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A Process Evaluation of the Food Security Initiative at the Clarkston Community Center

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**A Process Evaluation of the Food Security Initiative at Clarkston  
Community Center**

By

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B.S, The Pennsylvania State University, 2011  
Emory University  
2013

Thesis Committee Chair: Webb-Girard, Amy, PhD

An abstract of  
A thesis submitted to the Faculty of the  
Rollins School of Public Health of Emory University  
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2013

## Abstract

### A Process Evaluation of the Food Security Initiative at Clarkston Community Center

By Rachael Kane

**Background:** Clarkston is called the most diverse square mile of the U.S due to its high refugee and immigrant population. The city has a poverty rate of 29% and is wedged between two food deserts, contributing to difficult access to affordable, nutritious, culturally relevant foods. The Clarkston Community Center (CCC) aims to combat hunger and access to affordable, nutritious foods through a comprehensive Food Security Initiative (FSI). The main goal of FSI is to increase the percentage of food secure families in Clarkston with independent access to affordable, nutritious, culturally appropriate foods. FSI includes a food pantry, co-operative, community garden, farmers market and Community Supported Agriculture (CSA).

**Methods:** The purpose of this Masters' thesis was to use process evaluation methodology to understand the challenges and successes that arose as the Clarkston Community Center's Food Security Initiative was implemented. Each program was evaluated for the population reached, recruitment methods used, proportion of program delivered and received (dose) and the extent to which each program was implemented as planned (fidelity). Overall challenges and barriers to implementation are also detailed. A variety of data sources were used to gather this information, including community surveys, program records and meeting notes.

**Results:** All five programs in the Initiative had difficulty in at least one key aspect of implementation. The food pantry struggled with consistently implementing data collection and fulfilling roles of the organizational partnership. The food co-op had difficulties in sufficiently reaching its target audience. Community gardens lacked information on participant characteristics and quantifiable information on the dose received by members of the CSA was not gathered. Finally, the farmers market struggled to recruit low-income and refugee populations. Despite these challenges, all programs excelled in one or more areas of implementation.

**Conclusions:** Individual recommendations were made to improve each of the programs, in addition to overall recommendations to quantitatively establish need and baseline information, establish consistent record keeping systems and put in place systems to begin to measure the impact of programs. This evaluation serves as a guide to executing community food security programs and highlights problems that can arise during the process of implementation.

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## Introduction

The city of Clarkston is a major refugee resettlement area for the state of Georgia. With a total population of 7,554 as of 2010, Clarkston is an extremely dense one square mile city in DeKalb County (USA.com 2010). Wedged between Decatur and Stone Mountain, the median household income is \$31,741 and over half of its residents live below the poverty line (CityData, 2012). The population is predominately Black (58%), Asian (22%) and White (14%). Forty percent of Clarkston residents are foreign born, 28% of whom do not have U.S. citizenship. The largest proportion of foreign born residents comes from Africa (27%) and 9% were born in Asia. Although 65% of Clarkston residents speak English at home, the remaining 35% speak a different language. Thirty eight percent of men and 48% of females are unemployed or not in the labor force (USA.com 2010).

In Clarkston's congressional district (four) over 23,000 households received SNAP benefits in 2010, approximately 10% of the population. Almost 50% of households in the district receiving SNAP benefits are below poverty level and 10% of households not receiving SNAP benefits are below poverty level (USDA 2011). It is believed that this gap is higher in the city of Clarkston itself, but no city specific data is available at this time<sup>1</sup>. The fact that some households are eligible for SNAP but are not enrolled in the program illustrates the gap left between government programs and community level situations. The city of Clarkston is wedged between two food deserts (defined as, "a *low-income census tract* where a substantial number or share of residents has *low access* to a supermarket or

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<sup>1</sup> This information is gathered from personal communications with key informants that work and live in the city of Clarkston

large grocery store” (USDA 2011)). There are seven other food deserts in close proximity to the community center (CityData 2013).

The Clarkston Community Center (CCC) is a non-profit community hub for long standing residents and newly arrived refugees from around the world living together in the community of Clarkston. Located in the center of Clarkston, the CCC was established in 1994 in the former Clarkston High School. Its mission is to create a place for Clarkston residents to come together for art, education, recreation and community building. The CCC celebrates the diversity of Clarkston and recognizes, “how the richness and strengths of many different cultures can help build a sound and progressive city” (*Clarkston Community Center* 2013)

The Food Security Initiative (FSI) is a project of the CCC whose mission is to increase the percentage of food insecure families in Clarkston with independent access to affordable, nutritious, culturally appropriate foods. FSI was created in 2011 through two grants received from the DeKalb County Board of Health and Kaiser Permanente which supported the hiring of a Food Security Coordinator and provided start up funding for the food co-operative, farmers market, and Community Supported Agriculture (CSA) programs. These three programs built on an existing community garden (started in 2002) and a food pantry (started in 2011). While only a few years into the initiative, the projects have grown in scope and reach in order to fill the gap left by government food assistance in Clarkston.

### **Problem Statement:**

Food security is defined by the World Food Summit as “when all people at all times have physical, social and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (FAO 2013). Food

insecurity has been steadily increasing in the U.S. since 1995. Almost 15% of households in the U.S. (17.9 million households) experienced food insecurity at some point in 2011. In Georgia, 17% of households are food insecure, with 6.4% experiencing very low food security (Coleman-Jensen et al. 2012). Food insecurity is particularly high in refugee communities due to language, income, transportation, and education barriers (Hadley et al 2010). The impact of food security extends beyond hunger to impact school and work productivity, mental health, and nutrition (Hadley & Sellen 2006)

To fill gaps left in government assistance programs aimed at decreasing food insecurity, many communities are creating small scale programs like community gardens, food pantries, farmers markets and food co-ops. These programs are intended to help lift community members out of food insecurity by connecting them with affordable access to nutritious foods (Cohen, 2002). Despite a rising trend in the creation of these community-led programs, there is little understanding of best practices or challenges to implementing these initiatives (Anderson & Cook, 1999).

If the challenges and successes of implementing the varied range of community food security programs were well documented, it would save the resources of many small non-profit organizations and churches that attempt to implement the programs but ultimately do so unsuccessfully. With a knowledge of the best practices for addressing different aspects of food insecurity, grant funding for community food security projects could be more effectively targeted and have a greater impact on food insecure populations. Such knowledge would enable organizations to develop context specific and evidence-based programs and implement them in ways that address the specific needs and assets of their community. These programs could then be implemented with a better a priori

understanding of the risk and challenges of implementation, a clearer idea of the positive and negative effects the program may have on the community and thus a better likelihood of improving the food and nutrition security of the community

Currently, a gap exists between the implementation and evaluation of community food security programs; this gap hinders understanding of best practices. More knowledge of the process through which programs are implemented, in terms of the dose delivered and received, populations reached and fidelity to original plan is needed. It is also important to understand the challenges and successes that arise as community food security programs are being implemented.

### Purpose Statement

The purpose of this Masters' thesis is to document the challenges, successes and best practices that arose during the implementation of the Clarkston Community Center's Food Security Initiative using process evaluation methodology.

### Objectives

1. Determine whether the FSI program reached the target population in sufficient numbers and the most effective recruiting techniques.
2. Determine the dose of each FSI program delivered and received by program participants.
3. Determine the extent to which each FSI program was implemented as planned (fidelity) and what changes occurred during the process of implementation.
4. Document that challenges and successes each program experienced in terms of reach, dose and fidelity and the lessons learned through the implementation process

### Significance

Through a process evaluation of CCC's Food Security Initiative, other community organizations can understand how to implement a comprehensive food security program, especially for ethnically diverse populations. FSI staff will use evaluation results to understand the successes of each program and areas where improvement is needed. This process evaluation will also provide a springboard for a more comprehensive impact evaluation of the program and future grant funding for programs. With the knowledge gained from this project, the Clarkston Food Security Initiative can increase the quality of services offered and become closer to its goal of increasing access of affordable, nutritious and culturally relevant foods for food insecure families in the community.

## Comprehensive Review of the Literature

To document practices that contribute to the effectiveness of the Clarkston Community Center (CCC)'s food security programs, it is first necessary to understand the historical and cultural context within which these programs operate. This section reviews literature regarding the current status of food insecurity in the United States and food insecurity in US refugee populations. The U.S. federal and community level programs that exist to combat hunger and food insecurity are also described. Given this broader context, I will then discuss the city of Clarkston and the food security programs that exist through the CCC.

### Food Security in the United States

There is some contention about the definition of food security (FAO 2003). For the purpose of this thesis the World Food Summit definition of food security will be used because it is both the most recent and the most comprehensive definition. That is, "when all people at all times have physical, social and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (FAO 2003). This definition of food security recognizes three components: availability, access, and use. People must have a sufficient quantity of food available to them, food that is affordable and easy to access, and food that is healthy and nutritious. It also recognizes the importance of food preferences, which includes culturally appropriate foods; a concept that is very important to consider with Clarkston's international population.

Since 1995, the U.S. Department of Agriculture has conducted an annual survey annually to estimate the state of, "food access and adequacy, food spending and sources of



food assistance” in the nation. This household survey is given as a supplement to the Current Population Survey conducted by the U.S. Census Bureau and is nationally representative. In the year 2011, 43,770 households completed this supplement. Respondents were asked 18 questions about different scenarios in the past 12 months where they were unable to obtain food due to lack of money or resources. (Coleman-Jensen et al. 2012).

From this survey, we know that 85.1 percent of U.S. households in 2011 were food secure, meaning that “all household members had access at all times to enough food for an active, healthy life” (Coleman-Jensen et al. 2012). The remainder, 14.9 percent or 17.9 million households, experienced food insecurity at some point in the year. Of this proportion, 5.7 percent (6.8 million households) reported very low food security. The USDA defines very low food security as a household that is, “food insecure to the extent that eating patterns of one or more household members were disrupted and their food intake reduced... because they could not afford enough food” (Coleman-Jensen et al. 2012). Low and very low food secure households most commonly reported that they worried food would run out, could not afford a balanced meal, and the food they bought did not last long enough. A high percentage of very low food secure households also said they cut meal sizes, skipped meals, ate less than they felt they should and were hungry but did not eat. Georgia households experienced a statistically significant higher percentage of food insecure households compared to the national averages. In 2011, 17.4 percent of Georgian households were food insecure and 6.4 percent of these experienced very low food security (Coleman-Jensen et al. 2012).

The percent of U.S. households with very low food security increased significantly from 2010 to 2011 (from 5.4% to 5.7%), returning to the levels reported in 2008 and 2009. Women who lived alone, African-American households and households with incomes below 185 percent of the poverty line experienced the greatest increase in very low food security prevalence. Food insecurity has been steadily increasing in the U.S. from 1995-2011. Of the households determined to be food insecure, 57% participated in one or more of the Federal food assistance programs: Supplemental Nutrition Assistance Program (SNAP), free or reduced-price school lunch, and Women's Infant and Children supplemental nutrition program (WIC) (Coleman-Jensen et al. 2012).

#### Food Insecurity in U.S. Refugee Populations

A refugee is defined according to the U.S. Immigration and Nationality Act (101a 42) as, "a person who is unable or unwilling to return to his or her country of nationality because of persecution or a well-founded fear of persecution on account of race, religion, nationality, membership in a particular social group, or political opinion" (Martin and Yankay May 2012). In 2011, the United States admitted 56,384 people as refugees. This was a substantial decrease from the amount admitted in 2010 and 2009 (around 70,000), but still higher than those admitted in 2002 (around 25,000). The top nationalities of refugees were Burma, Bhutan and Iraq. The state of Georgia is in the top ten states receiving the most resettled refugees. During 2011, 2,636 refugees (4.7% of the national amount) were resettled in Georgia.

Refugees commonly struggle to find affordable, culturally acceptable, nutritious foods when they come to the U.S. A host of factors, such as language, income and transportation act as barriers to refugees being food secure. A study of 281 refugees in the

US in 2010 found that 77% of respondents replied yes to at least one of seven questions on the food insecurity scale, showing some level of food insecurity. Refugee's experience of food insecurity was significantly ( $p < 0.0001$ ) associated with income. Seventy-two percent of homes with monthly incomes of less than \$500 reported high food insecurity, while only 31% of households with incomes of more than \$2,000 a month experienced high food insecurity. Families with difficulty speaking English and who attended less than one year of school were also significantly more likely to have high food insecurity. Even when controlling for differences in income and education, refugees who had difficulties navigating the food environment were significantly more likely to experience food insecurity. Some difficulties mentioned included not knowing how to prepare American foods, not knowing where to find other stores, and not being able to find stores with the types of foods they liked (Hadley, Patil, and Nahayo 2010).

A few case studies of the experience of food insecurity have been conducted with specific refugee populations in the U.S. A large study investigated poor health outcomes of children of immigrants and found that food insecurity was a mediator between immigrant status and poor child health. Newly arrived immigrants were at the highest risk of food insecurity, when compared to other immigrant and non-immigrant populations (Chilton et al. 2009). A study of immigrants in Los Angeles and New York found that food insecurity and hunger rates were higher for noncitizens in comparison to naturalized citizens (around 30% of all immigrant families). Limited English proficiency and single-parent families were associated with higher food insecurity in the immigrant families surveyed (Capps, Ku, and Fix 2002). Hadley and Sellen (2006) interviewed 33 Liberian refugee mothers living in a large city in the northeast. These women lived in the U.S. for less than five years and

currently had a child less than five years old; 85% were found to be food insecure. Those living in the US for less than one year, those with less than high school education and those families enrolled in the Supplemental Nutrition Assistance Program (SNAP) were significantly more likely to have child hunger in the household. Moreover, regardless of the amount of time spent in the U.S., Liberian refugees experienced more child hunger in the home if they reported difficulties in navigating the food system in the U.S. (Hadley and Sellen 2006). These studies show how food insecurity can affect refugee populations through lower incomes, less education, language difficulties, single-parent families and troubles navigating the food system to find acceptable food.

#### Strategies to Address Food Insecurity- Federal Programs

To tackle food insecurity, the United States utilizes a diversity of federal assistance programs aimed at preventing hunger. The Handbook of Agricultural Economics separates federal assistance programs (FAPs) into two types. Type 1 FAPs are programs “that improve individuals’ food choices or the nutritional impact of their choices.” Examples of Type 1 FAP’s include SNAP benefits, WIC, school lunch programs, food vouchers, cash transfers and others. Type 2 FAPs, “improve food utilization” and include micronutrient fortification, nutrition education, and similar programs (Barrett 2002). Type 1 FAPs are targeted to vulnerable persons and used by governments around the world to address hunger. Type 2 FAPs are present most often in high-income countries and have been demonstrated to be effective, although are often not included in discussions about food assistance. Type 2 FAPs attempt to improve the effectiveness of food to achieve nutritional indicators through fortification or changing the way food is procured, stored, prepared or

consumed. For the purposes of this thesis, Type 1 FAPs will be focused on, although Type 2 strategies also affect health and nutrition security (Barrett 2002).

Type 1 FAPs include SNAP benefits, supplementary feeding programs, Women Infants and Children (WIC), food-for-work schemes, and food subsidies. Of these programs, SNAP and WIC are most commonly used and will be the focal point of this section.

#### *Supplemental Nutrition Assistance in the U.S.*

The Supplemental Nutrition Assistance Program (SNAP) is a federal government program administered by the U.S. Department of Agriculture (USDA). The program began in 1939 as a voucher system known as the food stamp program. At that time food stamps were, “coupons given to eligible persons to use as cash in order to acquire food in regular retail outlets, which then redeem the coupons, like checks through the banking system” (Barrett 2002). The food stamp program was initiated through the New Deal legislation of Theodore Roosevelt as a way to channel surplus food grown in the U.S. to the poor. It was halted in 1943 due to wartime reductions in the budget but was fully reinstated by the Kennedy Administration in 1961. In June of 2004 food stamp paper coupons were replaced with electronic benefits deposited into a card similar to a debit card. At this time, the food stamps were renamed as EBT: Electronic Benefits Transfer. This shift was put in place to help decrease stigma against food stamp recipients who often reported feeling ashamed to pull out paper stamps in grocery stores. EBT also allowed grocers to be paid faster and save the trouble of sorting, counting and bundling paper stamps. Transferring to electronic benefits also helped to reduce fraud and abuse in the system, since it made it harder to lose, sell or steal benefits (Pear, 2004). In October of 2008 the food stamp program name was

officially changed to the Supplemental Nutrition Assistance Program (SNAP) to reflect a renewed focus on nutrition and increase in benefit amounts (FNS 2012).

SNAP is the most common form of food assistance received and makes up the largest portion of the FAP budget. In 2011, over 44 million Americans received SNAP benefits. The average monthly benefit given per person was \$133.85, totaling over 71 billion dollars in benefits. In August 2012 alone, over 22 million households and 47 million persons received over six billion dollars in SNAP benefits (FNS 2012). In Georgia last year (2011) 1.78 million people used SNAP, an increase of about one hundred thousand from 2010. Almost three billion dollars were disbursed to families in need in Georgia (FNS 2012).

While the federal government pays 100 percent of SNAP benefits, the state governments share administrative costs (usually about 50%). Congress reauthorizes funding for SNAP every five years as a part of the Farm Bill. Changes to eligibility requirements, program access, benefits and other issues are usually made at these five-year intervals. SNAP benefits are administered by the USDA Food and Nutrition Service (FNS) (*Federal Food/Nutrition Programs* 2012).

Refugees are more likely than other populations to use many federal food assistance programs, such as SNAP (Bollinger and Hagstrom 2008). Before 1996, most non-citizens that were lawfully living in the U.S. were eligible for SNAP under the same eligibility guidelines as citizens. However, when the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) was passed, most lawful non-citizens lost their eligibility. This eligibility began to be reinstated in 1998 but was not broadly restored until the Farm Bill of 2002. Refugees may now apply for SNAP without a waiting period or additional

eligibility criteria. However, despite their eligibility non-citizens have a historically low participation rate in the SNAP program; only 51% of eligible non-citizens used SNAP in 2008. Some common reasons for this may be language barriers, lack of knowledge about the program and the perception that being in SNAP could hurt their immigration status or chances of becoming a citizen (USDA 2011).

Overall, most SNAP applications and participants are satisfied with the program according to a customer service survey in 1999 (FRAC 2008). This includes the application and recertification process, issuing of benefits and caseworkers. However, in each of these areas, 10-20% of participants were dissatisfied. Fifteen percent of participants were dissatisfied with the application process to some degree. Dissatisfied participants were found to have common characteristics in that they were more likely to live in urban areas, have elders in the household and be black non-Hispanic. Frustration and dissatisfaction with the program increased with the more hours spent applying, more trips made to the SNAP office to apply, number of times they had applied, and the level of perceived stigma around the program (FRAC 2008).

#### *The Special Supplemental Nutrition Program for Women, Infants and Children (WIC)*

WIC is the third largest food and nutrition assistance in the US. The program was created in 1974 in response to the wide distribution of poverty and hunger in the U.S. and the dangers of poor nutrition for pregnant women, mothers, infants and children. Funding for WIC is disbursed from the USDA Food and Nutrition Services (FNS) to state health and human services agencies, which in turn use local agencies to administer the program. There are over 10,000 WIC clinics hosted by health departments, hospitals, mobile clinics, schools, community centers, public housing sites and other local organizations. As WIC is

not an entitlement program, Congress determines the amount of funding available on a yearly basis (*Federal Food/Nutrition Programs* 2012). This means that the funding is susceptible to be discontinued during financially tight years, leaving many needy families without services.

In the year 2010, over 9.2 million people nationally were provided with the services from WIC, costing around \$6.7 billion. In the state of Georgia, an average of 304,000 people use WIC every month (Geller et al. 2012). WIC is described as a program that, “provides free supplemental foods, nutrition education and health care referrals to low-income pregnant, breastfeeding, and postpartum women, infants and children up to age five who are considered to be at nutritional risk” (Barrett 2002). Participants are eligible if they have income below 185 percent of the federal poverty guideline or are enrolled in another safety net program like SNAP, Temporary Assistance for Needy Families (TANF), or Medicaid. Around 45% of children born in the U.S. are eligible for the program. Vouchers are given for foods deemed to meet macro and micronutrient needs of pregnant and lactating women and children including calcium, iron, protein and vitamins A and C. About 53% of WIC participants also receive SNAP benefits.

Legal residency or U.S. citizenship is not required to receive WIC benefits, although the applicant must reside in the state through which they are applying. However, no population level data is available on the use of WIC by refugees. Smaller studies of specific ethnic groups show use consistent with that of the SNAP program (Hadley and Sellen 2006).

In a national survey of WIC participants, satisfaction with the WIC program was very high. Around 50% of participants rated both the quality and quantity of WIC foods as



“excellent” and 93% rated the stores where they shopped for WIC foods as good, very good or excellent. Seventy one percent were “very satisfied” with WIC staff and services, while 70% were very satisfied with clinic locations. This satisfaction was consistent across different ethnic groups studied (Geller et al. 2012).

The effectiveness of WIC has been demonstrated in terms of increases in prenatal care rates and nutritional quality of diet. WIC is also associated with reductions in low birth weight, fetal mortality, and anemia among participants compared to nonparticipants of similar socio-economic status (Geller et al. 2012). WIC participants also reported having high food security. A survey in 2011 of 1,210 WIC participants reported 81.9% of households as having high food security (defined as no reported indications of food access problems or limitations) with only 7.7% reported as having very low food security (multiple indications of disrupted eating patterns and reduced food intake). WIC benefits go beyond just providing a source of nutritious foods. Over 70% of respondents reported WIC was extremely valuable in giving vouchers for known nutritious foods, saving money on groceries, teaching about foods that children, babies and mothers need, helping stay on time with shots for children, health checkups, and general nutrition and health information (Geller et al. 2012).

#### *National School Lunch Program*

Beginning in individual schools in the 1850s, the National School Lunch Program (NSLP) has grown from a local and state supported program to a federally funded program administered through the USDA’s Food and Nutrition Service. The 1946 National School Lunch Act created the national program we know today. Through the NSLP, schools are given cash subsidies and USDA commodity foods to feed the students. Families with

incomes below 130 percent of poverty level (\$29,965 for a family of four) are eligible for free lunch and those with incomes between 130 and 185 percent of poverty (no more than \$42,643 for a family of four) can receive reduced-priced meals for \$0.40 or less. NSLP reimburses participating schools \$2.86 for free lunches, \$2.46 for reduced-priced lunches and \$.27 per paid lunch. In exchange for these subsidies and foods, schools must ensure children are given one-third or more of their Recommended Dietary Allowance (RDA) in each school lunch. Nutritional regulations on these lunches was fairly loose prior to 2010 (*Federal Food/Nutrition Programs* 2012).

