist within the program (see Case 6-C). However, these effects may be mitigated by the confirmation of being able to pay upfront prior to the beginning of the season, and if producers were notified earlier that selling to pantries would be an option for longer term production planning, and/or if pantries invest enough in producer to affect production. This is not mitigated when a producer is fairly certain item(s) would have sold otherwise at other market channels for a higher price point.

For example, where a producer experiences loss of harvest, due to weather, pests, or other circumstances, one producer demonstrated how important the FPAG program was to the producer, but affecting other customer sales. The producer described how weather severely affected harvest, and that there were some weeks where no other customers but the pantry received their orders.

This program must note the importance of the negotiation/bargaining aspect of its goals. Key models of success that have arisen are those that helped negotiate with the needs of both food pantries and producers in mind. Particularly technical assistance tailored to specific food systems demonstrated great potential in helping mitigate potential countervailing effects, such as in:

- La Plata, Montezuma, & Archuleta Counties Rachel Landis and the Good Food Collective
- Eagle & Garfield Counties: Ciara Lowe and UpRoot Colorado

<sup>&</sup>lt;sup>31</sup> http://www.farmtoschool.org/Resources/EconomicImpactReport.pdf

## **CASE 6: A SPECTRUM OF PRODUCTION EFFECTS**

For livestock producers, purchases from food pantries had a variety of different activities with potential effects & impacts.

#### Case 6-A: Enthusiastic Gains

Mo Eggs, in Black Forest, contracted with five food pantries throughout Colorado to supply them with her fresh eggs, making up 80-90% of her sales. Morgan Hamilton is the owner and operator of the farm. While she is a fifth-generation farmer, she is the first in her families to raise chickens, is a new/beginning farmer on her fifth year at her current operation, and is a single parent. She raises her chickens free range on up to ten acres for them to roam around on. FPAG helped Mo Eggs during a difficult year balancing farming as well as parenting responsibilities. The program helped Morgan have more control to fit her needs, such as having more flexibility on

attending farmers markets several miles away on weekends with her young child, and less labor-intensive requirements for packaging with food pantry purchases. The security of purchases helped her to make investments in the facilities for her birds, including plans for insulation through solar lighting. Becoming Colorado Proud and being involved with the program also got her more involved with LiveWell Colorado. From this, she learned about opportunities to engage with farm to school. The funds and confidence gained from participating in FPAG incentivizes the farm to participate in the program for the future, as well as explore other markets.

#### Case 6-B: Modest Boost

For a FPAG-participating pig producer using organic practices in the San Luis Valley region, they shared that they were glad to have a local food pantry reach out to them. They believe that their participation in the program helped get their name out within their community. Economically, they were able to come to a consensus on pricing that worked for both parties. The producers

reported that the pantry's purchase of a whole pig, while being flexible with types of cuts, was an economic benefit. An emerging opportunity also arose as their relations have developed. The pantry has agreed to be a centralized location for CSA pick-ups for other customers, instead of the producers driving to individual houses. In return, the pantry receives extra produce donations when available.

### **Case 6-C: Mitigating Unintended Effects**

For a rancher in the Central Rocky Mountains, they reached out to a local pantry to participate in the program after hearing about it. The program was especially appealing due to a family friend/neighbor who was experiencing food insecurity and wanting to contribute.

Though the ranch and food pantry were able to come to a consensus on price, beef sold towards the food pantries in the fall, was then unavailable for other winter markets. The ranchers emphasized that they would still like to participate again, but that earlier negotiations would help with mitigate limits on production and processing.



# 4. Recommendations

Recommendations given below are based on findings presented for program improvement and provides a discussion of preliminary impact(s), as well as additional evaluation possibilities and a brief overview of farm to food pantry models taking place in other states. Key questions include: Based on the learnings, how can Hunger Free Colorado and implementing partners improve the program? What opportunities arose for food pantries and producers? What challenges arose for food pantries and producers?