In 2010 the Healthy, Hunger-Free Kids Act created further stipulations in order to improve the quality of food provided through NSLP. These changes included an increased amount of fruits and vegetables, more whole grain foods, low fat milk, limited calories and reduced sodium and saturated fat. This was the first update to NSLP meal standards in 15 years and holds the power to shape taste preferences of children as well as decrease health issues like childhood obesity and diabetes (*Federal Food/Nutrition Programs* 2012). The new standards also open up the door for more farm-to-school and school gardening programs to help increase fruit and vegetable consumption.

### Community Level Programs

Communities also act proactively and reactively to address food insecurity. In recent years there has been a push for food assistance programs at the local level that supplement federal programs or fill in gaps where government programs lack (Fisher, 2003). Five community level initiatives will be discussed in this section as these are the most commonly implemented community based programs: food pantries/food banks, community gardens, food co-operatives, farmers markets, and Community Supported

Agriculture (CSA) programs. Examples of these types of programs will be given as well, with a special emphasis on programs that target refugee populations.

### *Food Banks/Food Pantries*

Food banks are one of the earliest interventions used to address food insecurity and hunger. Today, food banks/ food pantries take many forms. They can be large state organizations that coordinate food collection and distribution to smaller food security programs (such as the Atlanta Community Food Bank) or they can be smaller and run out of churches or non-profit organization that serve a smaller community. Riches defines food banks, “as centralized warehouses or clearing houses registered as non-profit organizations for the purpose of collecting, storing and distributing surplus food (donated/shared), free of charge either directly to hungry people or to front line social agencies which provide supplementary food and meals” (Riches 2002). A retired businessman in Phoenix, Arizona started the first food bank in America. John Van Hengel volunteered at a soup kitchen and in the late 1960s began to gather food donations from grocery stores that would have otherwise gone to waste. In 1967 he opened St. Mary’s Food Bank, which distributed about 250,000 pounds of food in its first year. The food bank movement caught on in the 1970s and food banks emerged all over the nation. In 1976 a tax reform act was passed that gave financial incentives to companies that donated products. This pushed the food bank movement further along and by 1979 the creation of America’s Second Harvest served as a clearinghouse for large food donations from national corporations. Standards for capacity, quality and management were then established. By the mid 1980s food banks were present in most major U.S. cities and focus shifted to improving current food banks. In 2008 America’s Second Harvest changed its name to

Feeding America, which is now the nations largest domestic hunger-relief charity. More than 2.5 million Americans each year are provided with services from this organization through 200 large scale member food banks that cooperate with 63,000 smaller organizations (*The History of Food Banking*).

Today, many associated with the food bank movement, “attribute the rising need for food directly to increasing poverty” (Levkoe 2006). The food bank approach is a response to this increase in poverty. Many food bank advocates see the creation of food banks as a, “marker of the inability of the government to achieve social equality” (Levkoe 2006). Hunger is rebranded as “food poverty” and it is thought that strong social safety nets and adequate income can enable people to make food choices that are healthy and filling. The food bank approach has been criticized for putting a band-aid over the problem by handing out food and ignoring the role of government policies and a global food system that plays into the production, distribution and consumption of food. Another critique of food banks is that they do not always provide the most nutritious or culturally diverse foods that a population desires. Food given out at food banks has been described as, “nothing special... well, damn awful actually” (Riches 2002). Many people also feel ashamed, embarrassed, degraded and humiliated to use food banks, especially for the first time. One respondent to a qualitative study conducted by End Legislated Poverty in Vancouver said, “It’s degrading to make people stand in line-ups to beg for food” (Hobbs et al 1993 quoted in (Riches 2002)

One study by University of Pittsburgh scholar Daponte compared SNAP benefits and food pantries in terms of factors affecting the choices low-income households make and the efficacy in alleviating food shortages. The data, collected by the Food Distribution Research

Project in 1993, surveyed 405 households that were below 185% of the poverty level in Allegheny County, Pennsylvania. Of those surveyed, 51% used SNAP benefits and 33% had used a food pantry in the last 30 days. Among those using SNAP, 44% received food from a pantry. Of households who accessed a food pantry, 67% were members of the food stamp program (Daponte 2000). Food stamp participants often use food pantries when they run out of benefits toward the end of the month. In fact, “90% of SNAP benefits are redeemed by the third week of the month and 58% of food bank clients currently receiving SNAP benefits turn to food banks for assistance at least 6 months out of the year” (Castner and Henke February 2011). Thus we see that there is an overlap between the households using SNAP and food banks. Food banks and food pantries remain a vital way for households to receive temporary, emergency food but are criticized for a narrow focus on one aspect of the food problem.

### *Community Gardens*

Today, one of the most popular community food security programs is community gardening. Community gardens got their start around the 1890s in Detroit (Lawson, 2007). They began as a way to give land and technical assistance to unemployed people in large cities. Civic lessons and good work habits were also taught to youth through community gardens. In 1918, the U.S. government started to promote community gardening to “supplement and expand the domestic food supply” during World War I. The first formalized connections between gardening and schools came through a Bureau of Education program called the U.S. School Garden Army. Curriculum materials were circulated to 50,000 teachers and children began to learn more about agriculture and food production. During the Great Depression of the 1930s community gardens were used to

give the unemployed a way to grow their own food. Private, state, and local organizations provided the space and employment. In 1934 alone, “more than 23 million households, growing produce valued at \$36 million, participated in various garden projects.” During World War II a campaign called The Victory Garden focused on food production for personal consumption, recreation and improved morale. Gardening programs were dramatically reduced after the war, but these led to a rebirth of community gardening in the 1970s. This time, community gardens were used to rebuild urban neighborhoods and expand green spaces. More of an emphasis was placed on building social networks and revamping infrastructure of neglected urban communities (Extension April 2009). Today, the focus of community gardens, according to the American Community Gardening Association (ACGA), is all encompassing. The ACGA purports the benefits of community gardening for communities development, including increased social interaction, self-reliance, community beautification, providing nutritious foods and conserving resources, among others (*American Community Gardening Association: About section*).

The benefits purported by the ACGA are largely evidence-based. A review of 55 articles concerning the benefits, purposes and motivations for community gardening in the US between 1999-2010 looked at the motivation to garden in a community plot, as well as the effect of community gardens on health, social capital, food security, economic development, recreational activities, cultural preservation and expression, community organizing and many other themes (Draper and Freedman 2010).

Studies looking at personal motivations for community gardening found that access to fresh food, time to enjoy nature, health benefits, socialization, beautification and conservation of green space to be major reasons for community garden involvement

(Armstrong, 2000; Glover, Shinew, et al., 2005; Ohmer et al., 2009). In terms of socialization, five studies surrounding a community garden in St. Louis, MO found that participants, “viewed the community garden as a way to successfully bring together people of different races and other people who would not normally socialize” (Draper and Freedman 2010). In this way, social processes such as mutual trust and reciprocity translated into situations even outside of the garden and led to a stronger sense of community.

About 50% of the articles reviewed by Draper & Freedman mentioned the health benefits of community gardening including an increased amount of physical activity and consumption of fruit and / or vegetables. . Some studies reported that respondents viewed community gardens as a way to make the community more walkable through creating more green space, and also as a way to access local fresh foods in schools. One article in the San Francisco Bay area used healing and therapy community gardens to rehabilitate people with mental illnesses or learning disabilities (Ferris et al., 2001).

Community gardens were also mentioned as a method to fight food insecurity (Allen et al., 2008; Armstrong, 2000a, 2000b; D’Abundo & Carden, 2008; Graham et al., 2005; Hannah & Oh, 2000; Henderson & Hartsfield, 2009; Hess & Winner, 2007; Kurtz, 2001; Lawson, 2007; Macias, 2008; Pudup, 2008; Saldivar-Tanaka & Krasny, 2004; Shinew et al., 2004). Fresh foods were mentioned both as a motivator and a benefit for participants. Some gardeners chose to plant foods that they desired more of in their diet but were either not available or too expensive to buy in their community. The production of these fresh foods was often used not only as a way to feed food insecure families but also as an income generating activity by selling the produce to farmers markets or restaurants(Draper and

Freedman 2010).

Cultural preservation and expression was also seen as a purpose of community garden. In Latino community gardens in New York City, (Saldivar-Tanaka and Krasny (2004) found that the structures, design, and plants present reflected the country of origin of the participant. Many multicultural gardens held events that helped to express cultures and educate other members of the community through dance, music and food focused activities. In Oklahoma, an afterschool garden was used to educate and preserve Native American culture through the planting of a “three sisters” (corn, beans, squash) garden (Robinson-O’Brien et al., 2009). Community gardens can provide a way for immigrants and refugees to America to continue growing traditions from their home countries and educate their new community.

A study by Macias interviewed participants from four Community Supported Agriculture farms, four direct-market organic farms and four community garden site coordinators working in a local agriculture project in Burlington, Vermont (Macias 2008). The study identified an age gap in community gardeners between younger (20-30 year olds) and older (50-60 year olds) members. It was hypothesized that this gap was due to other responsibilities, mostly related to having children during this part of life. Nonetheless, it should be considered how the time commitment of community gardening could discourage whole community participation. Some other struggles with community gardening mentioned in this study were vandalism and stealing, location far from residential areas, and finding leaders in the community (Macias 2008).

Overall, the impact of community gardens spreads widely across the community. The benefits of community gardening range from increases in healthy eating, physical



activity and other health benefits at the individual level, to community development, preservation of green spaces, socialization, and education on a larger scale.

### *Food Co-operatives*

Food co-operatives are commonly thought of as “worker or customer owned businesses that provide grocery items of the highest quality and best value to their members” (LocalHarvest 2012). The common goals of most food co-operatives are consumer education, product quality, member control and support of local produce. Food co-operatives also provide a unique solution to the issue of food deserts<sup>2</sup>. By creating a grocery store that often carries more variety and fruits and vegetables than the local corner store, co-ops can help to decrease food insecurity in a community while also fostering community development and self-sufficiency.

There has been some debate as to whether this grocery store style of food co-operative is applicable in low-income communities where co-op members may not have the resources to invest in the ownership of a store (Can Food Co-ops Work in Low-Income Communities? 1996). The University of Wisconsin Center for Cooperative’s “Urban-Rural Conference” on November 9<sup>th</sup> of 1996 sought to answer the question of whether food co-operatives can work in low income communities (Can Food Co-ops Work in Low-Income Communities? 1996). Three main themes emerged from this conference. The first emphasized the economic challenges associated with maintaining a food co-op grocery store. In low-income neighborhoods finding this capital would be even more difficult. The importance of feasibility studies and business plans was stressed. Partnerships with

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<sup>2</sup> A Food desert is, ““a *low-income census tract* where a substantial number or share of residents has *low access* to a supermarket or large grocery store” (USDA 2012).

successful co-operatives and other community organizations, in addition to dedicated members were also mentioned as important factors for food co-op survival. Finally, member-owner education was deemed to be critical to sustaining success from the very beginning (Can Food Co-ops Work in Low-Income Communities? 1996).

Gordon Park Food Cooperative in Milwaukee is an example of a food co-op that served a low-income community for thirteen years before shutting down in 1987 due to the move of a chain grocery store into the neighborhood (Can Food Co-ops Work in Low-Income Communities? 1996). Community members came together to buy a store from two brothers who were not able to sell it to private investors. The co-op ran for thirteen years under membership control and leadership until a privately-owned store with cheaper prices moved into the neighborhoods (Can Food Co-ops Work in Low-Income Communities? 1996). This is a problem common to many food co-op grocery stores: the struggle to maintain a marginal profit to pay off debts and re-invest in personnel and equipment. As co-op grocery stores in low-income areas would not survive well with high prices, they are forced to provide food at cheaper prices and often not receive the money needed to keep the store operating.

However, a different model of food co-ops emerged in the late 1980s through the Tampa United Methodist Centers. A manual titled, "Out of the Pit: A Practical Guide to Starting Low-income Food Co-operatives" described a food co-operative that looked more like a community member owned food pantry. Instead of starting grocery stores in low-income neighborhoods, a low-income food co-op operated as a way for churches and non-profit organizations to distribute food, often from a state food bank or grocery stores, to those in need, while giving them a sense of ownership and community.

In Georgia, the Georgia Avenue Community Ministry started its first food co-op on February 28<sup>th</sup>, 1991 based on the model from Tampa United Methodist Centers. Today they have six low-income food co-operatives and provide training to other agencies that wish to start their own (*Georgia Avenue Food Cooperative* 2010). The model of a low-income food co-op, involves the distribution of food from a food bank, grocery store, and sometimes gardens to low-income co-op members every other week. Members pay \$5 to join the co-op and \$3 to receive a box of food every other week. However, Membership dues do not go towards the food received. Instead, dues are put in a pooled account and used in whatever way members decide. This may include field trips, donations to charity or other group projects. The food is funded by the hosting organization (often a church) or by private grants. Co-op members participate in the ordering and collection of food for cheaper prices from food banks and grocery stores. They also are responsible for picking up the food from the food bank, bringing it back to the meeting and helping to sort food into member boxes. Boxes are often three different sizes, based on number of family members (Clark and Brockwell-Carey 1987). At GA Ave. co-op, a medium-sized family receives more than \$100 worth of food at each meeting (*Georgia Avenue Food Cooperative* 2010). Once boxes are sorted, a meeting is often held to discuss any decisions to be made by the co-op, have a religious prayer or reflection, or listen to speakers that address issues ranging from diabetes to Medicare and Medicaid. The goal of a food co-op is not necessarily to provide all of the food needed by a family for the two weeks, but to supplement the food supply so that more food stamp money is freed up and other resources are not spent trying to provide food (Clark and Brockwell-Carey 1987). In this way, food co-ops fill the gap between what members receive from SNAP each month and what they need to buy to sustain their family.

GA Ave co-op boasts several affects and benefits of low-income food co-operatives. Low-income food co-ops provide food with dignity and ownership as co-op members decide the types of foods they want to receive and pay a bit of money into a communal pot. The amount of food provided helps to combat food insecurity and homelessness by freeing up money to pay other bills than food. The personal impact of food co-ops includes an increased awareness of health, disease and social services through speakers and a sense of belonging that can change attitudes and behaviors in daily life. GA Ave members have reported that they stopped drinking or became better parents due to the social support network inherent in a low-income food co-op. Additionally, food co-ops provide opportunities for education and leadership trainings. Co-op coordinators and leaders often go on to become major advocates and leaders in the community and their own lives (*Georgia Avenue Food Cooperative* 2010). In culturally diverse food co-ops such as the Clarkston Food Co-operative, an opportunity to increase awareness of other cultures and friendship across ethnic groups is a focus.

### *Farmers Markets*

Farmers markets offer a way for community members to access fresh, often organic foods grown and prepared right in their own neighborhood. These local markets are known for their capacity to build local economy and foster community. The number of famers markets has been steadily increasing since the 1970s. Between 1970 and 2001 the number of farmers markets in the U.S. increased from 340 to over 3,000 (Brown 2002). Part of the reason for this increase overtime was the Farmer-to-Consumer Direct Marketing Act of 1976, which formally allowed the sale of farm products directly from farmers to consumers, without middlemen. This policy aimed to, “lower the cost and

increase the quality of food to such consumers while providing increased financial returns to the farmers” (Title 7 Chapter 63 of PL94-463- Farmer-to-Consumer Direct Marketing 1976). This growth in farmers markets has continued beyond the year 2001. From 1994 to 2006, the number of farmers markets grew by 150%. Total sales in 2005 were estimated to be \$1 billion, a 13% increase since 2000 (Brown and Miller 2008). Today there are over 7,800 registered farmers market with the USDA (USDA 2012).

In recent years there have been more attempts to measure the economic benefits offered by farmers markets. Estimates are different depending on the market location and population in attendance. A 2004 study of annual market revenues in three markets of Howard County, Maryland showed \$192,000 in revenue from 11,000 shoppers. This revenue was extended to direct and indirect economic benefits (such as shopping in nearby local stores) as \$307,249 a year (Brown and Miller 2008). A study by Hughes et al in 2008 surveyed farmers markets in West Virginia to examine the net impact after accounting for the loss in grocery store sales. Authors found that farmers markets still had a positive net impact of \$1.075 million on the state’s economy. A national survey of vendors in 2006 measured an average vendor annual revenue of \$7,108 from farmers markets (Brown and Miller 2008). Many other studies have also been conducted to estimate the direct and indirect effect of famers markets on the local economy. However, measurement remains difficult, as customer’s recollection of expenditures can be unreliable.

Today, many farmers markets accept and even double SNAP benefits. In May of 2012, the US Department of Agriculture’s Food and Nutrition Service announced funding to increase the participation of farmers markets in accepting SNAP benefits through EBT cards. Through the Consolidated and Further Continuing Appropriations Act (P.L. 112-55)

\$4 million dollars are being allocated to increase farmers' markets participation in SNAP. This funding will be split between states depending on the percentage of farmers markets not authorized to accept SNAP within each state. In Georgia, there are 40 known farmers markets that accept SNAP and at most 50 that do not. This allows Georgia to be allocated \$38,603 toward promotion of SNAP in farmers markets (FNS 2012).

One organization that doubles SNAP benefits is Wholesome Wave. Through its Double Value Coupon Program (DVCP), launched in 2008 at markets in Connecticut, California, New York and Massachusetts, they strive to provide, "consumers with incentives that match the value of their federal nutrition benefits when used to purchase fresh, local produce at participating farm-to-retail venues" (*Wholesome Wave: Double Value Coupon Program* 2012). As of 2012, the DVCP had expanded to 25 states with over 300 farm-to-retail venues and almost 2,500 farmers.

Accepting and doubling SNAP benefits at farmers markets can have dramatic effects on the consumption of fresh, local foods and the revenue of local farmers. In 2011 the number of DVCP participants at markets increased to 39,000 from 20,000 the previous year. "Eighty-six percent of DVCP consumers reported eating more fresh fruits and vegetables and more than 90% said the amount of fresh foods they bought at the market made a big difference in their family's diet" (*Wholesome Wave: Double Value Coupon Program* 2012). Farmers see the difference in their sales as well. A fourth of all sales at DVCP markets were from SNAP consumers who had their SNAP benefits doubled. By doubling SNAP benefits, Wholesome Wave helps to keep federal assistance dollars in the local economy. One study showed that, "expanding SNAP is one of the most effective ways to prime the economy's pump" and increasing SNAP benefits by \$1 creates \$1.73 in

economic stimulus (*Wholesome Wave: Double Value Coupon Program 2012*). In 2009, Georgia launched its own chapter of Wholesome Wave. Expanding from three markets in 2009 to 15 markets in 2011, Wholesome Wave Georgia (WWG) doubled \$61,500 of SNAP benefits to \$123,000 in 2011. Around 3,500 SNAP cards were swiped at farmers markets in 2011, averaging \$35 after doubling (*Wholesome Wave: Double Value Coupon Program 2012*). Programs such as Wholesome Wave allow for low-income populations to access more healthful, fresh, local foods and support community building and the local economy.

#### *Community Supported Agriculture Programs*

Community Supported Agriculture (CSA) programs were first introduced to the US in 1985. Starting with only 50 farms in 1990, CSAs now number over 1,900 nationwide. CSAs offer an opportunity for consumers to buy a “share” in the farm before planting season starts and then receive a box of vegetables grown every week of the growing season. Shares are usually several hundred dollars and last throughout the growing seasons of summer, spring, and winter (depending on location). The money given from the consumers provides farmers with the capital needed up front to purchase needed supplies and seeds. It also ensures that farmers have a steady demand for the foods they grow throughout the season, without being accountable if some crops do not grow well. The share boxes received each week come in different sizes depending on family size and often include products such as eggs, honey, flowers or meat in addition to produce (Brown and Miller 2008).

The main effect of CSAs is providing consumers with a wider variety of nutritious produce to cook. A survey of four CSAs in Pennsylvania found that 74% increase the variety of produce they ate and 58% increased the quantity (Brown and Miller 2008). CSAs can be

a good chance for farmers to create demand for some rare experimental varieties that they may want to sell at market. CSA customers can provide valuable feedback about the appeal of different produce as well as quality. CSAs also aim to allow consumers to meet and see who and where their food is grown. Consumers can save money on shares for a whole season versus buy organic produce in grocery stores. A study in Massachusetts found that CSA shares are 1.5 to 2.5 times the value of the share if it would have been purchased in the grocery store. One Canadian CSA share also saved consumers 39% on produce versus if they would have purchased organic at a store (Brown and Miller 2008).

The effect of CSAs on farmers was also reviewed. One of the biggest benefits of CSAs is that it provides money for operating costs and labor on the farm. A national survey of CSA farms in 2001 found that 74% of farmers believed CSAs improved their ability to cover operating costs and 54% believed it helped to improve compensation for farmers. CSAs can also help to make up money lost due to lack of health care and retirement plans in farming (Brown and Miller 2008).

Many critiques have pointed out the demographics of CSA members. For the most part, CSA members are from a densely populated area, highly educated and environmentally conscious. They tend to have higher incomes and higher rates of college graduation than the general population (Macias 2008). These trends show that CSAs are often not reaching low-income, food insecure populations. However, fairly recently the USDA has approved the use of SNAP benefits to cover half of CSA shares for families using SNAP. This has made the price more affordable but there are still struggles in raising low-income membership (USDA 2012). Many may argue that the purpose of CSAs is not to



combat hunger but to raise awareness about where food comes from and provide an upfront wage for farmers before the growing season starts.

### Clarkston Community Center Food Security Initiative

The term “Community Food Security” (CFS) has often been used to describe community level approaches to issues of hunger and food access. This term emphasizes building sustainable communities that possess the capacity to produce and market food locally. Principles of equity, social justice and ecological sustainability are grown in the community. CFS aims to develop food systems that are decentralized, environmentally sound and ensure equitable access throughout the community in the long-term.

Households are seen as agents of change and programs that strive to create self-sufficiency are encouraged (Levkoe 2006). The Clarkston Community Center’s Food Security Initiative (CCC FSI) can be placed in this category due to its emphasis on working with community members, encouraging community leadership and creating a self-sustaining food system in Clarkston.

The CCC FSI hosts all of the community level programs mentioned in the previous section, including a food pantry, low-income food co-operative, farmers market, community garden and CSA program. As the focus is on low-income refugee and American born residents, the CCC participates in programs such as doubling of SNAP benefits at the farmers market and using USDA benefits to cut CSA shares in half for low-income members. Each FSI program will be detailed in the methods section in terms of its’ vision, goals and program activities.