### 4.1. Technical Assistance

- Recommendation 4.1-1: Promote decentralized technical assistance. Flexible, context-specific models of technical assistance are one of the major successes of this program. The evidence recognizes the importance of decentralized systems to create a personable and more informed pantry-producer relationship. Any centralizing of structures for efficiency must consider (a) the geographic distance from producer(s) that an awarded food pantry has; (b) the potential for a 'connector' within the area who is familiar with both the needs of food pantries and producers. The evaluation indicates the importance of this in being able to negotiate at a price point that works for both parties, as well as help producers better understand the programs they're supporting; (c) staff/volunteer capacity of food pantries to engage in negotiation and procurement processes.
- Recommendation 4.1-2. Build a reliable timetable for producers and consumers. A reliable timetable for the program will be important for maintaining and expanding participation with local producers. Knowing that the program will be taking place and that pantries will be placing orders again was consistently important to farmers who expressed a desire to participate again. This will simultaneously help pantry-goers in the consistency of fresh foods. A consistent timetable is especially important for beef ranchers who take their cattle for processing a limited number of times in a year, and rely on being able to plan early to control their supply; and fruit farmers, who could potentially invest in expansion of orchards and whose fruit trees do not go into full production until three to six years+.
- Recommendation 4.1-3. Embed active producer promotion from food pantries. Activity to actively promote the specific producers should be built into the program. This could include marketing of partner farms and ranches' background, history, growing practices, and/or other information that bring pantry-goers closer to producers and the food they're consuming. This aligns with the success of other farm to institution models who also promote local producers, as well as the potential for marketing opportunity for producers to increase the economic reach/potential benefit of the program. The extent to which FY19 FPAG recipients actively marketed their producer partners varied, largely due to capacity.

- Recommendation 4.1-4. New and beginning producer participation. The program is an opportunity for new or beginning farms to participate in enhanced economic activity. The program may be a good fit for farmers who have recently acquired land or moved to a new location, due to the opportunity to engage in a flexible payment schedule, capital at the beginning of the growing season, and gaining more experience deciding what markets they want to pursue. Because beginning farms are more likely to operate at a small scale initially (almost 70% of small farms producing less than \$10,000 worth of output<sup>32</sup>), FPAG could provide a unique opportunity for capital.
- Recommendation 4.1-5A. Strategies for procurement and spending strategies. FY19 food pantries utilized diverse spending strategies. Some invested their funding into a single producer, while others spread their money around to multiple farmers. For farmers, packers, and ranchers operating for several years with diversified markets: even when the grant amount wasn't a significant portion of their sales, they reported satisfaction in being able to get something financially. Further study is required to understand overall economic effects, but preliminary findings suggest that depending on the logistics of communications and delivery for the producer, small amounts spread out over multiple producers may not be as financially beneficial for producers as larger purchasing with fewer. When working with smaller producers, working with multiple food pantries, or a single food pantry investing more deeply could make more of an economic difference. Pantries know what they need best, but seeing what other pantries have done may help in developing their spending strategy.
- Recommendation 4.1-5B. Build pantry support. Opportunities for pantries to
  exchange best practices should continue. Having producers involved with this will
  assist with program success. This can be done regionally, as demonstrated in
  Southwest Colorado and along the I-70 Corridor, as well as statewide, such as with
  the Colorado Food Pantry Network's annual gathering of food pantries.
- Recommendation 4.1-6. Longer timeline for pantry spending. Some pantries
  shared that they had to report on the grant, before they even started receiving and
  distributing their food. This is also tied to the Colorado peak growing season for
  many fruits and vegetables in areas throughout the state. A longer timeline for
  reporting could help capture key outcomes.
- Recommendation 4.1-7. Equitable distribution of foods. For pantries with satellites or provide food to target populations through partner organizations (such as resource centers, etc.) a plan should be in place for equitable distribution of

\_

<sup>&</sup>lt;sup>32</sup> Key, N. & Lyons, G. (2019). An overview of beginning farms and farmers. USDA Economic Research Service, Economic Brief Number 29. https://www.ers.usda.gov/webdocs/publications/95010/eb-29.pdf?v=8829.1

FPAG foods. This includes adequate technical support to ensure communication and distribution practices can be developed.

Recommendation 4.1-8. Evaluation for multiple-year funding. If funding is
allocated for multiple years, it is recommended that a pre/post measure of healthy
foods and potential healthy food behaviors be put into place, if said measure can be
implemented as non-intrusively as possible to the variety of food pantry operations
across the state. An economic multiplier may be generated where possible to
measure the effects on local producers. Details on this are available under "Future
Evaluation & Research."

# 4.2. Leveraging Opportunities to End Hunger

Recommendation 4.2-1: Harness momentum to focus on nutrition: Pantries should utilize FPAG to widen their approaches to how they prioritize fresh foods. It may be helpful to include examples of this to share with participating food pantries (Table 7). While many food pantries express they would like to offer fresh foods for pantry-goers and are extremely adept in utilizing current approaches, they need financial and technical support in pursuing short and long-term novel strategies to fresh food procurement. FPAG may be used to encourage food pantries to move beyond traditional collection-based models, and explore sustainable approaches to nutritionally diverse, fresh foods.

Table 7. Examples of nutrition-focused activities by food pantries.