## Methods

### Introduction

A process evaluation of the CCC Food Security Initiatives was conducted to assess the reach and fidelity of program implementation. . Process evaluations identify the main goals and objectives of the programs and ask whether they are implemented as intended. Gaps between program design and real-life delivery are identified. Process evaluations also serve as a way to identify the factors that lead to a successful outcome by detailing the steps taken and failures that occurred during implementation of a program. This type of evaluation can be looked back on towards the end of the program to see which components of the program led to success and which were not as effective. Overall, examining the process of implementation can help professionals in the field understand best practices and barriers to implementing interventions. This information can be incorporated into future programs to make them more effective and efficient (Linnan and Steckler 2002). In a non-profit world where resources are scarce and programs are dependent on grant funding, it is necessary to understand how to design programs that will effectively and efficiently create the change desired.

### Population and Sample

Clarkston is a one square mile city in DeKalb County, Georgia. It has been called the most diverse square mile in the United States (St. John, 2007). The population of Clarkston is largely made up of African-Americans and refugees from Burma, Bhutan, Burundi, Bosnia, Afghanistan, Ethiopia, Iraq and more. The median income of the community is

\$29,000 annually, with an overall poverty rate of 29%. Nineteen percent of American-born residents and 43% of foreign-born residents live below the poverty level (CityData 2013).

The Clarkston Community Center (CCC) was formed in 1994. It is a gathering place for art, education, recreation and community building and serves both long-time residents and newly arrived refugees in the area. Programs at the CCC strive to improve the quality of life of residents by offering opportunities to learn, gain skills, discover new interests and meet neighbors. In 2011 the CCC served nearly 20,000 people (*Clarkston Community Center* 2013).

Housed within the CCC is the Food Security Initiative, which aims to increase access to nutritious, culturally appropriate foods through a broad spectrum of programs. These programs were created as a response to difficulties among the low-income population in accessing affordable, nutritious and culturally appropriate foods. Therefore, the target population of the study was low-income American born and refugee households who are food insecure.

The rationale for targeting this population lies in the demographic characteristics of the Clarkston population. In Clarkston's congressional district (four) over 23,000 (10%) households received SNAP benefits in 2010. Almost 50% of families below poverty level received SNAP benefits and about 10% below poverty level were not receiving SNAP (USDA 2011). The city of Clarkston is wedged between two food deserts<sup>3</sup>, both of which fall within the CCC's desired impact area. There are seven other food deserts in close proximity to the community center as well (CityData 2013). The desire for more programs to address

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<sup>3</sup> A Food desert is, ““a *low-income census tract* where a substantial number or share of residents has *low access* to a supermarket or large grocery store” (USDA 2012).

food insecurity beyond governmental programs arose from the community during numerous community forums and discussions and led to the creation of CCC's Food Security Initiative.

### Research Design

A process evaluation was used to monitor program implementation to understand the relationship between program elements and program outcomes. Process evaluations do not assess the impact or effectiveness of a program, but instead verify the contents and goals of the program and analyze whether the program is being implemented as designed. In order to evaluate the implementation of a program, four components of the program are analyzed: reach, dose, fidelity, and participant satisfaction. Reach is the, "proportion of the intended priority audience that participates in the intervention" (Saunders, Evans, and Joshi 2005). Reach is measured through a combination of examining target audience, recruitment techniques and characteristics of participants. Dose is measured in terms of the, "amount or number of intended units of each intervention or component delivered by interventionists" and the extent, "to which participants actively engage with, interact with, are receptive to, and/or use materials or recommended resources" (Saunders, Evans, and Joshi 2005). Fidelity examines the extent to which an intervention is implemented as planned and often involves comparing activities to the goals and objectives of a program. Finally, participant satisfaction looks at the proportion of participants who are content with the program activities and staff. This component analyzes feedback and surveys completed by program participants (Saunders, Evans, and Joshi 2005). Together, these four components help to determine if a program is being implemented effectively.

A process evaluation was chosen as the study design since many programs in the Food Security Initiative are still in the start-up phase and have not yet reached a stage where it is possible to study the hypothesized outcomes and impacts anticipated. More information about how food security programs are effectively developed and implemented is desired by many organizations wishing to mimic similar programs in different areas of the world. IRB approval was waived for this project given that it is an evaluation that is not meant to generalize findings to a broader population.

### Procedures

To assess implementation of food security initiatives at the Clarkston Community Center the components of each program were identified. This was completed through the development of an impact pathway that shows how each output (food pantry, food cooperative, farmers market, community gardens, CSA) of the Food Security Initiative (FSI) contributes to the overall purpose and goal of the initiative (See Figure 1). Impact pathways aim to show the components of complex systems and are often used in agricultural development projects. Impact pathway evaluation is a special process of using impact pathways that involves program participants (Douthwaite et al. 2003). The impact pathway developed for this process evaluation was developed through semi-structured interviews with the Food Security Coordinator at the CCC. It details a theory of how the project sees itself achieving impact. This pathway is used to guide program implementation further and can evolve and change over time with lessons learned.

This impact pathway, along with an overall flowchart outlining the design of the initiative (Figure 2) was used to create process evaluation questions and determine the

necessary data sources. Broad process evaluation questions that were asked of each FSI program are listed below:

- In what time frame is the program being implemented?
- Who is the target audience for the program? Are they being reached in sufficient numbers? What mechanisms are used to recruit participants?
- How much of the intervention is being administered and how much is being received by participants?
- What are the strengths in implementing the program?
- What weaknesses are present when implementing the program?
- How satisfied are recipients with the program?
- What is the quality / fidelity of the program received?

Further process evaluation questions address the who, what, when, where, and why of each program and were used to determine the appropriate data sources to evaluate the implementation of each program. Programs were analyzed for their recruitment procedures, reach, dose, participant satisfaction and fidelity. General descriptions of challenges and successes during implementation are also described.

### Instruments

A wide variety of instruments were used to answer the process evaluation questions and ultimately the research questions. Table 1 depicts the goal, target audience and data sources for each program. Data sources varied across all programs and were used to describe the development of the program, recruitment, reach and participant characteristics, dose, fidelity and participant satisfaction.

*Food Co-op:*

Process evaluation of the food co-op component used meeting minutes, agendas, records and sign-in sheets mainly. Monthly reports to the Atlanta Community Food Bank were used to determine the ebb and flow of co-op members throughout the evaluation period. Data on family size and makeup, race/ethnicity, pounds of food distributed, and sources of food were collected from these monthly reports. An adapted version of the U.S. Food and Nutrition Technical Assistance (FANTA)'s Household Food Insecurity Access Scale (HFIAS) was used to measure food insecurity status of members in the eighth month of co-op implementation.

*Food Pantry:*

In the food pantry program, agency records were used to understand the demographics of pantry recipients as well as the amount of food given to each family at distribution. Evaluation of the second phase of the pantry program, which involved opening the pantry for a second day during the month, meeting agendas and minutes were used to understand the planning process and beginning stages of implementation. The second pantry opening, run by the CCC, also incorporated the modified HFIAS used in the co-op to understand hunger among pantry recipients.

*Farmers Market:*

The farmers market program boasts the broadest range of data. DeKalb County Board of Health surveys of market attendees were conducted at four markets along with an overall vendor survey. Agency reports give an understanding of the number of visitors to each market, the amount of revenue generated and the use of SNAP benefits at the market. During the last market in October, a community survey was conducted at the market as

well as online to provide feedback for future markets. Vendors were also surveyed for their feedback online.

### *Community Gardens & CSA*

The least amount of data was collected for the community gardens and CSA programs. Data surrounding the community gardens was selected from garden logs that detail hours worked by volunteers, crops grown and pounds of food harvested. Historical records also helped to describe the development of the gardens from their start in 2002. Basic agency records for the CSA detail the amount and types of food received in each share. A small, informal focus group was also conducted with members of the CSA who dropped out of the program midway in order to identify motivation and room for improvement.

### Plans for data analysis

A basic description of each program begins the data analysis section. Basic services delivered, a timeline of how long the program has existed and details of program implementation were collected from agency records. From there, information regarding the program participants was described, if available. The data was analyzed for program reach, defined as the, “proportion of the intended priority audience that participates in the intervention” in order to determine how much of the target audience participated in the program and if this increased or decreased over time (Saunders, Evans, and Joshi 2005). Recruitment practices were also described for each program to determine if the target population was truly reached.

After the participants involved in the program were described, the program itself was described in detail. Fidelity, or the extent to which the intervention was implemented



as planned was assessed using information about changes in the program overtime as it relates to initial plans (Saunders, Evans, and Joshi 2005). Programs were also evaluated for the amount of the program that was fully delivered (dose) and participant satisfaction where available. In conjunction with the above, program quality was assessed by comparing the activities of the program with participant satisfaction and resources available to the program. Justifications for activities used by programs were analyzed to determine if there were other possible activities that would provide a higher dose or higher satisfaction among participants. Data analysis is concluded with an overall assessment of challenges and opportunities in the implementation of the program that was not covered in the above sections.

### Limitations & delimitations

Several limitations exist in this process evaluation. The uniqueness of each food security program means that systematic, uniform data was not collected across all programs in the initiative. Also, for several programs, baseline data was not collected at the beginning of the program implementation stage or was not continuously and regularly collected once the program started. This led to difficulties in organizing and analyzing data. It also created limitations in understanding the full process of implementation and changes in program participants over time.

Another limitation was that many programs did not have clearly written goals and measurable objectives at the start of the program. Semi-structured interviews with the Food Security Coordinator and Executive Director of CCC helped to fill in these gaps and create clear, measurable goals and indicators that will aid in further evaluations.

Additionally, the resources and time to conduct the evaluation were limited. With a budget

that only covered the cost of a part-time Graduate Research Assistant, measurements that were implemented needed to be cheap and easily administered by program staff.

### *Delimitations*

This study is limited to five food security programs at the Clarkston Community Center: the food co-operative, food pantry, community garden, farmers market and CSA. Special focus will be placed on the food co-op and farmers market as these programs carry the most information from conception to present-day implementation.

## Results

### Introduction

This chapter will summarize the findings from the process evaluation of the CCC's five food security programs. The chapter begins with an overall flowchart and timeline of the FSI programs. Each section of the findings will include a basic description of the program, including the mission and goals, services provided, process of implementation and recruitment practices. Then, each program will be assessed for reach, dose, fidelity and participant satisfaction.

### Findings

The Food Security Initiative (FSI) is a project of the CCC whose goal is to increase the percentage of food insecure families in Clarkston with independent access to affordable, nutritious, culturally appropriate foods. FSI was created in 2011 through two grants received from the DeKalb County Board of Health and Kaiser Permanente. All five programs contribute to the goal of the initiative in four ways: they (1) connect consumers to a local, healthy food system, (2) build community relationships, (3) educate participants about healthy food, (4) provide food assistance to those without the means to buy food. A detailed description of how each program contributes to the goal is shown in the impact pathway (Figure 1).

The various FSI programs were rolled out in several phases to allow time for each program to reach maturation before beginning the next program. The community garden started in 2002, prior to the formal conceptualization of the FSI and was the first program to be developed. Because the garden was a natural fit for the objectives of the FSI it was rolled into this initiative. In 2011, a community run food pantry was started through a

partnership with Oak Grove Methodist Church (referred to as Oak Grove). Today, there are pantry distributions twice a month, with one staffed by Oak Grove and the other staffed by the Clarkston Community Center through an additional partnership with the Clarkston United Methodist Church (CUMC). The first CCC and CUMC pantry opened on January 24<sup>th</sup>, 2013. The garden and pantry were later followed by two programs: the food co-operative and the farmers market in April and May of 2012, respectively. The final program to be initiated, the CSA program, had its first pickup shortly after, on July 8<sup>th</sup>, 2012.

There is a vision for the flow of food insecure families through each of the five programs in the initiative (See Figure 2). This flow allows program participants to gain knowledge, adapt attitudes and modify behaviors with each program, while providing them a safety net. Many participants start in the food pantry, where they receive free food assistance, which frees up more of the household income to be spent on other necessities. Repeat visitors to the food pantry are recruited for the food co-operative where they continue to receive food assistance but also become educated about healthy food choices, learn cooking and gardening skills, and are connected to social support and other services. In addition, co-op members gain control of the variety and quantity of food received and can practice healthy food choices. Through their involvement with a community garden plot set aside for the co-op, participants may then flow into the community garden, where they maintain their own garden plot. From the community garden, participants become less dependent on buying food, learn organic growing techniques and begin to appreciate fresh, local, organic foods. With this new appreciation, they may become patrons of the local farmers market or CSA members. From these programs they will learn the value of supporting the local economy and local growers, form social connections and become

valued customers in the local food system. The end result is a community member, who understands the importance of eating healthy, local, sustainable food, and can grow and purchase their food locally. Not all programs are mutually exclusive, however. They allow for simultaneous involvement and backtracking if the need arises. Each program will now be described in detail, with respect to goal, activities, and implementation process. The programs will be evaluated for reach, dose, fidelity and participant satisfaction. For organizational purposes the presentation follows the flow of participants through the FSI model (Figure 2) starting with the Food Pantry and ending at the CSA.

#### *Clarkston Food Pantry*

The goal of the food pantry is to provide supplemental food to low-income families so that more of their money can be spent on non-food bills. The pantry seeks to provide one-time assistance to low-income, food insecure residents of Clarkston and surrounding areas. This target population includes all ethnic groups and family types. Food is bought or donated from the Atlanta Community Food Bank, grocery stores, community gardens, or private food drives. Currently, the pantry holds distributions twice a month on Saturdays from 9:30-11:30am. One of these distributions is run by Oak Grove Methodist Church (Oak Grove) and one is staffed by the Clarkston Community Center (CCC). Both pantry distributions are hosted within the Clarkston United Methodist Church (CUMC).

#### Process of Food Distribution through the Food Pantry Model

Participants are allowed to come to the pantry once a month on specified pantry distribution days. On these distribution days, participants line up outside the door to CUMC's Fellowship Hall. Some families arrive as early as 8:30am to be in the front of the line. At 9:30am the pantry coordinator hands out numbers to participants depending on their position in line. Participants are then let into the pantry. Two volunteers staff a front

desk, where participants are called by number, given the appropriate paperwork and then sent to an interviewer. There are usually 2-4 interviewers, depending on the number of families that come to the pantry on distribution day. Interviewers help the pantry participant fill out a family member record (or check for changes if the participant has already been to the pantry), hunger questionnaire (HFIAS), and check off food items desired on a form called a ticket. The interviewer hands the ticket to a runner, who brings it to the pantry, where 3-4 volunteers fill the order. Once the order is filled it is weighed and the participants name is called to receive their food. All paperwork then returns to the front desk.

The amount of food each household receives is predetermined based on family size. Tickets contain a predetermined quantity of food to distribute to households of 1-2 people, 3-4 people and 5 or more. Food items are separated into several categories, such as meats, vegetables, fruit, beans, peanut butter, pasta, rice, soup, cereal, sugar, flour, cooking oil and others. A family of 3-4 receives double the amount of food a family of 1-2 receives and a family of 5-6 gets triple the amount. These quantities were determined by Oak Grove pantry staff based on estimates of what a household needs for a month and how much is feasible for participants to carry, as many pantry attendees walk from nearby apartment complexes.

#### Process of Implementation

Prior to 2011 a weekly food pantry was run out of CUMC. However, in 2011 the director of the pantry passed away and the pantry was discontinued. Oak Grove initiated a monthly Saturday distribution in September 2011 as a CCC supported project, which initially was run out of the Clarkston Community Center. In 2012, the pantry moved to CUMC. Oak Grove is a church located in Toco Hills, about 30 minutes northwest of

Clarkston. The youth group at Oak Grove took up the pantry as their project and currently run the distribution once a month out of CUMC. Food in the pantry is donated by Oak Grove church members or purchased by youth group leaders. The Oak Grove pantry is not scheduled on a regular week every month. Instead, the pantry revolves around the youth group schedule.

In November of 2011, the CCC initiated talks with CUMC about the possibility of opening up a second distribution day every month, using CUMC as the location. Oak Grove did not have the capacity to staff a second distribution, so the partnership was created between CUMC and CCC. CUMC agreed to provide the funding for food and CCC agreed to staff the distribution. Despite talk of opening a second distribution day since November 2011, difficulties with the partnership between the CCC and CUMC delayed the second distribution day to January 24<sup>th</sup>, 2013. These difficulties will be discussed in later sections.

Several meetings were held during the process of opening a second pantry distribution day. In the beginning, meetings were held between CCC, CUMC and Oak Grove to learn the pantry flow and coordinate stocking of the shared pantry prior to the next distribution. It was determined that a list of pantry foods needed for the next distribution would be sent to the organization running the second distribution. Therefore, it is the job of the second pantry to stock what was depleted after the first pantry. Since there is not a consistent schedule of pantry distributions, the organization running the first pantry of the month varies month to month. Meetings also discussed the possibility of moving the pantry to a larger space; however this option is on hold because the proposed space is not currently operable.

Meetings with Oak Grove also discussed the number of times participants should be allowed to receive food each month. CUMC and CCC were proponents of only serving households once a month, in order to serve more people. However, Oak Grove was concerned about the problems that may arise with turning people away and decided not to enforce participants only coming once a month. As a compromise, Oak Grove notes if a participant has been to the pantry already that month and will give them less food than they would normally give a new participant. In this way, the fidelity of the program is potentially compromised

Another issue discussed at meetings was how to verify that participants were low-income and hungry. The CCC FSI team visited multiple other food pantries in the area and observed how other pantries verify income, residence and number of people in household. It was decided to have pantry participants self report income, and fill out a hunger questionnaire (HFIAS) to collect initial data. Collected data are used to determine if verifying documents should be examined. To facilitate this process of identification of target participants, the CCC pantry uses HFIAS survey as a screening tool. Oak Grove pantry currently does not screen with this tool but organizers anticipate starting by June of 2013.

### Recruitment

Participants in the pantry were recruited through several different methods. In the beginning, Oak Grove recruited participants through flyers hung in common areas like restaurants and grocery stores in Clarkston. The church that hosts the pantry, CUMC also spread the word to its congregation and attendees to the pantry heard through word of mouth. Once an initial group was recruited, Oak Grove stopped advertising the pantry and would often call the people who attended one pantry to tell them when the next pantry



distribution would be. CUMC continued to advertise pantry dates to its congregation. Since pantries are not held consistently on a certain week of the month, advertising the pantry can be difficult.

When CCC and CUMC coordinated to open a second pantry distribution day, flyers were designed that listed all pantry distribution dates for the year 2013 (including Oak Grove dates). This flyer was distributed to all apartment complexes with a bulletin board in and around Clarkston. Flyers were also given to major refugee resettlement agencies like Lutheran Services of Georgia, Refugee Resettlement & Immigration Services of Atlanta (RRISA) and other churches.

#### Reach

The target audience for the pantry was low-income, food insecure residents of Clarkston and nearby cities. This audience includes residents of all ethnicities and family types. Table 2 provides a summary of characteristics of pantry participants. A majority of pantry participants lived in Clarkston. Other participants came from nearby cities like Decatur, and Stone Mountain. A majority (82%) of participants reported an annual household income of \$15,000 or less. This keeps in line with the pantry's target audience of low-income households in Clarkston. Ethnicities of pantry participants are widely spread across nine different countries, with the most participants being African (31%), African American (28%), or White American (18%). Twenty four percent of all pantry participants recently immigrated to the country, as recent as one month ago. Ethnicities seem to be distributed equitably between international and American born residents, although there were less refugees from Southeast Asia represented in the pantry in comparison to their representation in the city.

Most pantry households had one or two adults, no seniors, and zero to three children. Four percent of participants reported being homeless and one participant said they were near to homelessness. Sixty two percent of respondents used SNAP and/or WIC benefits. No information was gathered to determine if participants not using WIC or SNAP benefits were eligible. The Georgia Nutrition Assistance Program (GNAP) is a special program run through the state of Georgia that designates food to food banks for families that have at least one child in the household and are on some form of governmental assistance (SNAP, WIC, Medicaid, free or reduced lunch, and others). This program was just recently implemented in the pantry starting at the first CCC pantry in January 2013. Forty-one percent of participants are eligible for this program.

Fifty seven participants also completed a modified Household Food Insecurity Access Scale (HFIAS) survey at either the January 21<sup>st</sup> or February 9<sup>th</sup> pantry. Their responses to all ten questions are recorded in Table 3 as percent of respondents who answered “Yes” or “No”. The HFIAS questionnaire is a shortened version of the official version, to make it easier to incorporate into the fast-paced flow of the pantry. Therefore, respondents are simply asked to affirm or negate the scenarios posed in the questionnaire, and not asked to describe the frequency with which they experienced the situation in the past 30 days. As a result of this shortened questionnaire, full analyses cannot be conducted to determine the level of food insecurity among all respondents. Results do show, however, that 64% of pantry participants surveyed were anxious and uncertain about their household food supply. A greater proportion, 84% lacked sufficient quality foods and 76% lacked sufficient food intake and experienced its physical consequences. Only 9% of respondents answered no to all questions, showing that they were completely food secure.

HFIAS respondents were also asked if they currently use SNAP benefits in order to collect more specific data about programs pantry participants use. Sixty-six percent reported currently using SNAP benefits.

Given the above information, it appears that the pantry has reached its target audience, but has not yet reached a sufficient amount of the population, given the amount of poverty and hunger issues in the population. It is difficult to determine the true reach of the pantry because of the amount of missing data in the pantry records. Also, since the records span a full year (2011-2012) it is difficult to understand if the target audience is being reached at each individual pantry.

#### Dose

From September, 2011 to February, 2013 the Oak Grove and CCC run pantries together held 21 distributions and provided approximately 23,601 pounds of food to 769 households. Figures 3a and 3b depict changes in pounds of food and households served over time. Figure 4 shows the percentage of participants who visited the pantry once, two to four times, five to nine times and ten or more times. A majority (60%) only visited the pantry once over the course of the 21 distributions from September 2011 to February 2013. The fact that most participants only visit once fits with the pantry's goal of feeding needy families on a short-term basis, instead of repeatedly serving the same households. However, 5% of households visited the pantry between ten and sixteen times, showing that there are some regular visitors to the pantry.

Despite standardized quantities, the amount of food two equivalent sized households receive can differ. One reason for this is that participants are given a chance to check off foods that they do or do not want to ensure that the food received meets any dietary restrictions or preferences. This sometimes leads to families receiving a smaller

amount than normal. Another reason for the discrepancy is the order in which the participant receives food. Certain foods may run out in the middle of the distribution and thus impact the amount of food received by participants at the end. Extra foods are often added to compensate for missing items, which can add weight to an order. Finally, pantry stocks are dependent upon what food was available at the Atlanta Community Food Bank (ACFB) and what grocery store foods were within pantry budget. Often, the pantry does not carry items like diapers or infant formula because of the expense and unavailability at grocery stores and ACFB.

### Fidelity

As mentioned earlier there was a delay between initial conversations about a second pantry distribution and the implementation of the plan due to difficulties in the partnership between CCC and CUMC. A large part of the reason for this delay was a lack of leadership and commitment from CUMC to start the pantry. When CCC and CUMC first discussed the possibility of a partnership to open a second distribution day the agreement was that CCC would provide the volunteers to staff the pantry and would run the distribution. CUMC would fund, order, pickup and stock pantry food in addition to providing the distribution location. Despite this initial agreement it took several meetings between the Food Security Coordinator, Intern (CCC) and pastor, and staff (CUMC) before a concrete funding amount was disclosed. Due to a failure to stock the pantry with food before the first distribution in January 2013, a Memorandum of Understanding (MOU) was drafted between CUMC and CCC to clarify the roles determined at the beginning of the partnership. To date however, the pantry has not been adequately stocked with food for the Saturday distributions due to failures to purchase food early enough in the week. As such, the pantry is not operating with the efficiency level originally planned.

Another issue with fidelity is the lack of full, consistent implementation of the monitoring and screening systems developed by CCC. Staff from Oak Grove and CCC are working together to train Oak Grove staff on use of the data collection instruments and anticipate fully implementing the monitoring system by May 2013.

#### *Clarkston Food Co-operative*

The mission of the food co-operative is to provide food in an affirming environment that allows members to invest in and gain ownership of the process and create a strong community around food. With its first distribution in April of 2012, the Clarkson Community Food Co-operative arose from a desire of community members to have a form of food assistance that could help food insecure families while promoting independence and self-reliance in the community. While food pantries provide temporary assistance, low-income families want the ability to incorporate more fresh foods into their diets without the added cost. Additionally, community members want ownership over the food they receive and to come together as a community over food. This information was gathered at meetings surrounding food that were open to all community members. One co-op member, in explanation for why they wanted to be a member of the co-op stated, "So I can be part of a team that helps people. So I can meet and help those who can't help themselves. Because I need help as well and would like to stay healthy."

The target audience for the food co-op is low-income, food insecure families that live in Clarkston. The ideal co-op would have a proportionate mixture of races and ethnicities that live in Clarkston: white Americans, African Americans, and refugees and immigrants from various native lands.

Objectives of the food co-op are listed in Box 1:

**Box 1: Objectives of Clarkston Community Food Co-op**

1. Provide food to hungry families to free up more money to be spent on other necessities.
2. Foster community and relationships between different ethnic groups and races living in Clarkston.
3. Connect members to social support and other public services related to health care, employment, gardening, etc.
4. Empower members to make healthy food choices.
5. Create community leaders with the skills to create change in Clarkston

The CCC provides a place for co-op members to gather twice a month to sort and distribute food received from the Atlanta Community Food Bank (ACFB) and community garden. Members receive a box of food proportional to their family size every other week. The box contains some canned and packaged foods from the Atlanta Community Food Bank and some fresh fruits and vegetables from the Food Co-op/Food Pantry Garden. Members pay \$5 to join and \$3 each distribution. These dues are not used to buy food. Instead, co-op members decide how dues will be used. Dues are often used to pay for transportation to and from ACFB. The co-op may also decide to use membership dues for community building activities within the co-op and field trips to observe other co-ops.

Distributions are every other week on Monday from 10am-noon. At every distribution, co-op members help to unload and sort food from ACFB into family size

appropriate boxes. After all food is sorted, all co-op members sit down and have a meeting together. Meetings offer a chance for members to raise questions or concerns about the co-op, discuss how to spend membership dues, and decide what food to order for the next distribution. After the meeting ends, members leave with their box of food. Distribution days can also include harvesting fresh foods from the co-op garden plot, cooking demonstrations, and speakers about nutrition, chronic diseases or other topics of interest to co-op members. These activities are dependant on the time of year and the interests of the co-op members.

#### Timeline of Development

Planning for the implementation of the co-op started in November of 2011 with visits to other food co-ops to identify best practices. The executive director of the CCC also attended a food co-operative training hosted by Georgia First Avenue Church, the first organization to start a co-op in Atlanta. An application to the Atlanta Community Food Bank was written for CCC to become a partner agency for both the food co-op and food pantry. This application included a business plan, budget and membership guidelines. Participants were recruited from December 2011 to March 2012 and orientation was held March 25<sup>th</sup>, 2012. Orientation described the purpose and process of the food co-operative, basic rules and showed an example of the types of foods expected to receive. Since orientation, the co-op has gone through several challenges and shifts to get to where it is today.

Originally, distribution days consisted of two Mondays a month where co-op members could come to pickup food anytime between 11am and 6pm. This model was chosen because stakeholders believed it would be too difficult to find one time that worked

for everyone interested in the co-op. In order to foster connections among members of the food co-op a monthly meeting was held every Sunday at 2pm for one hour to discuss

**Model 1: April 9<sup>th</sup> –May 6<sup>th</sup>, 2012**

***Activity***

Distributions

***Description***

- Every other Monday
- Co-op members can pickup anytime between 11am and 6pm
- Some members come in the morning to unload ACFB food and sort into boxes for whole co-op
- Co-op Coordinator staffs the entire distribution day and checks people off, collects dues, prepares fresh foods
- Held first Sunday of the month at 2pm
- Serve as a forum for members to raise issues about the co-op and make changes
- Serves as a place for members to form relationships and have conversations
- Potluck style
- Each co-op member must volunteer 4 hours per month in some activity related to the co-op
- Exs: help unload food on distribution days, water & weed co-op garden

Meetings

Volunteer hours

Model 1 Description:

Model 1 was the original plan for implementation based on the belief that it would be too difficult to find two hours in a day that all interested members would be able to meet. Co-op members at the orientation chose Monday as the distribution day. This model was difficult to implement because it was very taxing on CCC co-op staff to wait all day Monday for members to show up for distribution. Also, members who came in the morning to unload and sort food into boxes were doing the bulk of the work and felt that it was not



fair for them. There were difficulties with co-op members showing up to distributions before 6pm and for any volunteer hours or monthly meetings. At monthly meetings, only about a fifth of co-op members showed up regularly and these were the same members who sorted food on distribution days. There was little interaction between co-op members because no one showed up to the meetings. Without an open space for co-op members to communicate and build connections, the weight of supporting the co-op fell on the core group of members showing up to meetings and working on distribution days and on the co-op staff. This model did not help to build community and allow the full group of co-op members to participate in changing the process.

### **Model 2: May 6<sup>th</sup>-July, 2012**

#### ***Activity***

Distributions

#### ***Description***

- Remained on Mondays from 11am-6pm but co-op members staffed shifts to decrease burden on staff
- New rule established that if member does not pick up food for two distributions and has not made other arrangements with co-op staff, their membership is revoked
- New rule established that if member misses the monthly meeting, they must make it up with one volunteer hour
- New rule established that if member falls behind in volunteer hours by more than 4 hours, they will not receive food until their time has been made up

Meetings

Volunteer Hours

#### **Model 2 Description:**

Model 2 attempted to more evenly distribute the responsibilities of the co-op among members other than the core group. An attempt was made to use the core group of members as a steering committee for the co-op but the group was not interested in taking on any more responsibilities. At the monthly meeting on May 6<sup>th</sup>, 2012 new expectations

and rules were established for the co-op. These expectations arose from issues that members mentioned in previous meetings. The rules were openly presented for discussion and changes at the meeting and the core group decided to accept them as they were. They did not feel the need to add to the rules. Only six co-op members (the core group) were present at the meeting where the rules were presented but all members were notified of these rules. With the enforcement of these rules a few families were removed from the co-op for failing to pickup food for two distributions without arranging for alternatives with co-op staff.

However, there were still problems with this model. Co-op members were still not interacting heavily with each other because no one outside the core group was showing up to monthly meetings. Volunteer hours were very difficult to track since co-op staff had no way to verify if members completed hours in the garden that staff were not present for. Still, many members were not showing up for volunteer hours and shifts on distribution days, or needing biweekly phone calls to remind them to show up for distributions.

### **Model 3: July 2012-present**

<b><i>Activity</i></b>	<b><i>Description</i></b>
Distribution	<ul style="list-style-type: none"> <li>• Shortened to 10am-noon on every other Monday</li> <li>• All co-op members expected to show up for the full length of distribution</li> </ul>
Meetings	<ul style="list-style-type: none"> <li>• Meetings are held after food is sorted on distribution days</li> <li>• All co-op members must stay for meetings and take box of food after meeting</li> <li>• Co-op members decide what food to order for the next distribution from a list of what ACFB currently has available</li> </ul>
Volunteer Hours	<ul style="list-style-type: none"> <li>• All co-op members expected to help unload truck and sort food into boxes on distribution day</li> <li>• No more volunteer hours</li> </ul>

### Model 3 Description

Model 3 arose from attendance of the Co-op Coordinator at an Atlanta Food Co-op Association meeting on June 18<sup>th</sup>, 2012. At this meeting, the coordinator was informed that according to guidelines with the ACFB, co-op members cannot be asked to complete volunteer tasks not directly related to the co-op. It was suggested that the CCC co-op adopt a model similar to the model used by other Atlanta co-ops, where all members are required to show up for two hours on distribution days. In these two hours all members do work to unload and sort food, a short meeting is held and members pickup their food at the end. This model allowed for more communication and relationship building between all co-op members. By working side-by-side, co-op members started to understand their similarities and focus on those above differences. This was seen through more open communication between co-op members themselves, instead of communication through the CCC co-op staff and members.

Today, this model is in place and has shifted the responsibilities from co-op staff to co-op members and allowed for more community based participatory decision-making about the food that is ordered and the process on distribution day. This model differs significantly from the original model because it allows co-op members to work together, while eliminating the burden of distribution days on program staff or a select group of members. It also requires all members to be present for meetings, because they are tied to distributions. In this way, the voices of all co-op members can be heard at meetings, which allows for more a more community driven model. However a drawback of this model is that it excluded many previous members who are not able to commit to the two hours selected by the core group of members. Many members said they could commit to the time

slot but never showed up. Similarly, the model excludes those who work during the days. Future ambitions may include the creation of another co-op that meets in the evenings to be more accessible to those who work during the day.

#### Recruitment:

Original co-op members were recruited through word of mouth and connections with a community partner of the CCC. In 2012, Clarkston Development Foundation (CDF) had a program called Parents As Teachers (PAT) where CDF staff from different countries representing the major refugee groups in Clarkston acted as Parent Educators. These staff would train groups of refugee parents important skills needed to raise children in the American education system. For the co-op, CDF parent educators acted as liaisons and translators for families selected from the PAT program. The Food Co-op Coordinator recruited families through visits to various community meetings and the daycare where the PAT program was implemented. Special effort was made to recruit participants from several ethnic groups.

Today, co-op members are recruited through a waiting list that accumulated from word of mouth about the program. In addition to that waiting list, members are recruited from the after-school program at CCC and are starting to be recruited from frequent visitors to the food pantry.

#### Reach

The food co-operative began with 23 families and today is down to four households, due to the shift to the current model, and difficulties with retention. In the year 2012, the co-op was made up primarily of Somali and Ethiopian women, but also held families from Bhutan, Afghanistan, Cameroon, Mexico and the U.S. Today the co-op has four members.

There is one Afghani household, one white American household, one Somali family and one African American family.

Since its' creation, the co-op has served 28 different families; a total of 172 people. Families were members of the co-op for as short as two weeks and as long as a year (the full span of the program). The highest number of members at a time was the beginning group of 23 families. The co-op has reached as low as two families. The maximum capacity membership in the co-op is 50 families, but this number must be reached gradually to ensure members are fully involved.

In the beginning, the food co-op was comprised of all members of the target audience in terms of ethnic makeup. However, there was no measurement of income level or hunger of beginning co-op members. Over time, as participation decreased due to a high dropout rate the co-op failed to reach its target population. Currently, the co-op is small and does not reach all intended ethnicities. Staff members are in the process of adding more members to the co-op to reach a sufficient amount of the target population.

HFIAS surveys were administered to four different households since the initiation of the co-op. However, tracking of who completed these surveys and the date complete was not recorded so the information is of little use for this process evaluation. Some of the surveys were administered to co-op members after they had already been in the program for 6 months, and some were administered to members when they first joined. However, since no dates were recorded on the surveys it is hard to say which survey corresponds to which participant or which survey period.

In general all participants surveyed experienced anxiety and uncertainty about the household food supply and insufficient quality of food eaten. Three of the four participants

(75%) reported insufficient food intake and the physical consequences of this. Three of the four participants were scored as severely food insecure and one was determined to be food secure. This participant may likely have been a participant who was in the co-op for 6 months already, but it cannot be stated for certain. Of the two responses to the final question on the survey, asking if members currently receive SNAP benefits, all responded that they did receive benefits. Amounts received per month were \$135 and \$200.

#### Dose:

To date (March 25<sup>th</sup>, 2013) 17,071 pounds of food have been distributed to 28 separate households and a total of 172 people. On average, a single box of food (for families with six or fewer members) receives 90 pounds of food per month and a double box (for families with seven or more members) receives 180 pounds per month. Of the 17,071 pounds of food distributed, 86% is non-perishable food from ACFB, 13% is free fresh food from ACFB, and 1% is from the CCC pantry/co-op garden and donations.

However, reports of the pounds of fresh food from the garden and donations are missing for seven distributions. Figure 6 shows how the pounds of food distributed in the co-op have changed over time. Part of the reason for this steady decrease is a decline in membership. Another reason for fluctuations in pounds of food given is the availability of food at ACFB, which changes frequently and often unpredictably.

#### Fidelity

The food co-op has gone through several changes since its start. Today, the structure of the co-op is not how it was anticipated in the design phase but it has evolved according to community needs and inputs. Assessing program fidelity requires that one be cognizant of the changing nature of this program in response to community needs. To date, the program is implemented accurately according to the guidelines of Model 3 discussed above.

Increasing the amount of cooking demonstrations, outside speakers and community building activities would bring the co-op to an even higher state of implementation.

### Participant Satisfaction

Figure 7 depicts changes in the number of families in the co-op since April 2012. The drastic decrease from July to August reflects changes to the model of the co-op, discussed above. Another reason for this decline was that four Bhutanese families dropped out because they were not satisfied with the types of foods received. This particular group preferred to have more fresh produce and foods to canned foods. Unfortunately, due to the availability of foods at ACFB, co-op boxes ended up being largely canned food, although some fresh foods were added to boxes from the garden, donations and the free fresh food floor at ACFB. Talk of making a trip down to the state farmers market was never put to action due to a lack of leadership from co-op members.

On September 19<sup>th</sup>, 2012 a focus group discussion was held between CCC co-op staff and CDF liaisons to discuss the dropout of many families. Reasons for dropout were identified during this focus group and are listed below:

- Not enough fresh foods
- Language barriers: Many co-op members spoke little or no English and relied upon CDF liaisons to translate information for them. When CDF liaisons stepped out of the role to allow families to take more ownership, families were unable to communicate at meetings
- Failure to commit to responsibilities of a co-op member: Many co-op members were asked to leave by staff due to failure to show up for distributions, meetings or volunteer hours.

- New co-op model that mandated that everyone come to distribution from 10am-noon on Mondays (instead of an all day open pickup that was used in the beginning) excluded many people who work daytime jobs or have other commitments.

On September 24<sup>th</sup>, 2012 community partners, Global Growers Network (GGN) came to the food co-op. GGN is an organization that helps refugees and immigrants to start small-scale organic farms in the U.S. The executive director visited the co-op due to an interest in helping to provide the co-op with more fresh foods grown on the farms. At this point the co-op consisted of five Somali families, one Afghani family and one African American family. Susan identified members' preference for fresh veggies grown on the farm and the quantity they would normally find. This discussion identified that co-op members liked most vegetables offered, except for sweet potatoes, which are only eaten during Ramadan for the Muslim families. To date there has been limited follow up in terms of collaborations with GGN; the co-op has not begun receiving fresh fruits and vegetables through this partner. Appendix 1 contains a description of additional challenges that the co-op faced since its creating in 2011.

### *Community Garden*

The goal of the Clarkston Community Garden is to provide a space where the diverse community of Clarkston can grow food organically and connect with neighbors who also enjoy growing food. All residents interested in growing organically are the target population of this program. Started in 2002, the community garden today consists of 27 individual garden plots and several communal herb plots. One garden plot is reserved for a food pantry/co-op garden, which grows fresh, organic vegetables for members of the co-op and pantry and is run by CCC FSI staff.



Community gardeners pay \$40 a year for an in-ground plot. Thirty of those dollars go to the CCC for rent and water usage and \$10 goes to the garden for communal supplies. Raised beds are \$25 a year, with \$20 going to CCC and \$5 to the garden. The garden does not allow any pesticides or non-organic fertilizers to be used. Growers supply their own seeds and plants and must begin preparing and planting plots no later than April 15<sup>th</sup>.

The Clarkston Community gardens started in 2002 with just seven in-ground plots. The soil was Georgia hardpan clay and was previously a garbage-dumping site for the county. In the first few months, assistants from the Atlanta Community Food Bank and several volunteer groups helped to remove junk, kudzu vines and rocks as well as create the plots. A grant from The Community Foundation helped to stock the tool shed with shared tools. Box 2 below details changes to the land over the past nine years. In January of 2012 the co-op/pantry garden plot was created with a design from Global Growers Network and the labor of master gardeners, Emory volunteers and the Food Security Intern at CCC.

**Box 2: Community Garden Land Changes**

2004—Soil was amended enough to support the first crop

2006—Added three plots, an herb bed and a flower bed

2007—Raised bed plots and herb pot benches were added through a Home Depot project

2010—More plots along the fence were added to bring the total to 27

2012—Pantry/co-op plot was added

To remain in the gardens there are several rules that gardeners must follow. Appendix 2 contains a list of rules from the Community Garden Membership Agreement for 2013.

Reach:

Community gardeners represent the diverse population of Clarkston. In the past, gardeners have been from Russia, Somalia, Vietnam, and Colombia. Today the gardeners are from the U.S., Burma and Ethiopia. Community gardeners are recruited through word of mouth and promotion at Clarkston Community Center events and Clarkston Farmers Markets. CCC staff and volunteers run the co-op/pantry garden. In 2012 over 430 volunteer hours were logged and staff reported working over 115 hours in the garden.

Dose:

In 2012, the community gardeners harvested around 2,000 pounds of food from individual and shared plots. On average, each of the 25 gardeners recorded in the garden harvest log took home 80 pounds of food in 2012. Crops grown range from tomatoes, collards and kale to Burmese gourds and sour leaf. Many gardeners also grow herbs like cilantro, parsley and catnip. Lettuces including Swiss chard, arugula and spinach made up the largest proportion of the harvest.

In the co-op/pantry garden plot over 760 pounds of food were harvested and distributed to participants of the food pantry & co-op and sold at the farmers market to benefit FSI. Most commonly harvested crops were greens like collards and kale and tomatoes.

Challenges Reported by the Community Garden Program

While there is no available data on the fidelity or satisfaction of community gardeners, there is documentation of challenges the garden has faced over the years. One major challenge that the community garden has faced consistently over the years is vandalism. The garden is located on the CCC Activity Field, which is also open to the community to use its basketball court and soccer field. Unfortunately, there have been several incidents of unknown perpetrators openly defecating in community garden plots,

ripping up crops (sometimes to take and eat and sometimes just laying them on top of the soil to rot), leaving water hoses running or unhooked, and graffiti. In response to these crimes the CCC has added locks to the gates on the activity field, and hired a police officer to close up the field at sunset. However, numerous locks have been broken and stolen and there is a fence below the Clarkston Library that is frequently jumped to get into the activity field. This fence has been torn down and rebuilt several times, but never lasts more than a week without being destroyed again. There has been talk of installing security cameras and hiring security guards to have a presence on the field but funding is not available for these options and there is uncertainty that the cameras themselves will be safe from vandalism.

The community garden has also faced difficulties with getting members to commit to communal workdays. While there are regular community workdays on the third Saturday of each month, not all members attended or contributed in the past. Gardeners felt that a core group of a few members were carrying the weight of the communal work like mulching, mowing and maintaining communal herb plots. In order to address this issue, new rules require 12 hours of communal work in order to keep a community garden plot. These rules were added to the 2013 membership agreement and will be implemented this growing season.

### *Farmers Market*

With its first successful market on Sunday, May 20<sup>th</sup>, 2012 the Clarkston Farmers Market (CFM) is the newest addition to the CCC Food Security Initiative. The goal of this farmers market is to build community by connecting neighbors with locally grown, nutritious and affordable foods and celebrating the city's diverse cultural traditions. The

market targets all residents of Clarkston and the surrounding area interested in supporting a local food system. The market engages six dedicated farmers groups such as the Global Growers Network, Jolly Avenue Community Gardens, Steve Miller (a local farmer), North Lake Church of Christ, Ellen-Htwe Farms, and the community garden at the CCC. The market accepts and doubles SNAP (food stamp) benefits. The funds for this doubling were provided by a DeKalb County Board of Health (DCBOH) grant that was received to help get the market started, and will be continued through a partnership with Wholesome Wave Georgia. In 2013 the market will be held weekly on Sundays from 10am to 2pm starting April 21<sup>st</sup> and running until the end of October. This was made possible by receiving a USDA Farmers Market Promotion Program grant for \$90,000.

The idea for a local farmers market arose from community members during a community forum and “sample market” event where a few local growers and community organizations that support sustainable, local agriculture met on the CCC activity field and hosted a fair to gather more information on what a farmers market in Clarkston may look like. Community members voted on the type of vendors they wanted to see, day of the week the market should be held and location of the market. Ninety nine percent of respondents (out of 207) said Clarkston would be a good place for a farmers market. Seventy three percent voted for a Saturday market and 23% voted for a Sunday market, with 75% voting for the market to be held in the morning. Forty-nine percent of respondents said they would like to receive information about cooking, gardening and nutrition through cooking demonstrations at the market.

### Recruitment

The target population for the market was very broadly set to all residents of Clarkston and the surrounding area. However, similar to the co-op, the goal of the market is

to see proportions of attendees who were representative of the many different ethnic groups and income levels in Clarkston. In order to draw lower-income and international populations into the market, CFM supports many international growers who sell foods from major refugee resettlement areas in Asia and East Africa that are not available elsewhere. This sometimes acts as a way to draw more international populations to the market, if they know hard-to-find foods from their native countries are being sold. It also draws in internationally curious audiences who wish to expand their palate and try new foods. Additionally, in order to draw in more low-income populations, CFM accepts and doubles SNAP benefits at the market.