NUTRITION-FOCUSED ACTIVITIES	FPAG RECIPIENT PANTRIES		
Community Garden On-Site	<ul> <li>Lift Up of Routt County in Steamboat Springs</li> <li>Nederland Food Pantry in Nederland</li> <li>Sharing Ministries Food Bank in Montrose</li> <li>Manna Soup Kitchen in Durango</li> </ul>		
SNAP Application Assistance	<ul> <li>Catholic Charities of Pueblo in Pueblo</li> <li>Family Intercultural Resource Center (FIRC) in Silverthorne</li> <li>La Puente Home, Inc. in Alamosa</li> <li>Manna Soup Kitchen in Durango</li> <li>Mountain Family Center in Granby</li> <li>Mountain Resource Center in Conifer</li> <li>Prairie Family Center in Burlington</li> <li>The Pinon Project in Cortez</li> </ul>		
Nutrition & Wellness Education	<ul><li>Mountain Family Center in Granby</li><li>Catholic Charities of Pueblo in Pueblo</li></ul>		
Greenhouse On-Site	<ul> <li>Lift Up of Routt County in Steamboat Springs</li> </ul>		
Aeroponic, Hydroponic, or Aquaponic Garden On-Site	<ul><li>The GrowHaus in Denver</li><li>Sharing Ministries Food Bank in Montrose</li></ul>		

- Recommendation 4.2.-2: Emphasize SNAP and other federal programs, Recent research and policy momentum in Colorado is focused on increasing the number of food vendors throughout the state that accept as Supplemental Nutrition Assistance Program (SNAP) and Supplemental Nutrition Program for Women, Infants, and Children (WIC) benefits.<sup>33</sup> Farmers are important partners in these food subsidy programs. The FPAG complements the goals of these food subsidy programs, as well as nutrition incentive programs, such as Double Up Food Bucks (DUFB) or the Farmers Market Nutrition Program (FMNP). A key recommendation would be for food pantries to utilize FPAG fresh foods to, where possible, support enrollment in and awareness of these programs. Food pantries often provide wraparound services, ranging from health insurance assistance to early childhood support to financial aid for rent. For some, this also includes application assistance and education on federal food subsidy programs, such as well as nutrition incentive programs, such as DUFB or FMNP.34
- Recommendation 4.2-3: Work with existing legislation to increase food pantry autonomy. The FPAG was funded within three years of the Colorado Charitable Crop Donation Act (CCCDA), which offers up to a 25% tax credit for the wholesale value of the foods they donate to Colorado taxpayers, targeting producers, who donate to food banks from 2015 to 2020. A 2017 policy audit recommended that food pantries who are 501(c)(3) designated, and not just food banks, should also be able to sign and issue tax-credit certificates to farmers<sup>35</sup>. The FPAG and CCCDA represent two opportunities for producers to flexibly route their foods towards donation to food pantries within their communities, while retaining financial viability. emphasizing the role of food pantries in being a direct interface with producers when appropriate.

### 4.3. Future Evaluation & Research

# 4.3.1. Analysis of Food

For future studies, there is potential to build a pre/post approach to more quantitatively measure the types of food purchased and their effects on pantry-goers. An example would be an adaptation of the Health Food Pantry Assessment Project, which aligns with a federally recognized SNAP-ed framework. Potential indicators include Readiness and Need (ST5); Organizational Partnerships (ST7); and Nutrition supports (MT5)<sup>36</sup>. However,

Brandsma, A. (2017). Colorado Charitable Crop Donation Act 2017 Policy Audit. https://drive.google.com/file/d/1DeFGRNvZrd3HkiPCfLvrl5XdYxoANjAa/view

<sup>&</sup>lt;sup>33</sup> COFSAC (2019). Improving healthy food retail for Coloradans. <a href="https://cofoodsystemscouncil.org/wp-">https://cofoodsystemscouncil.org/wp-</a> content/uploads/2019/06/ImprovingHealthyFoodRetailssueBrief Final.pdf; Moyer, D.C. (2013) Denver Food Deserts and the Impact on Public Health. University of Denver Institute for Public Policy Studies.

<sup>&</sup>lt;sup>4</sup> The State of Colorado currently participates in the Senior Farmers' Market Nutrition Program through the Colorado Department of Human Services' State Unit on Aging, but does not currently participate in WIC FMNP.

This was released in 2018 by the Regional Nutrition Education and Obesity Prevention Centers of Excellence and the Western Region at Colorado State University, https://snaped.fns.usda.gov/library/materials/healthy-food-pantryassessment-toolkit

the survey tool in its original form is very long, and would likely need to be adapted. Tracking of foods shouldn't be overly cumbersome when FPAG food items make up only a portion of foods distributed. The FPAG operates as one strategy amongst several for pantry food procurement, and pantries operate differently in allocation and aggregation of food, as well as data tracking.