A post market season online survey showed that a majority of CFM attendees heard about the market either through social media outlets like Facebook or from a friend or family member (See Figure 8). Other recruitment methods include advertisements on the CCC website, street signs, local newspapers and radio stations and flyers in Clarkston restaurants and stores. In addition to these channels of advertising, CFM started a “Street Team” to spread knowledge of the market and its benefits to harder to reach populations. On the Friday and Saturday prior to the last market of the 2012 season, over 90 volunteers from AmeriCorps college programs around Atlanta made up the Street Team. This team went door to door to spread the word about the market to populations that speak and read little English and/or do not use electronic media. This approach brought many new people to the market, including low-income populations who infused more SNAP dollars into the market, as evidenced by the spike in SNAP dollars doubled (see Figure 9). From a community survey at the last October market after the Street Team, 37% of attendees

sampled stated it was their first time at the market. This approach will be used again for the 2013 market on a monthly or bi-monthly basis.

### Reach

Figure 10 depicts changes in market attendance over time. The attendance declined towards the end of the market, but remained steady around 340. As the population of Clarkston is over 7,500, CFM has not fully reached its target audience. The DeKalb County Board of Health sampled market attendees for the months of May, June and July. The sample size for all markets together was 136. Figures 11-13 show demographic characteristics of sampled attendees. Ages of attendees were split fairly evenly with most (40%) of attendees being either 25-34 or 55-64 (Figure 11). Respondents of the survey were predominately white (68%) and had an annual income of \$50,000 or more (48%) (Figures 12 and 13). Forty two percent of respondents held an advanced degree and 40% were college graduates (Figure 14). A smaller proportion of survey respondents (about 45%) answered three questions about food insecurity. A majority (72-74%) of respondents reported never worrying about having enough food, being able to afford the food they wanted to eat, or afford healthier meals.

### Dose

A community survey conducted at the last 2012 market showed 37% attended the market once during the season, 47% attended 2-5 times, and 16% attended every market. Results were slightly different for an online survey administered post-market season. Figure 15 shows results; with 43% attending the market 1-2 times, 44% 3-5 times and 3% attended all markets.

Although grant funding only allowed for a monthly market, the community attendees and vendors strongly supported the idea of a weekly market. The monthly

market made it difficult to promote, since new advertisements had to go out every month to remind the public of the market. Also, farmers do not generally harvest once a month during the summer and expressed the need for a steady weekly market to provide income. However, the monthly market was a good dose for smaller scale growers who did not have enough food to sell weekly, but were still able to sell some produce or crafts every month for income.

Figures 16 through 19 describe the dose received in the farmers market program in terms of number of produce vendors, money spent by market attendees, vendor revenue and SNAP benefits spent at the market. From May to October there were 26 different produce, prepared foods and craft vendors at the market. On average, there were 10 food vendors at each market. Figure 16 shows changes in food vendors over the season. From June to October, all vendors made a total of \$12,681. Figure 17 shows changes in vendor incomes over time, with the peaks in revenue being at the beginning and ending of the season. The average revenue for a market was \$2,536. Average dollars spent per attendee to the market drastically increased by over \$2 for the last market. Figure 18 shows a graph of the changes over the season, with \$7.11 being the overall average amount spent at the market. SNAP dollars spent at the market also increased drastically at the last market, moving from \$54 at the September market to \$444 after doubling at the October market. The proportion of total market income due to SNAP dollars is portrayed in Figure 19. Over \$1,000 SNAP dollars were spent during the entire season, with an average of \$180 per market. This change reflected a marketing strategy that was implemented for the final market and aimed to raise awareness among low-income and international populations of Clarkston.

### Fidelity

The DCBOH set out objectives to be achieved in the process of developing the Clarkston farmers market. Objectives and current status of the objectives are listed in Table 4. All ten objectives have been completed. Therefore, the market has followed closely with the plan for implementation and has even expanded beyond it. Expansions include a shift to a weekly market with more vendors and the establishment of a food hub between GGN and CFM. GGN will aggregate the products of several small-scale refugee growers at the CCC and then go on to sell them at market under one umbrella. This food hub will give individual growers the experience of selling at a farmers market without taking too much risk if their crops don't sell or they don't have enough to fill a market stand.

### Participant Satisfaction

All participants surveyed by the DeKalb County Board of Health at markets in May-July rated the overall quality of the farmers market as good or excellent. Positive community feedback about the market revolved around the food sold, location, and social atmosphere of the market. In regards to the variety of food offered at the market one respondent said, "This is my favorite farmers market in the area. Very local sellers, very friendly. Focus is more on produce... Clarkston had a wonderful array of things to try. I bought many things for the first time." Other respondents also mentioned the global flavor of produce sold at the market. Most patrons of the market also liked the location, on the CCC activity field, because it is at the center of town, easy to walk to, and offers opportunities to tour the community gardens and play in the soccer field. Finally, market attendees spoke about the community spirit and interaction with neighbors that occurred at the market. Staff and vendors were praised as being very friendly and helpful.



Respondents mentioned, “meeting people, talking, making connections” and “the pride, meeting neighbors, and the cultures being represented” at the market.

Holding the market on a Sunday was a bit contentious for some patrons and vendors. However, the community survey administered at the October market found 88% of respondents liked the market being held 11:30am-3:30pm on Sundays. Seventy three percent of respondents to the online post market survey said they liked the date and time of the farmers market. Other suggestions were to hold the market on Saturdays and/or earlier in the day to escape Georgia’s summer heat in the afternoons. Among vendors, 85% liked the Sunday market and 23% said they would prefer Saturday mornings. 77% of vendors liked the time slot and 23% said they would prefer earlier hours. This feedback contributed changing the market time to Sundays from 10am to 2pm, to escape the heat.

Patrons to the market and vendors gave suggestions for changes to the market through the DCBOH survey, an online post-market consumer survey and community survey at the October market. The most common suggestions said the market needed to be weekly, have more produce, value-added products and prepared foods, and incorporate more kids activities, music and entertainment.

#### *Community Supported Agriculture (CSA) Program*

Through a partnership with the Global Growers Network (GGN), the CCC sponsors a CSA program that provides participants with a box of local, organic produce every week when they pay local farmers up front. Developed through the same grant that supports the farmers market, the main goal of the CSA program is to connect consumers to those who grow their food, and provide financial stability and a reliable market for growers. The target population of the CSA is all residents of Clarkston, with five of the fifteen shares

subsidized specifically for SNAP recipients. The CSA fee (\$25 per week) is given to local refugee farms coordinated by GGN to support the materials and supplies needed to grow food up front. It provides a guaranteed outlet for their produce throughout the season and builds relationships between community member and the growers of their food.

#### Timeline of Development

The CSA was started July 8<sup>th</sup> and ended September 23<sup>rd</sup>, 2012, a total span of 12 weeks. CSA members picked up shares at CCC every Sunday between 11:30am and 1:30pm. On the last Sunday of the month, CSA shares were picked up at the Clarkston Farmers Market. The CSA will continue in 2013 with pickups weekly at CFM.

#### Reach

Five CSA shares were subsidized for community members with SNAP benefits. Instead of paying \$25 per week, SNAP participants pay \$12.50 and can pay on a week-by-week basis. Five Somali members of the co-op were chosen because of their consistent dedication to the co-op. Five SNAP participants join for the first week but only two came back for the second week. These two stopped coming after the second week. In the third week, two more SNAP recipients were added as CSA members, but these members also discontinued after one week.

#### Dose

CSA shares varied from week to week depending upon what was in season. Crops included in the shares ranged from staples like tomatoes, cucumbers, peppers and eggplant to more internally focused crops like amaranth greens, bean, sweet potato and pumpkin leaves, and sour leaf (a Burmese plant). Each share had six to eight items in it, valuing around \$25.

### Fidelity

The CSA program was implemented as planned, but due to feedback from SNAP members who dropped out, subsidized shares for the CSA will no longer be offered in the year 2013

### Participant Satisfaction

In order to determine why SNAP recipients dropped out of the program, the Food Security Coordinator conducted an informal focus group with all dropouts. Former CSA members said they did not think the food was worth the higher price. They compared prices to the nearby Your DeKalb Farmers Market (YDFM), where they already went to shop for items as a group. At YDFM they are able to buy more food in bulk for very low prices. CSA dropouts said they did not see the value in buying local foods, and were not concerned about pesticide use in foods that they may buy at YDFM. Outside of those members, there was a high retention rate, with 75% of 2012 CSA members signing up for the 2013 season.

### Summary

This process evaluation of the five programs within CCC's FSI incorporates a wide variety of data, ranging from community surveys and focus groups to program tracking records and meeting notes. Each section describes a different program in terms of its goals, activities, timeline of development, dose, reach and fidelity. Some programs, like the food pantry and farmers market, contain more in-depth data, while other programs like the community gardens and CSA lack information. The next section will discuss results and draw conclusions regarding dose, reach and fidelity of each program. Challenges will be summarized and suggestions made to improve the implementation of FSI programs.

## Discussion, Conclusions and Recommendations

### Introduction

In this section, the major findings of the process evaluation will be discussed. Each program will be assessed for the overall implementation of services offered, target population and reach, dose, and fidelity. Findings will be discussed in terms of how they are consistent or inconsistent with standards of successful implementation for similar programs. The implications of these findings for the effectiveness of the program will also be discussed. Recommendations for improvement of each program in terms of the process evaluation objectives (reach, dose and fidelity) will be made. Then, overall recommendations will be made to increase the effectiveness of the implementation of the Food Security Initiative as a whole. Finally, the chapter will conclude with implications and recommendations for the effectiveness of broader public health programs based on food security that were learned from this evaluation.

### Food Pantry

The Montana Food Bank Network created a guide called, “How to Start a Food Pantry” (*How to Start a Food Pantry*). This guide will be used to provide a standard for the successful planning and implementation of a food pantry. This guide includes thirteen steps to starting a pantry, which are seen below in Box 3:

#### **Box 3: 15 Steps to Starting a Food Pantry**

1. Conduct a needs assessment
2. Create a steering committee and board of directors
3. Obtain non-profit status
4. Create a basic business plan
5. Determine food program hours of operation
6. Secure a location and storage space
7. Develop a pantry model
8. Determine best client intake procedures
9. Develop client resources and referrals
10. Fundraise
11. Select types of food to be distributed
12. Recruit staff and volunteers
13. Recruit clients and promote the service

The Clarkston Food Pantry did not conduct a formal needs assessment, but developed the pantry out of requests from community members to multiple community leaders around the city. Although no formalized steering committee or board of directors was established, leaders of the project were established within CCC, Oak Grove and Clarkston United Methodist Church. CCC previously obtained non-profit status for general purposes of the services it offers. No business plan was created, but meetings between leaders in each organization established general policies regarding hours of operation, location, and the model of distribution. Client intake procedures and record keeping was pre-established by Oak Grove and refined and added to by CCC staff. The pantry does not offer consistent resources for clients or referrals to other social services. Fundraising was done by CUMC to create a line item in the church's budget to be spent on food for the pantry. Two food drives were also conducted by CCC staff to stock the pantry. The type of food distributed was also predetermined by Oak Grove pantry staff, and is based upon availability of food from ACFB, donations, and grocery stores, as well as staple food items for families in Clarkston. CCC program staff also conducted an assessment of foods sold in bodegas targeted towards Clarkston's international residents. A list of culturally relevant foods was created and incorporated into suggested donation items for food drives. Finally, CCC recruited volunteers from the Hands On Atlanta volunteer website and advertised the pantry via refugee resettlement agencies and apartment complexes in the area.

Services offered by the pantry have been fully implemented, although there is need to incorporate referrals to other social services and resources into the distributions. The target population of low-income, food insecure families is being adequately reached over all 21 distributions since September 2011. However, it is hard to determine if individual

pantries host the appropriate audience in terms of food insecurity status and ethnicity. Despite this, the number of families that attend each pantry has increased steadily over time.

Although the amount of food each family received (dose) was found to be adequate for a month's supply, several barriers make it difficult to maintain consistency in the dose given to household of similar size. Dietary preferences, pantry stocks and the order which recipients are served at the pantry contribute to differences in dose provided to similar households.

Difficulties with the partnership between CCC and CUMC have led to discrepancies in program fidelity. A lack of consistent, early stocking of food in the pantry has created tensions in the partnership, and limits to the number of families the pantry is able to serve. Additionally, newly added record keeping systems are not consistently implemented across the pantries staffed by CCC and Oak Grove. However, there is promise of full implementation within the next few months.

#### *Pantry Recommendations:*

To increase the effectiveness and completeness of the pantry's implementation three recommendations are made:

1. To improve fidelity and availability of information the pantry should train CCC and Oak Grove staff on record keeping and data collection systems.
2. To be responsive to the cultural food needs of the community, the pantry should increase the amount and variety of food distributed. This could be facilitated through more community food drives, and partnerships with grocery stores, farmers markets and local farmers for fresh fruit and produce.

3. To ensure a mutually responsible partnership, deadlines for food to be ordered or bought and stocked in the pantry and consequences for failure to do so should be amended to the MOU between CCC and CUMC. A Standard Operating Procedures (SOP) manual could also be created to document responsibilities and activities needed to effectively run a food pantry.

### Food Co-op:

The food co-op manual created by Georgia Avenue Community Ministry in 2011 serves as the standard for effective implementation of a food co-op. This manual states the general process of food co-op distributions and how to grow a co-op. It is suggested that a food co-op start small with 10-15 members and then grow slowly to no more than 50 members. The Clarkston Community Food Co-op did not closely adhere to the suggestions of the manual at first because of the belief that it would be too difficult to find a time of day that all interested parties could attend one meeting. Also, the Clarkston co-op started with more members than recommended due to overwhelming interest. Over time, the co-op has circled back to the main principles expressed by the co-op manual: holding one two hour long distribution every other week and requiring all members to be present and active in the process. This transition eliminated many members who were not available for that time slot or were not willing to actively participate in the process. The co-op is now at a point where it is small but ready to grow slowly with an effective model.

Therefore, the co-op is struggling to reach its target audience. In addition to a diminished membership, data collected on the food insecurity status of members is poorly recorded and tracked. There is little quantitative knowledge of how needy families truly are and how their food insecurity status may change during co-op membership.

On the other hand, the amount of food (dose) participants are receiving is adequate to supply their family size for two weeks, at least. In order to incorporate more fresh fruits and vegetables, a partnership with a local school garden and the pantry/co-op garden plot have donated over 700 pounds of fresh foods in 2012. Further incorporation of outside speakers, cooking demonstrations and community building activities is needed.

The program did not adhere to the original guidelines (fidelity) in the beginning but now has come back to the model suggested by Georgia Avenue Community Ministry and known to be effective. The model also developed through feedback from co-op members about what was ineffective with the original model, adhering to principles of community based participatory action.

*Co-op Recommendations:*

Based on the above discussions of reach, dose and fidelity, three recommendations exist to create a more effective program:

1. To expand membership and reach its' target population, the co-op should expand recruitment efforts by connecting to other CCC programs like the food pantry and after school programs. Additionally, designing and distributing recruitment flyers in several languages spoken in Clarkston at a range of community events can help the co-op to reach a more diverse audience.
2. To determine need and progress of co-op members a consistent record keeping system for assigning identification numbers to co-op members as they enter should be designed and implemented. The HFIAS food insecurity scale should also be administered upon entry and every two months following entry, in order to measure changes in food security with involvement in the program. A monitoring



system for submitting this data should be developed in order to prevent loss of information.

3. To increase likelihood of co-op members moving on to other FSI programs and becoming more food sovereign, the co-op should provide more connections to other social services that can lift them out of food insecurity. Speakers and pamphlets about health care, childcare, educational and English learning opportunities, and chronic diseases can help to form these connections. Co-op staff may also want to consider holding an open forum at each meeting for any member to express their struggles and allow other members to assist them in accessing useful services.

#### Community Garden:

The American Community Gardening Association (ACGA) website provides numerous tips and guides to starting a community garden. Since there is very little background information on the development of the Clarkston community garden, it is hard to determine if the garden was developed according to the recommended guidelines. However, looking at the policies and procedures in place now, the Clarkston Community Garden is a fully functioning garden with a steering committee, garden president, membership contract and rules that address potential problems community gardens face.

The Clarkston community garden has reached its target population, since all but two plots are full for the season. The garden has been more ethnically diverse in the past, but members still represent three major countries where people in Clarkston originated. The amount of food grown in the garden is impressive, and the average annual harvest per member (50 pounds) provides an adequate dose. Literature does not specify a standard amount a community garden must grow to be determined successful. Success is more

frequently determined by community involvement and the growth of any and all crops. To this end, the community garden has high involvement from different community gardens. The major challenges associated with the garden were having members commit to community workdays and problems with vandalism. The revised membership agreement for 2013 has put in place rules that require a minimum number of community work hours over the season to keep a plot. The effectiveness of this requirement is yet to be shown.

*Community Garden Recommendations:*

In order to overcome challenges in the community garden, the following recommendations are made:

1. To increase community building among garden members, workdays could be incentivized through post-work activities such as potlucks, family game days and other outings.
2. In order to minimize vandalism in the garden and make gardeners feel safer, the ACGA recommends several tips to deter vandalism in community gardens. A few key tips not yet used by the Clarkston community garden are listed here:
  - a. "Make short picket fences or wire to deter animals and honest people
  - b. Spend more time in the garden
  - c. Invite everyone in the neighborhood to participate in community work days
  - d. Involve children in learning gardens
  - e. Plant thorny plants along the fence as a barrier to fence climbers
  - f. Make friends with neighbors whose windows overlook the garden. Trade them vegetables for a protective eye.
  - g. Plant less popular vegetables like root crops along common walking areas

- h. Plant unusual varieties of vegetables like purple cauliflower or white eggplant to confuse vandals
  - i. Plant a 'vandal's garden' at the entrance. Mark it with a sign: 'If you must take food, please take it from here.' (*Starting a Community Garden*)"
- 3. To ensure the garden is reaching its target population, create short surveys that measure characteristics of members (such as ethnicity/country of origin, family size, income, and food security status) when new members enter. Surveys on participant satisfaction, personal impact of the garden and food insecurity status could also be administered every two months to measure the impact of the garden on members' lives over time.
- 4. Currently, the garden harvest log is organized in a way that makes it difficult to determine how much food one member's plot has produced in comparison to other plots. Creating a separate notebook page for each gardener to record his or her harvests and work hours will simplify data collection and also allow gardeners to measure their harvests and volunteer hours more easily. This can be used as an incentive for gardeners and a way to build community through friendly growing competitions.

## Farmers Market

A study by Farmers' Markets America prepared in 2008 identifies ten characteristics of successful farmers markets. These characteristics are displayed below, in Box 4 (Characteristics of Successful Farmers Markets 2008).

### **Box 4: Characteristics of Successful Farmers Markets**

1. Vendors with high quality products, effective display, friendly customer service, education and guaranteed satisfaction.
2. A wide variety of products displayed in abundance.
3. Good Location: high visibility, sufficient space and parking, good signage, restrooms, water and electricity, storage, proximity to local landmarks.
4. Clear vision/mission is an essential basis for policies and programs.
5. Professional staff to manage the market.
6. Policymakers will value what customer's value.
7. Partnerships with all types of organizations.
8. Use of events and programs to increase demand and supply.
9. Solid financial plans for the future.
10. Markets contribute to and benefit from active public spaces.

The Clarkston Farmers Market has strived to meet all of these characteristics.

However, being a fairly new market, there are some characteristics that are not yet fully developed. The areas in which CFM is lacking are professional staff to manage the market; solid financial plans for the future and active public spaces. Although CFM has a market manager, the position is only part time. The Food Security Coordinator at CCC also oversees market operations, but also holds several other positions. The market is in need of a steering board, or committee to assist with decision making, securing future funding and advertising. CFM received a \$90,000 grant from the USDA Farmers Market Promotion Program (FMPP), but is not financially sustainable without grants. The city of Clarkston, while growing, does not have many active public spaces or green spaces for the community to be active in. Having these active spaces will encourage more activity within the city itself, and garner further support for the market.

CFM has sufficiently reached segments of the target population. Most patrons of the market were middle to high income status and American. There is a need to increase attendance by low-income and refugee populations living in the city. The Street Team is one marketing strategy that has proven to effectively reach this segment of the population. However, difficulties with volunteer recruitment and management make it difficult to maintain several Street Teams in a market season. The majority of patrons to the market were satisfied with all aspects of the market. Community surveys both at the market and post-market season suggest a desire for more vendors, more frequent markets and more entertainment at the market. These suggestions will be taken into account as the 2013 season kicks off weekly at the end of April.

In terms of dose, the shift from a monthly to a weekly market in 2013 will provide patrons with a more sufficient dose. This shift will also aid farmers, who often harvest weekly and desire a regular market. Vendor revenue and average amount spent by consumers increased over the course of the 2013 season and is thought to increase with a weekly market, due to regular shopper attendance. CFM met and exceeded expectations in the implementation of the plan designed by the DeKalb County Board of Health. Thus, CFM has been fully and accurately implemented but still desires further outreach to increase its reach.

*Farmers Market Recommendations:*

Based on this evaluation, there are three recommendations to increase the effectiveness of the Clarkston Farmers Market:

1. The development and implementation of a more aggressive marketing plan will continue Street Teams to reach low-income and international populations, provide

extensive signage on market days, spread awareness of the doubling of SNAP benefits and increase partnerships with apartment complexes and refugee resettlement agencies in order to reach the target population of the program in sufficient numbers.

2. In order to increase the dose received by patrons to the market, expanding the number and variety of vendors selling at the market will provide a plethora of fresh foods and crafts for patrons to shop from. This will also continue to support the local food system and provide jobs and income to residents of Clarkston who grow food or make crafts that can be sold at the market.
3. In order to easily monitor successes, a single master spreadsheet should be used to compile all pertinent data throughout the market season. The compilation of a short report at the end of market season should also be continued to judge successes over the lifespan of the program.

### Community Supported Agriculture (CSA)

The Hunger Action Network of New York State created a guide to best practices in CSAs in New York. This report details nine CSA programs in the state that uniquely involve a diverse range of members (Community Supported Agriculture in New York State 2013). Among the most common practices were offering low-income families the option to pay smaller amounts throughout the season, instead of all upfront, or accepting SNAP benefits for shares. Other CSAs also commonly offered “work shares” where members could receive a free or reduced price share for working a selected number of hours on the farm every week. This method is used to assist the farmers with labor needs and also provide membership to those who may not be able to afford the full price. CSAs also offered

gleaning, or chances for members to come and pick their own produce from the farm. This cuts down on harvesting and processing time usually completed by farmers. Finally, many CSAs chose to distribute their shares at farmers market, or market-like stands where members could supplement shares with other fresh, local foods. The Clarkston CSA in partnership with GGN engages in several of these practices by subsidizing shares for SNAP participants, offering a limited number of work shares, and distribution at the Clarkston Farmers Market.

Data collected on the CSA was very slim and did not include any information on the dose received or administered by program participants. In terms of reach, the CSA had difficulty retaining SNAP using members due to the belief that the food was not worth higher prices than what they would see at a grocery store. Due to this feedback, SNAP shares were discontinued for the 2013 season. This factor compromised the fidelity of the program, by eliminating a major component.

*CSA Recommendations:*

Due to the lack of data and challenges faced by the CSA in 2012, the following recommendations are listed below.

1. To judge the dose given and received in the program, increase record keeping and data collection related to the weight of shares, and composition of produce distributed each week.
2. To ensure the target population is reached, collect information on member characteristics (such as family size, ethnicity, and income, food security status, reason for CSA membership) at beginning and end of season. This comparison data can also be used to measure the impact of the CSA on individuals' food security. A

short survey about eating behaviors and knowledge of local foods could also be administered before and after to show changes in knowledge, attitudes and behaviors.

3. In order to gauge further interest in SNAP CSA shares and understand attitudes and beliefs of the Clarkston community around local food, create open community forums and education around the importance of local, good food from an individual consumer standpoint.

### Strengths and Weaknesses of Food Security Initiative Programs

There were several strengths and limitations in this evaluation. The evaluation was made stronger through the incorporation of a wide variety of data sources for many of the programs, which allowed the evaluator to gather a well-rounded view of the program.

There was also generally a good understanding of the programs from the planning to implementation stage due to the newness of the initiative. Several programs, such as the pantry, co-op and farmers market held good records of struggles faced during implementation.

Despite these strengths, it was difficult to evaluate the implementation of many programs (specifically the CSA and community garden) due to missing or inconsistent data. None of the programs collected baseline information and there was no formal needs assessment to judge the state of food insecurity on a local level prior to implementation. Monitoring systems were also often developed in the middle of implementation, instead of at the beginning. In the case of the farmers market, monthly surveys were only collected for the first three markets and the last market, making it difficult to truly make conclusions about the populations reached at two of the markets. It is recommended that the initiative:



1. In order to estimate the current state of food insecurity in Clarkston conduct a range of community based surveys. This could be done through adaptation of instruments included in the USDA, Economic Research Service Community Food Security Assessment Toolkit. This publicly available toolkit includes assessments of household food security, food resource accessibility, food availability and affordability, community food production resources, socioeconomic and demographic characteristics and more.
2. In order to ease the process of monitoring and evaluation, establish consistent record keeping and data monitoring systems for all programs.
3. Put in place systems to begin to measure the impact of programs, including pre and post services surveys. This information is imperative to securing future funding to continue the initiative.
4. In order to create complete food security, develop criteria that can be used to judge when a participant is ready to move from one program to the next. Also create record keeping systems to show how the situations of households change as they flow through programs in order to identify gaps and impacts of programs.

These recommendations will aid FSI in further evaluating the impact of the program at a later date and also improve the effectiveness of programs currently implemented.

### Broader Implications

A process evaluation of FSI has broader implications for the effectiveness of other public health programs focused on food. Process evaluations are most useful for identifying best practices and understanding challenges that organizations can face in the process of

implementing programs. Therefore, this evaluation broadly serves as a summary of challenges in implementing the five programs of the initiative effectively.

The overall initiative shows broader public health programs the importance of taking a comprehensive approach to addressing issues of food insecurity, in order to target multiple segments of the population at different points in their life. Similarly, it is important to design community food security programs that complement government assistance programs, instead of ignoring or trying to replace existing services.

In the initial development of food security programs, this evaluation has shown the importance of involving community members prior to development, to judge community interest and need. This will allow for more community ownership and involvement at later stages of implementation. Likewise, it is important to form partnerships with other organizations doing similar or complimentary work in the community. FSI has formed partnerships with churches, farmers, schools, bicycle repair shops, artists, entrepreneurship programs and more in order to broaden its impact on the community. Strong partnerships also create engaged stakeholders that can often lead to more community support for programs.

Additionally, this evaluation has shown the importance of impact pathways to guide implementation and the establishment of clear and useful monitoring, learning and evaluation systems. Documenting challenges and successes throughout the planning and implementation of programs helps to show how the program has grown and changed since its conception. This information is useful for potential funders to see the work that has been done to create programs. Similarly, designing a consistent, unified data collection plan

can aid in securing funding for programs in the future by showing milestones in the lifetime of the program.

Finally, the evaluation of FSI shows the importance of flexibility in designing and implementing community food security programs. Willingness to adapt program models to fit community desires, as was done with the food co-op, often makes programs more effective and can draw further community support.

### Conclusion

This process evaluation is one of few evaluations of comprehensive approaches to solving food insecurity at the community level. Further research on best practices and implementation of programs targeted at diverse communities is needed. Little is known about how to reach international immigrant populations due to challenges with communication, technology use and transportation. Further research on these topics will help to improve community food security programs and increase the effectiveness of current public health programs that address issues of food insecurity.

## Tables and Figures

Figure 1:

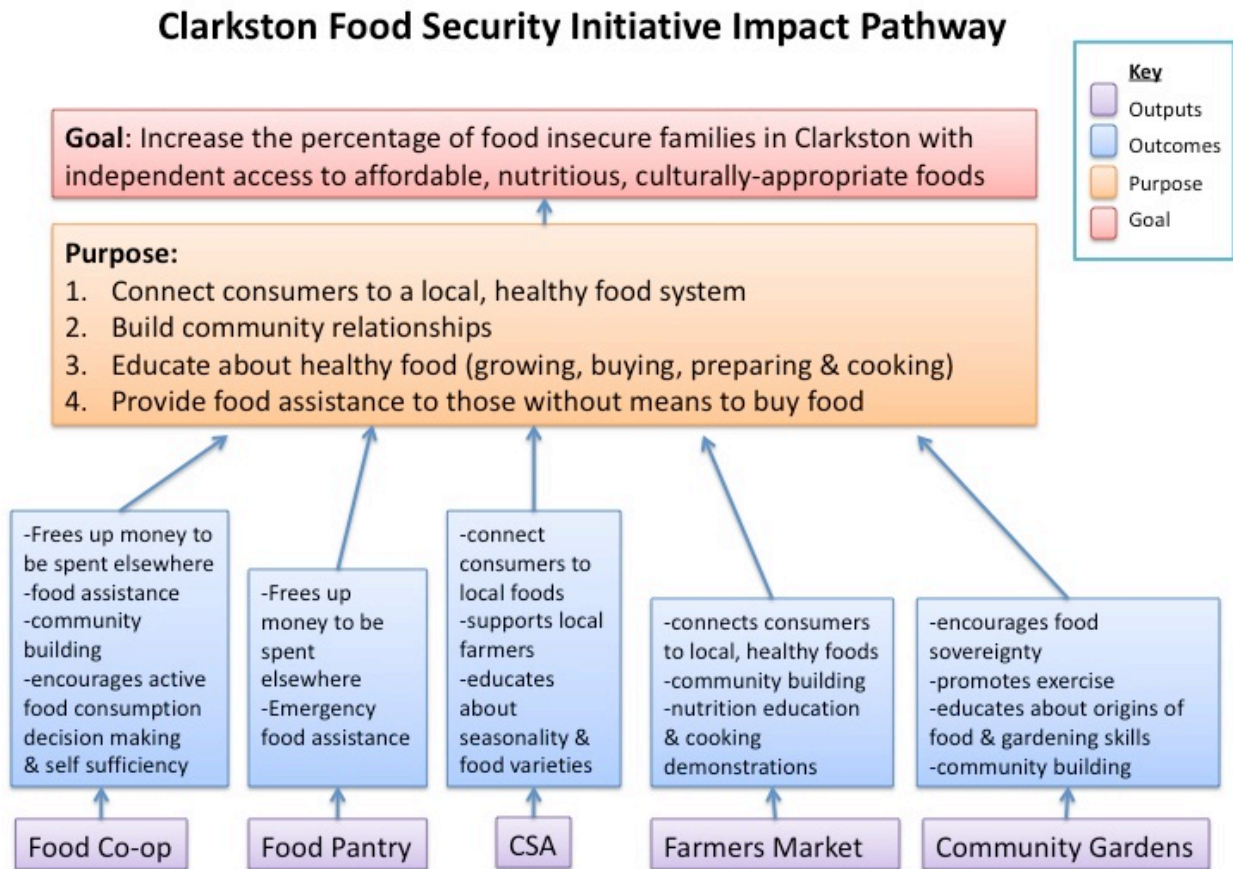


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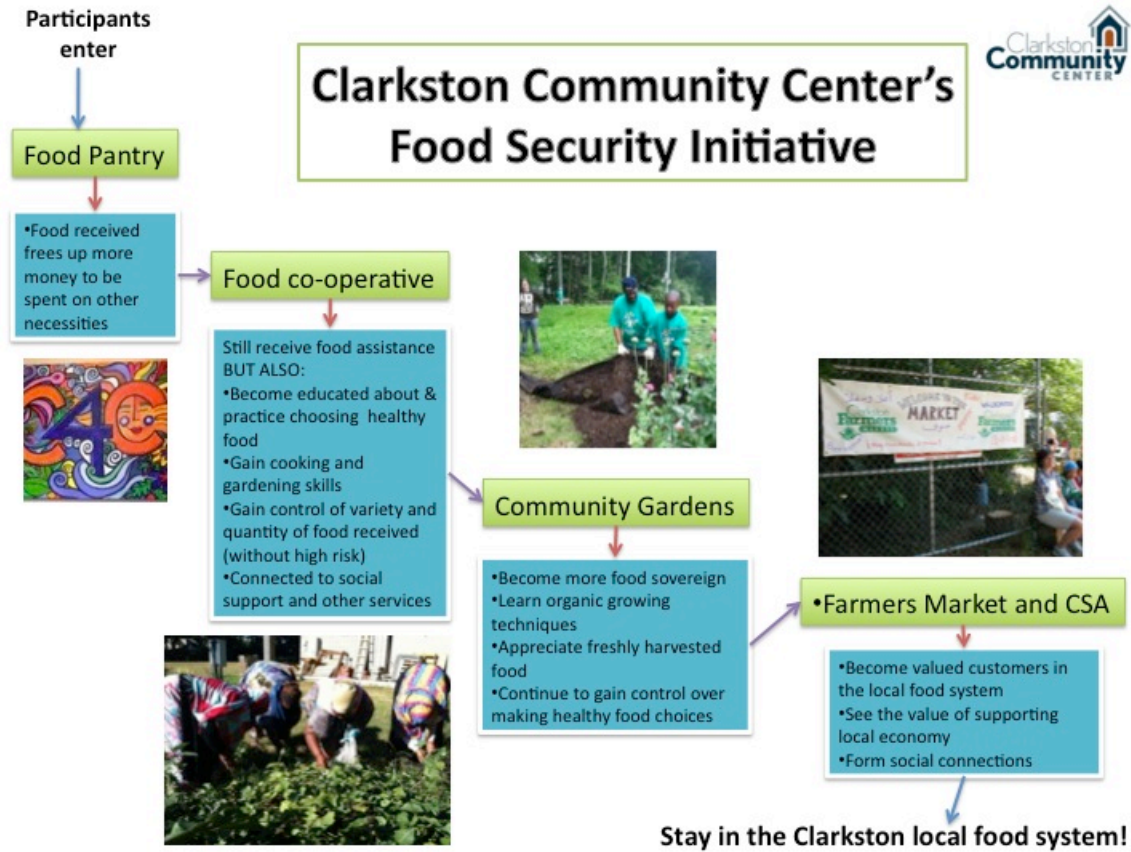


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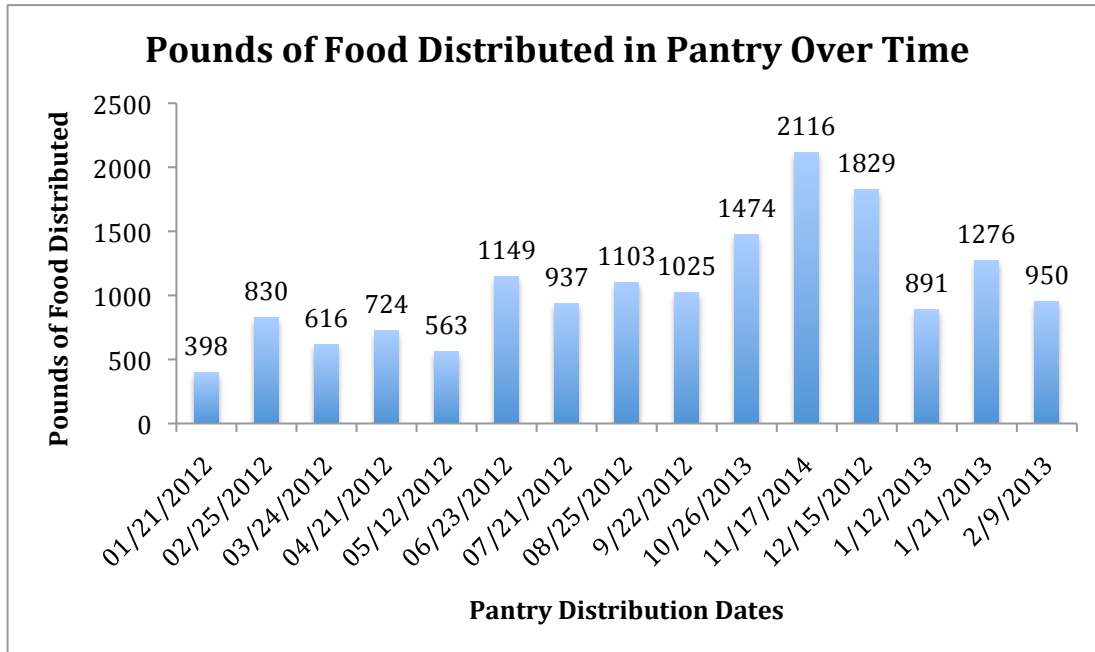


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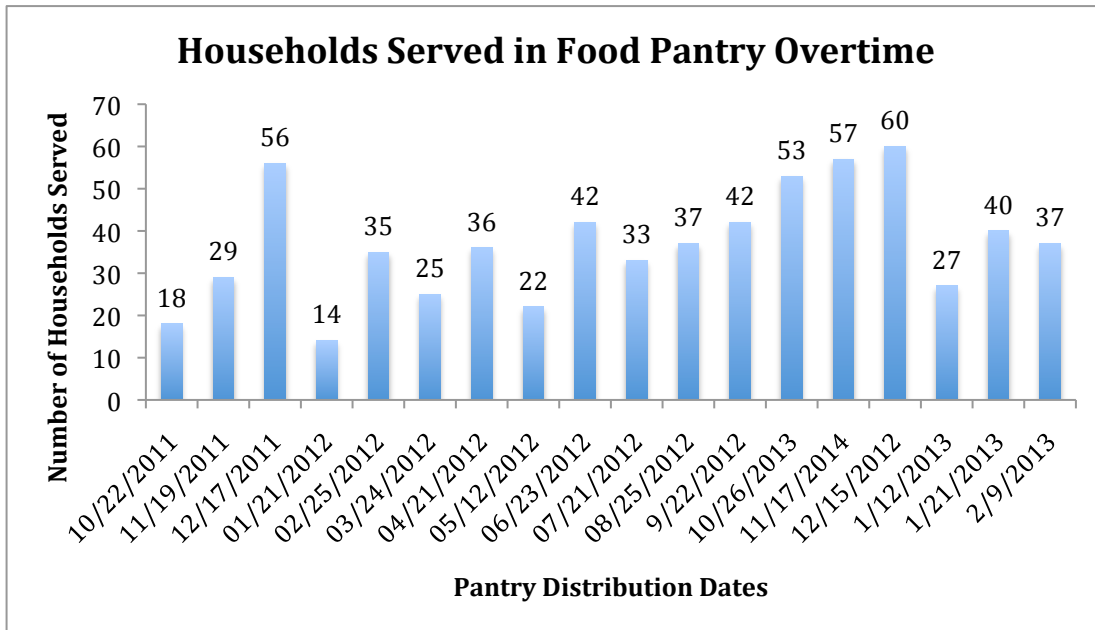


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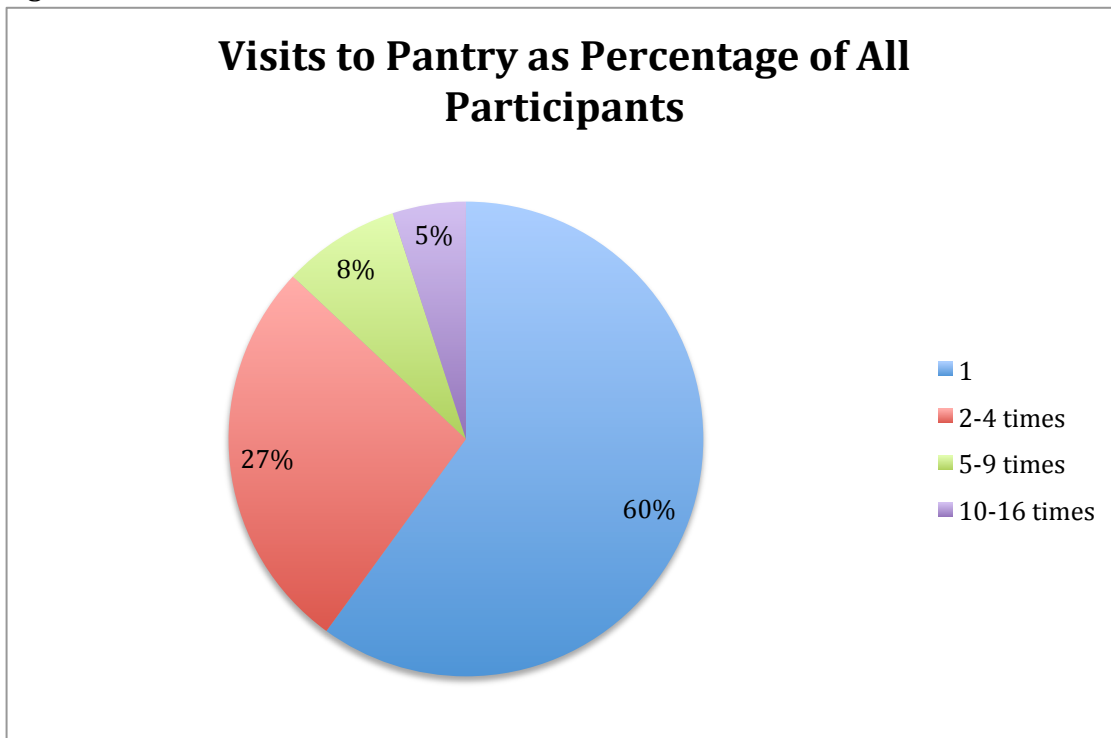
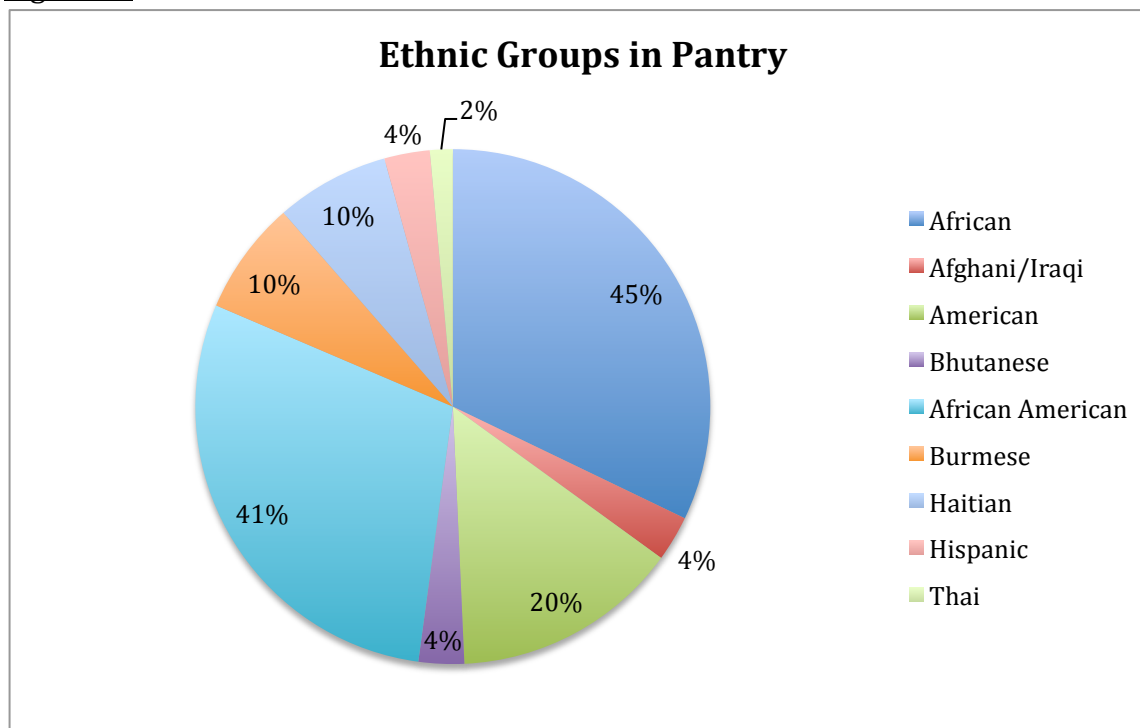
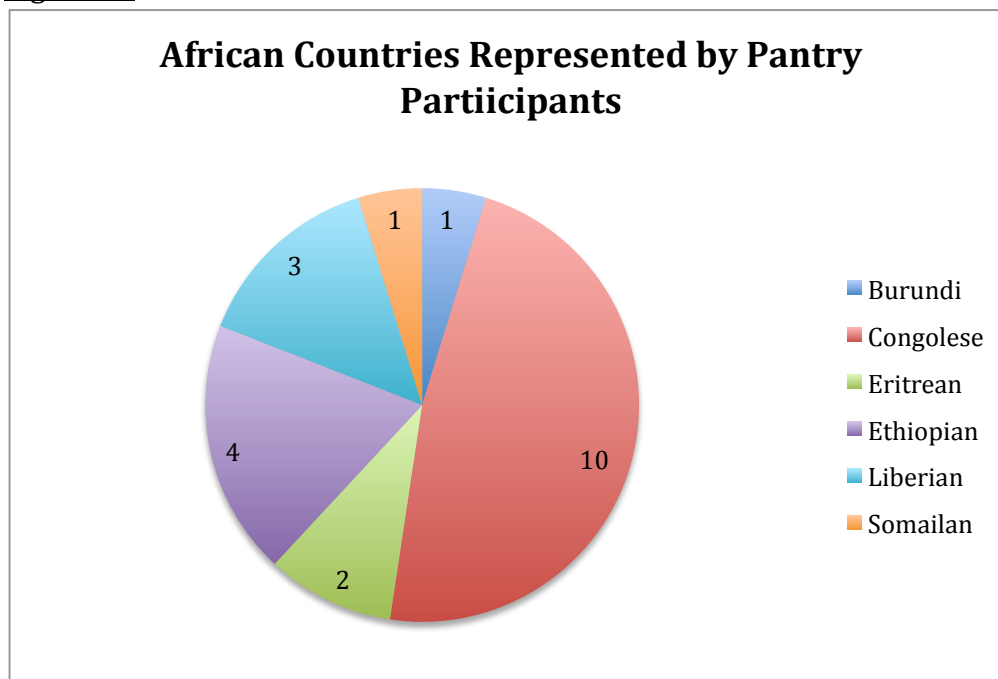