# 4.3.2. Economic Impacts

This evaluation details preliminary economic activities and compiles the first comprehensive list of producers involved in the FY19 FPAG. It is recommended that next steps utilize to a fuller extent the capacity of the USDA AMS Toolkit, including economic modeling, generation of economic multipliers, and social network analysis to probe into economic analyses. With 132 Colorado Proud location-confirmed and unduplicated participating farms and ranches, it's important to be careful in differentiating between economic benefits/contributions and impacts, before confidently stating whether or not an economic activity was net positive.<sup>37</sup> Because the program is so new, further economic impact analysis can hopefully be integrated into future evaluations of the merits and challenges of the program. There is also an opportunity to measure the environmental impact of local food miles, or food miles traveled by different food items compared to distance they otherwise would have traveled if not purchased locally<sup>38</sup>

#### 4.3.3. Additional Models

Colorado is one of the few states piloting a farm to food pantry model that aims to invest in producers. While Hunger Free Colorado developed this model based on emerging needs expressed by communities and food pantries, this model of engagement is gaining traction in other parts of the country as well. The following examples have provided funding for producers as a major catalyst for improving the provision of fresh foods for vulnerable communities.

#### California - CalFood

The California Association of Food Banks has created CalFood, formerly the 'State Emergency Food Assistance Program' to fund food pantries across the state to procure California-grown foods. Originally created in 2011, the program received a \$2 million investment from the state in 2016. In 2017, this funding was increased to \$8 million in Governor Jerry Brown's budget. For 2020, the program requested a total of \$24.5 million from the state of California to support the emergency food system in addressing the missing meal gap in California, and the capacity of its emergency food network to procure California-grown foods. Strategies especially consider the needs of communities, especially acknowledging the chilling effect of public charge and other federal rulings on the CalFresh SNAP program and the needs for its emergency food system to support affected communities.

<sup>38</sup> National Farm to School Network. "Evaluation for Transformation: A Cross-Sectoral Evaluation Framework for Farm to School."

<sup>&</sup>lt;sup>37</sup> Jablonski, B.R. & Thilmany McFadden, D. (2019). What is a 'multiplier' anyway? Assessing the Economics of Local Food Systems Toolkit. Journal of Agriculture, Food Systems, and Community Development. 8(Suppl 3), 1-8). <a href="https://www.foodsystemsjournal.org/index.php/fsj/issue/view/35/vol8-suppl3">https://www.foodsystemsjournal.org/index.php/fsj/issue/view/35/vol8-suppl3</a>

### **Washington – Farm to Food Pantry (F2FP)**

The Washington Department of Agriculture and Harvest Against Hunger hosted its sixth year of Farm to Food Pantry (F2FP) in the spring of 2019. The program seeks to function as an incubator for new market-based farm to food pantry models, strengthening local food systems through relationships between food pantries and growers. A study of the 2018 program, in which \$33,000 was distributed to 14 F2FP agencies, that then distributed funds to over 140 food pantries in 18 counties throughout the state. These organizations worked with over 65 growers. The study found that leveraging even a small amount of cash in hand in the beginning of the growing season could help new producers to improve and expand their operation, and emphasized the possibility for expansion to more counties, farms, increased funding sources.<sup>39</sup>

## Michigan – Health, Equity, and Access in our Local Food System (HEALFS)

The Grand Rapids Access of West Michigan hosts a suite of Good Food Systems Initiatives, including the Health, Equity, and Access in our Local Food Systems (HEALFS). Funded by the Heart of West Michigan United Way, this program includes education, community supported agriculture (CSA), and five food pantry markets that procure from local Michigan farmers. Partnerships emphasized the county health department, Michigan State University Extension, food pantries, local farmers, as well as a food and nutrition access coalition.

## Maine - Mainers Feeding Mainers

The Good Shepherd Bank has partnered with local Maine farms, dairies, fisheries, and other local producers to procure fresh, local foods. The percentage of healthy fruits and vegetables distribution through their network has increased from 19% in 2010 to 44% in 2017. A 2017 report found that more than 60 Maine producers in all 16 counties across the state participated in the program and was funded by 12 different foundations. They have created a streamlined application that collects information about the farm, its characteristics, product availability, as well as briefly on transportation and cold storage.

<sup>39</sup> Bobanick, D. (2018). 2018 Farm to Food Pantry. Washington State Department of Agriculture. https://cms.agr.wa.gov/WSDAKentico/Documents/Pubs/F2FP 2018 FINAL1.pdf?/F2FP 2018 FINAL1