Figure 5a: \*



\*218 missing values

Figure 5b: \*



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Figure 6:

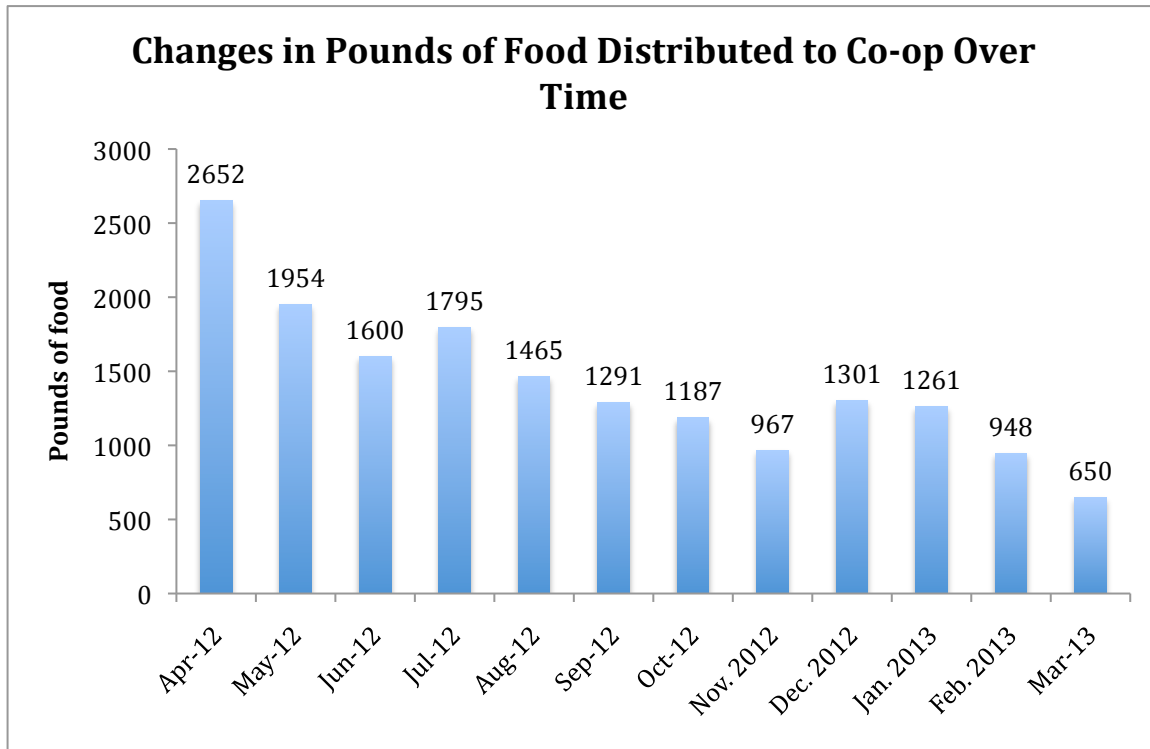


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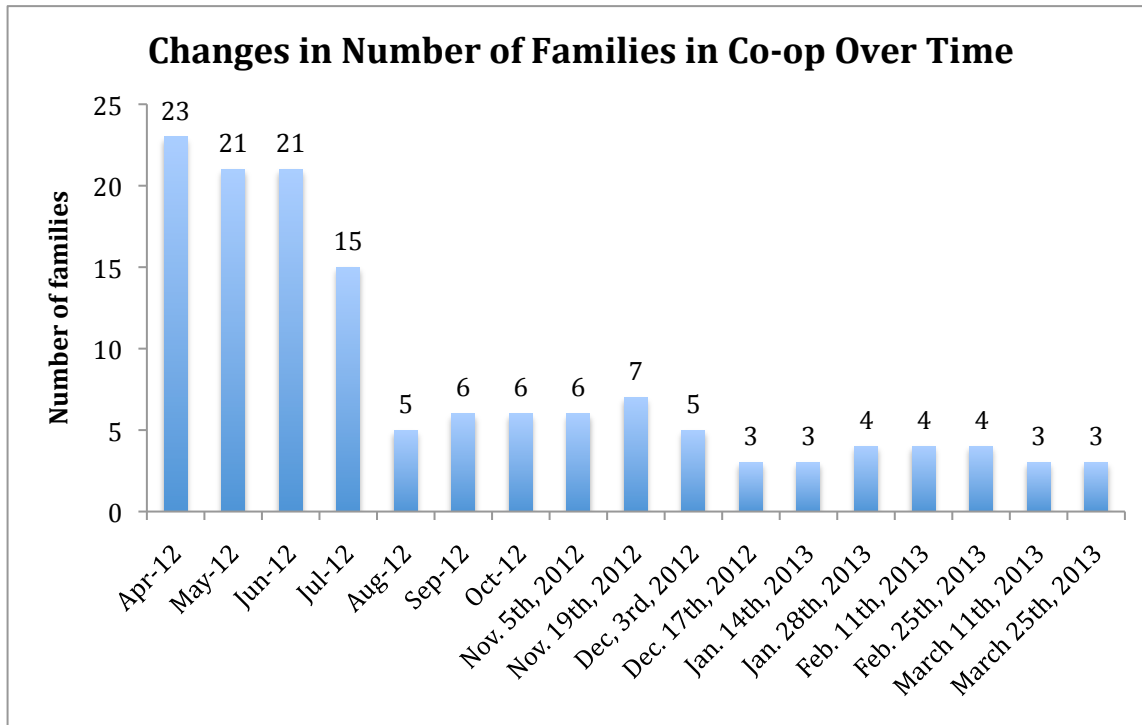




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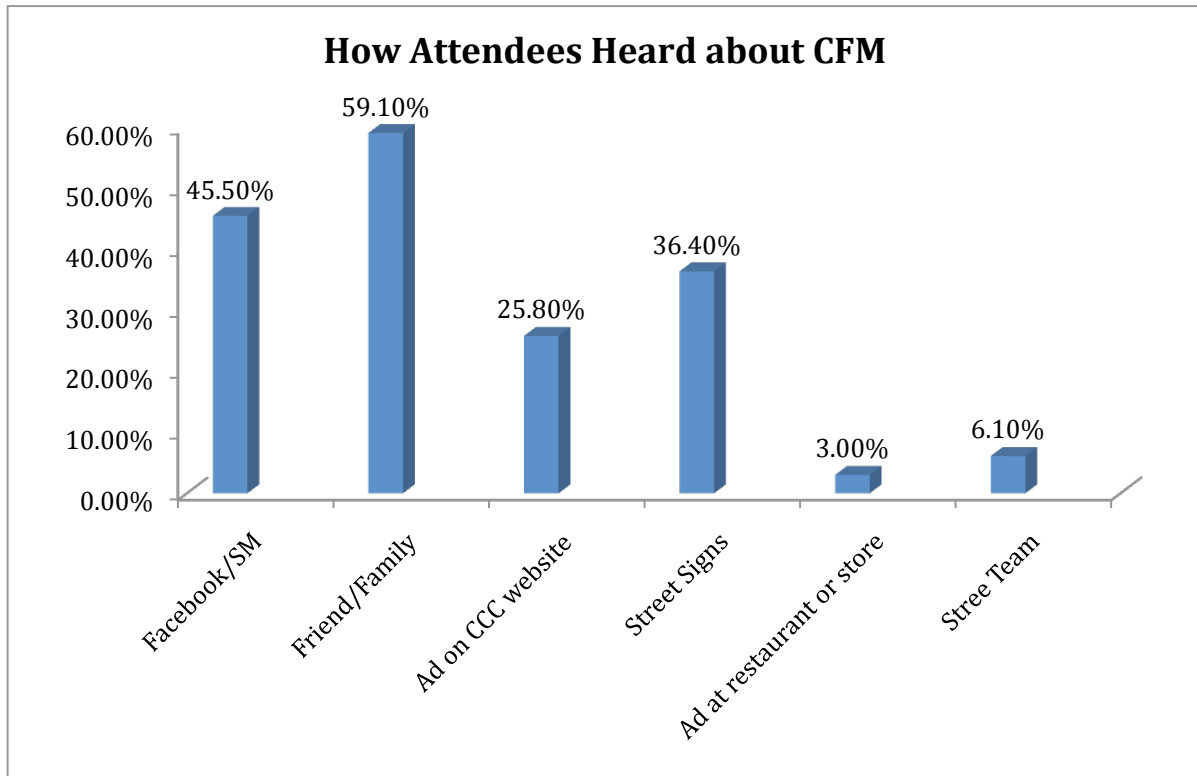


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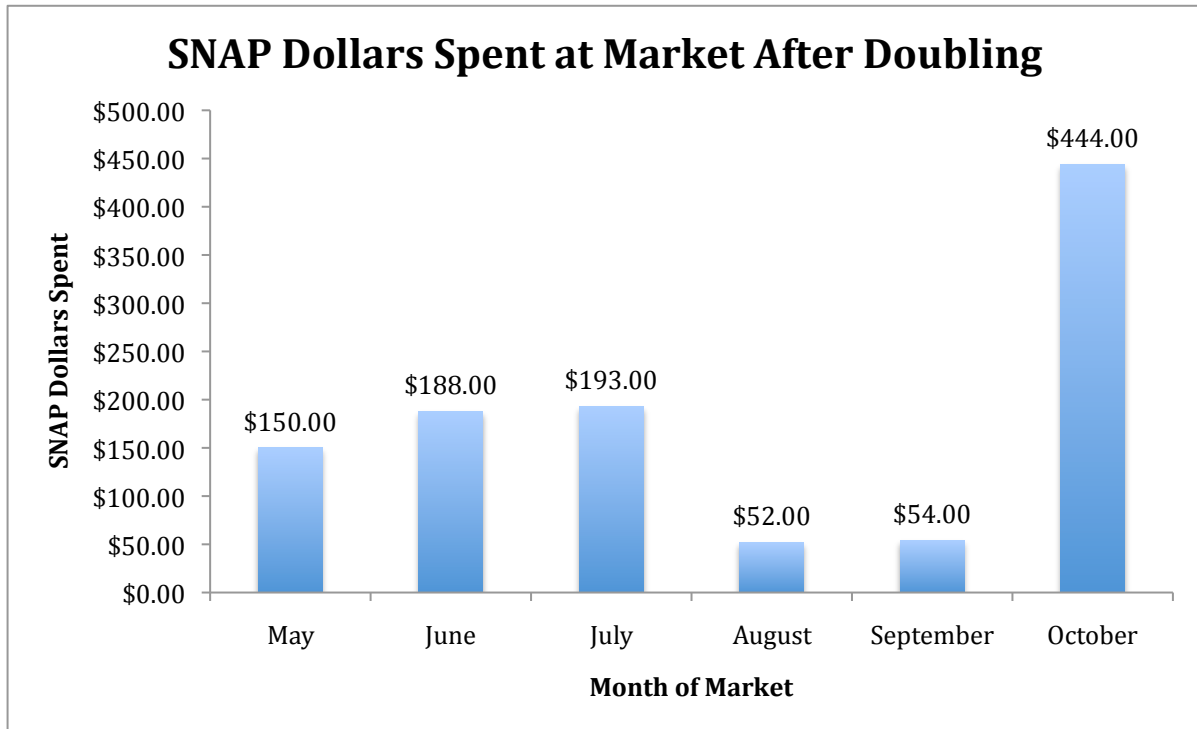


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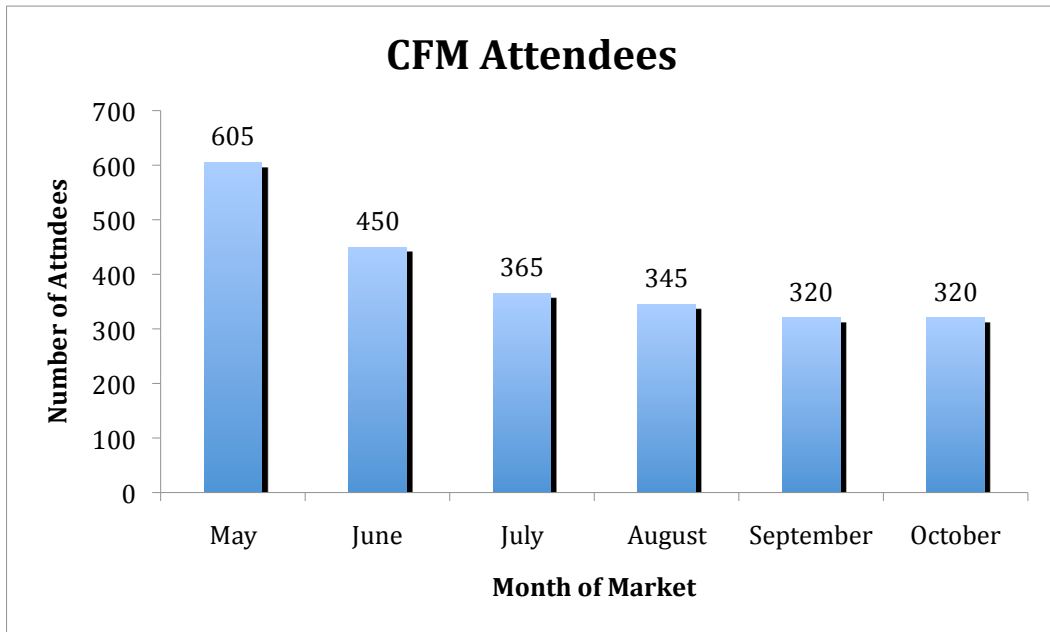


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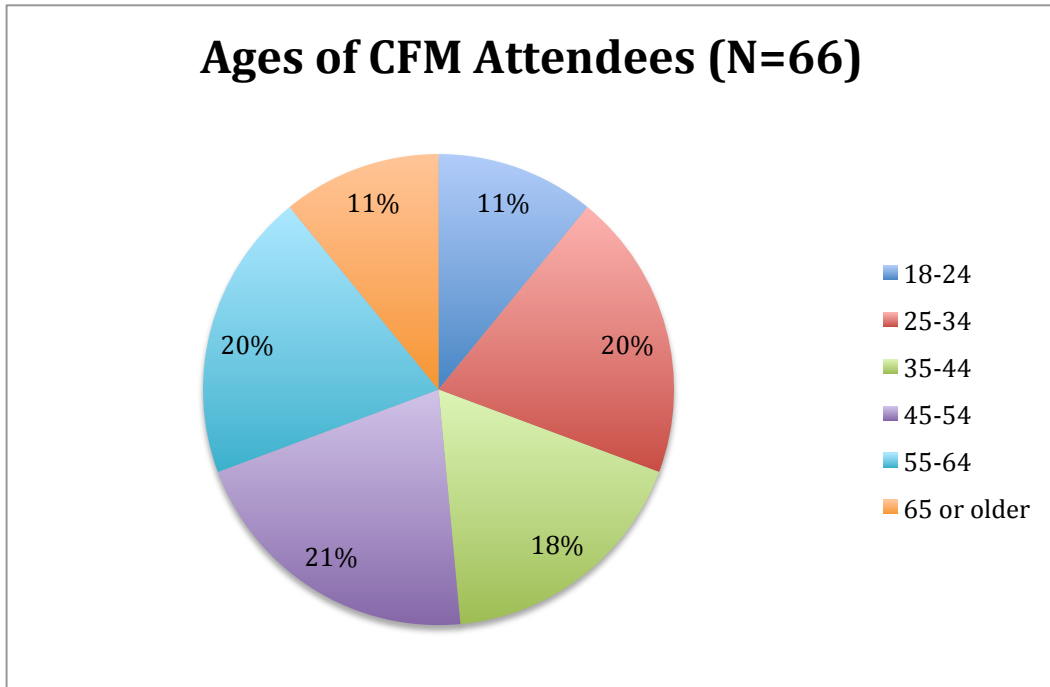


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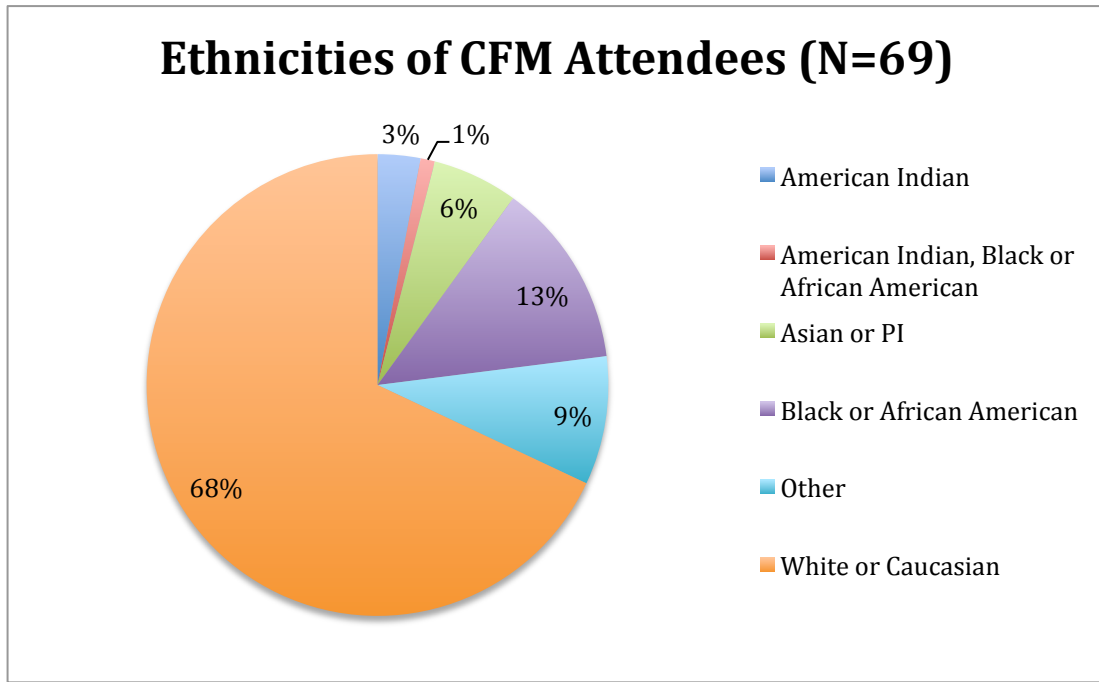


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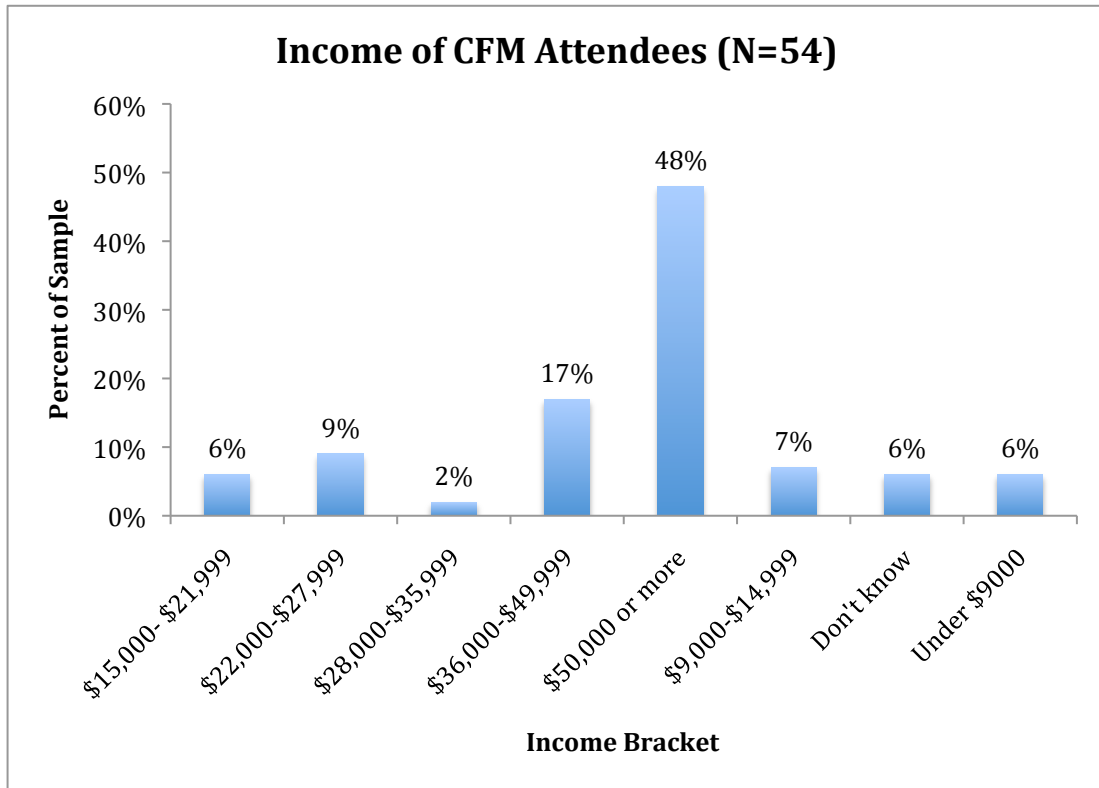


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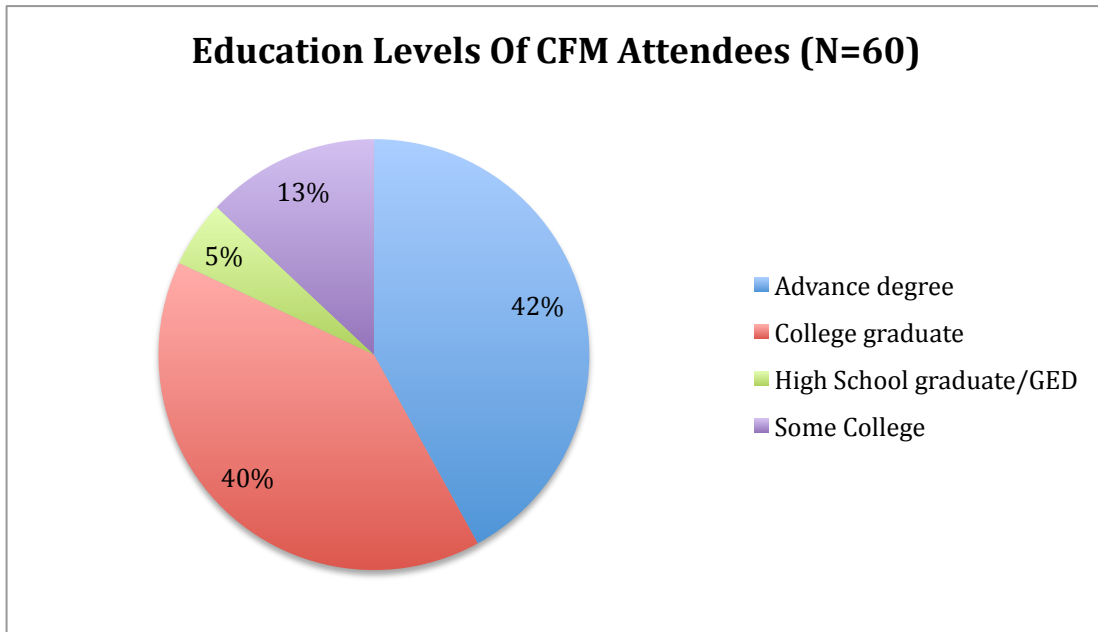


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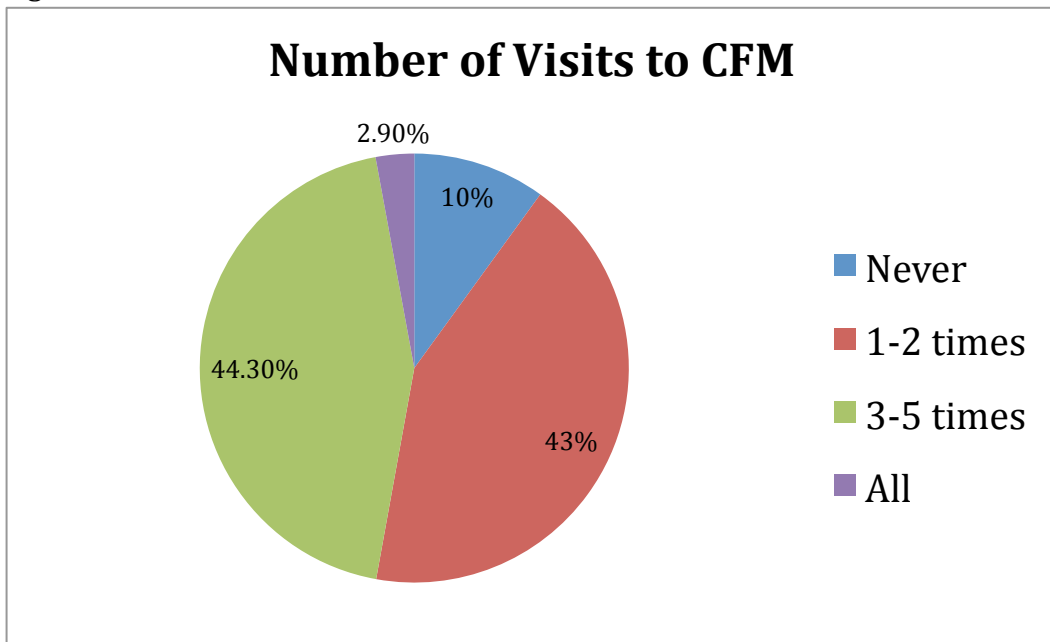


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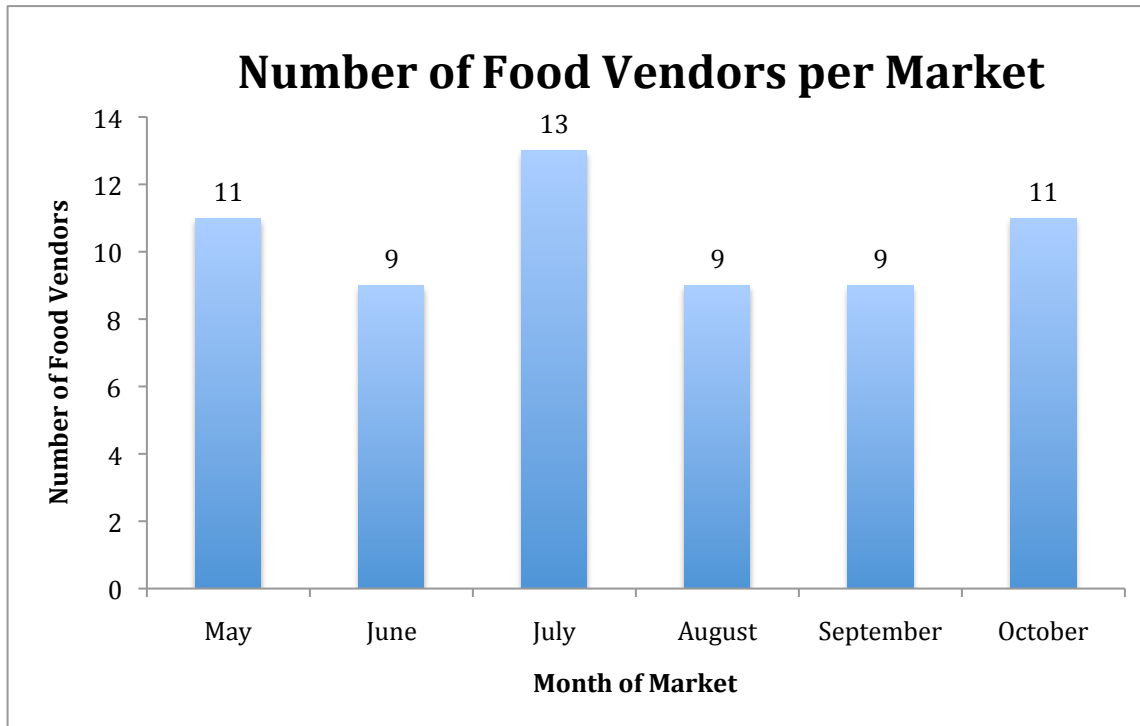


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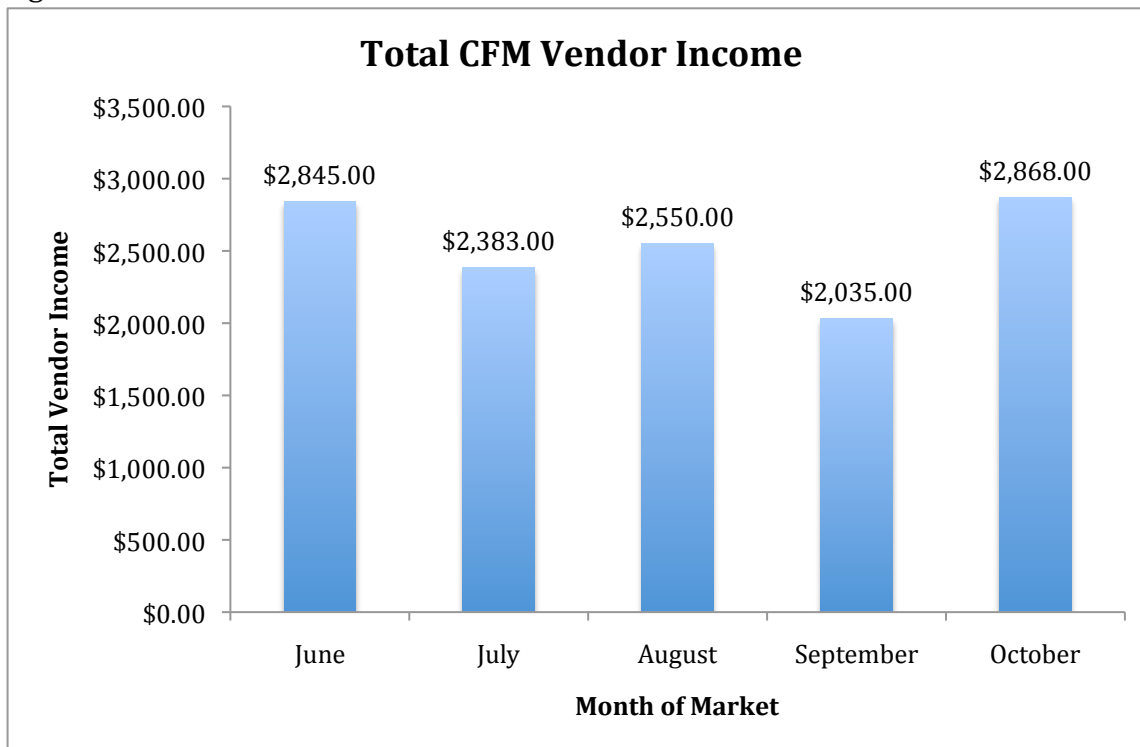


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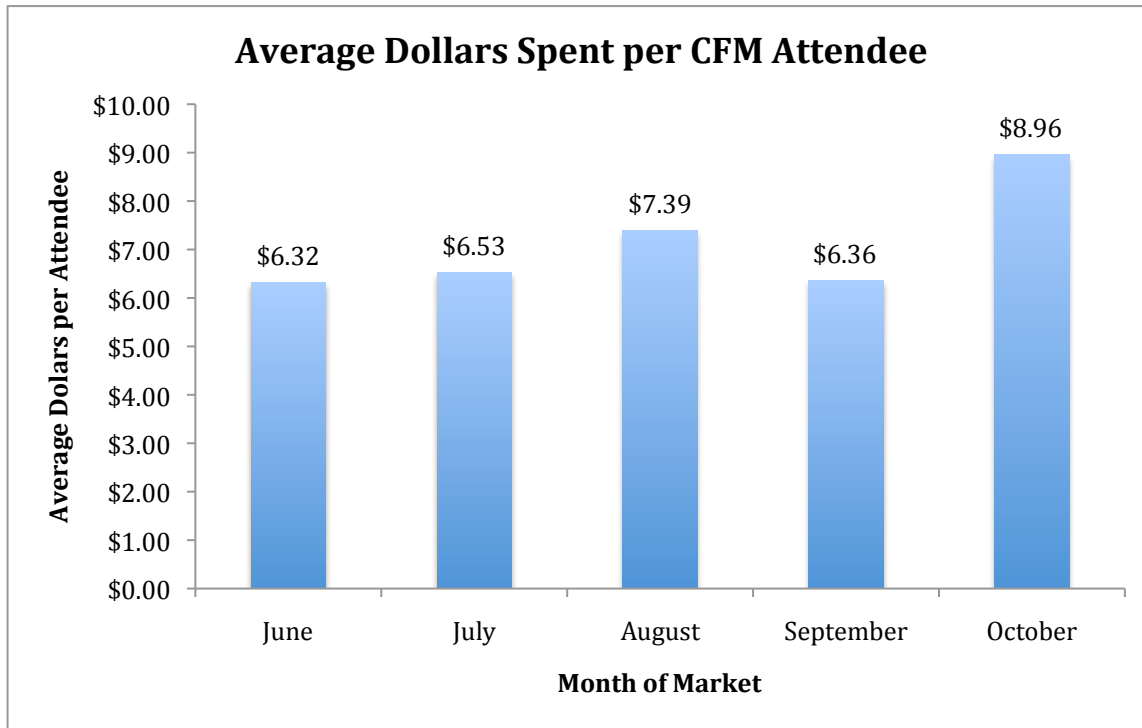
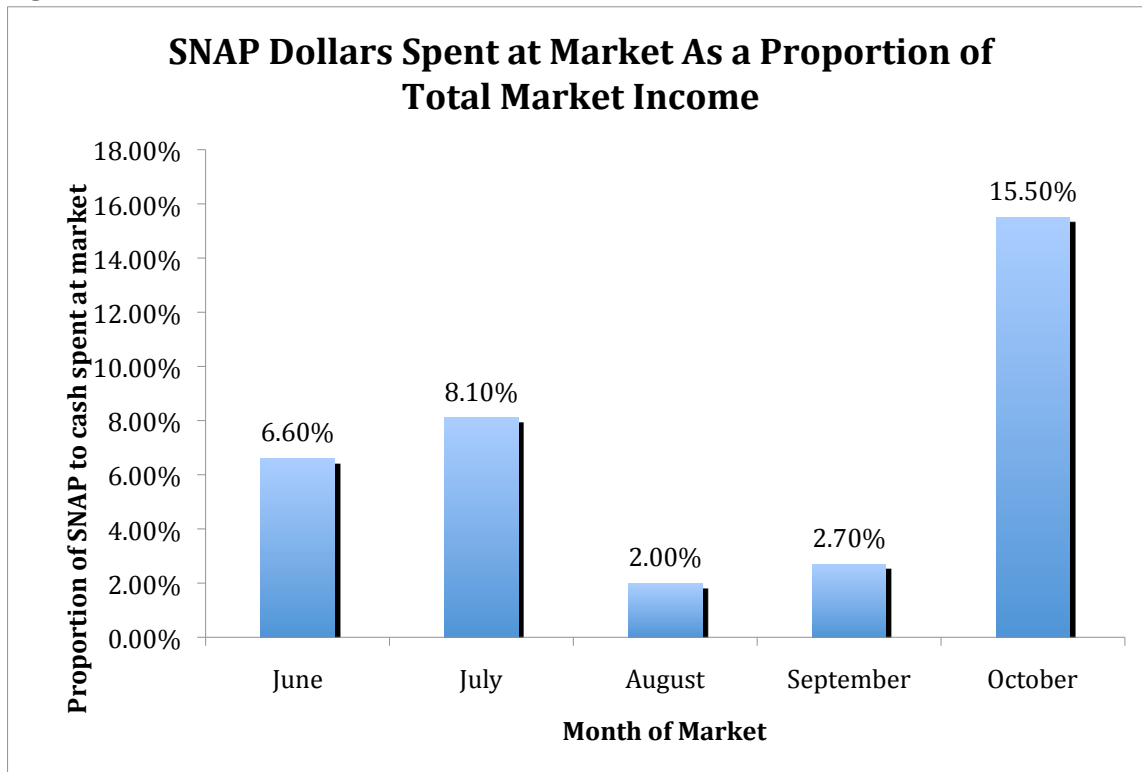


Figure 19:



**Table 1: Process Evaluation Data Sources for Each FSI Program**

	<b>Food Pantry</b>	<b>Food Co-op</b>	<b>Community Gardens</b>	<b>Farmers Market</b>	<b>CSA</b>
<b>Mission/Goal</b>	To provide supplemental (one-time) food to low-income families so that more of their money can be spent on non-food related expenses.	To provide food in an affirming environment that allows members to invest in and gain ownership of the process and create a strong community around food.	To provide a space where the diverse community of Clarkston can grow food organically and connect with neighbors who also enjoy growing food.	To build community by connecting neighbors with locally grown, nutritious and affordable foods and celebrating the city's diverse cultural traditions	Connect consumers to those who grow their food and provide financial stability and a reliable market for growers.
<b>Target Population</b>	Low-income, food insecure residents of Clarkston and surrounding areas	Low income, food insecure families that live in Clarkston. Variety of races and ethnicities.	All Clarkston residents interested in growing.	All residents of Clarkston and surrounding areas interested in supporting a local food system	All residents of Clarkston, with subsidized shares for SNAP recipients.
<b>Timeline of Development</b>	CCC Records; meeting notes	Co-op manual; community meetings, meeting agendas	Community garden records	Pilot market survey,	Program records
<b>Recruitment</b>	Meeting notes; informal interviews	Meeting notes	No data	Post market season surveys, Community surveys	Informal interviews
<b>Reach &amp; Participant Characteristics</b>	Monitoring record keeping systems	ACFB monthly report; attendance logs; HFIAS surveys	Garden log, historical documents	Program records, DeKalb County Board of Health surveys	Program records
<b>Dose</b>	Monitoring record keeping systems	ACFB monthly report, record keeping systems	Garden harvest log	Board of Health surveys, Vendor surveys, Community surveys	Program records
<b>Fidelity</b>	Meeting notes, MOU	Program records	No data	Board of Health Implementation Plan	Program records
<b>Participant Satisfaction</b>	No data	Focus group discussions, observation	No data	Board of Health surveys, Community & Vendor surveys	Informal focus group discussions

**Table 2: Summary Characteristics of Pantry Participants**

<b>Characteristic</b>	<b>Percentage</b>	<b>Other Important Statistics</b>
Residence (N=279)	72% live in Clarkston	Furthest residence was Athens (63 miles)
Income (N=57)	82% annual household income of \$0-\$15,000	2% annual household income of \$45,000+
Ethnicities (N=72)	31% African; 28% African American; 14% White American	See Figures 5a & 5b for a further breakdown of ethnicity
Immigrant Status (N=85)	24% Recently immigrated	
Number of People in Household (N=289)	24% 1-2 people; 38% 3-4 people, 26% 5-6 people	12% had 7+ household members
Number of Adults in Household (N=249)	80% had 1-2 adults in the household	18% had 3-5 adults
Number of Seniors in Household (N=236)	90% had zero senior in the household	Maximum number of seniors in household was two
Number of Children in Household (N=236)	62% had 1-4 children in the household	29% had no children, 9% had 5+ children
Homeless (N=183)	91% are not homeless; 4% are homeless	1 participant reported that they were, "near to being homeless"
SNAP or WIC benefits (N=85)	62% use SNAP and/or WIC	
GNAP* (N=126)	41% GNAP eligible	*GNAP defined as a household with children and on some form of federal assistance program



**Table 3: Pantry Participant Responses to HFIAS Food Security Questionnaire (N=61)\***

<b>Question</b>	<b>Percent Responded “Yes”</b>	<b>Percent Responded “No”</b>
1. In the past month, did you worry that your household would not have enough food?	60%	32%
2. In the past month, were you or any household member not able to eat the kinds of foods you would have preferred to eat because of lack of resources?	62%	31%
3. In the past month, did you or any household member have to eat a limited variety of foods because of lack of resources?	68%	28%
4. In the past month, did you or any household member have to eat some foods that you really did not want to eat because of lack of resources?	63%	30%
5. In the past month, did you or any household member have to eat fewer meals in a day because there was not enough food?	64%	30%
6. In the past month, did you or any household member have to eat fewer meals in a day because there was not enough food?	46%	48%
7. In the past month, did it happen that there was no food to eat of any kind in your house, because of lack of resources to get food?	28%	66%
8. In the past month, did you or any household member go to sleep at night hungry because there was not enough food?	28%	66%
9. In the past month, did you or any household member go a whole day and night without eating anything at all because there was not enough food?	17%	77%
10. Do you currently receive Food Stamp/EBT/SNAP benefits?	66%	34%

\*229 missing values due to questionnaire not being implemented previously

\*4 respondents did not understand enough English to complete questionnaire

**Table 4: DeKalb County Board of Health CFM Objectives and Achievement Status**

<b>Objective</b>	<b>Achievement Status</b>
1. Hire a Market Manager 2. Five farmers/growers committed to market:	<ul style="list-style-type: none"> <li>• Completed April 3<sup>rd</sup> 2012</li> <li>• Contacted vendors who attended fall event to gauge interest in FM being held,</li> <li>• Had 14 vendors at first market</li> </ul>
3. Develop and implement market operations: <ul style="list-style-type: none"> <li>• Establish procedures/practices and collaborate with consultants on best practices and procedures:</li> </ul>	<ul style="list-style-type: none"> <li>• Attended 5 hour vendor orientation for Peachtree Road Farmers market,</li> <li>• This along with looking at Policies &amp; Procedures (P&amp;Ps) from EAV, Grant Park &amp; East Lake Farmers Market helped to develop P&amp;P and vendor applications for CFM</li> </ul>
4. Obtain appropriate licenses and adhere to operating standards: 5. Develop/implement a marketing plan to increase awareness of farmers market. Publicize market in community	<ul style="list-style-type: none"> <li>• Applied for Special Events Permit with city and was approved</li> <li>• Created advertising calendar of due dates for all local newspapers and radio stations</li> <li>• Created logo &amp; flyers</li> <li>• Created Street Team for door to door advertising</li> <li>• Purchased a clicker, locked top field gate to control foot traffic.</li> <li>• Had 605 attendees at first market</li> <li>• Completed prior to first market on May 20th</li> </ul>
6. Hold market once a month for at least 4 hours, with goal of 100 participants at each market: 7. Establish doubling and EBT programs, working with DHR to meet requirements of the program: 8. Create inventory controls to ensure 75% of inventory is farm products:	<ul style="list-style-type: none"> <li>• P&amp;Ps sets up 4 farm vendors to 1 non-farm vendor rule,</li> <li>• Craft/non-food vendors accepted on space available basis</li> <li>• Read GA Dept of Ag guidelines and regulations about farmers markets,</li> <li>• Food safety &amp; vendor permits required,</li> <li>• 2 hour long phone conversations with BOH rep around food safety</li> </ul>
9. Obtain appropriate licenses and adhere to operating standards:	<ul style="list-style-type: none"> <li>• Vendor feedback not positive for every other week, in their experience with other markets.</li> <li>• Feedback said they wanted either every week or keep at once a month.</li> <li>• Market was kept at once a month.</li> </ul>
10. Explore expanding market from one day per month to 2 times per month	

## Appendices

### Appendix 1: Additional Challenges in Food Co-operative

In August of 2012 there was a problem with a few co-op members stealing food from other members boxes. This was reported to happen repeatedly at distributions when CCC co-op staff were in the other room sorting fresh food. Two members of the co-op were seen taking highly prized items like juice and canned fruit from other members' boxes and putting them in boxes they had set aside for themselves. Another co-op member reported this behavior to the Co-op Coordinator. In order to address this problem, co-op staff reiterated rules in the membership agreement related to stealing at the meeting with members. These rules state that the first time a member is caught stealing they will receive a warning, the second time they will be suspended for two months, and the third time they will lose membership in the co-op. Staff also made sure to have more of a presence in the distribution room at all times in order to prevent further stealing incidents.

Other accusations of stealing were made against other co-op members after this incident. Accusations arose between separate ethnic groups in the co-op. These accusations brought out feelings of exclusion due to differing languages and country of origin in the co-op. One member said, "They are always speaking to each other in their language and I think they are saying bad things about me." In these incidents, co-op members were encouraged to communicate with each other and find common understanding. After this communication barrier was broken, tensions were eased in the co-op and this opened up a space for friendships to form between co-op members.

### Appendix 2: Rules of Clarkston Community Garden Membership Agreement- 2013

1. Gardeners agree to tend their plots at least once per week. Weeds must be kept under control in and 3 feet around the outside of the plot - this includes the path round the plots and raised beds and crops must be harvested before rotting
2. Gardeners agree that if they do not keep up with their plot maintenance, they will receive notification from the garden committee. They will be given 2 weeks to clean up their plot (weed, harvest, get rid of rotting produce.) If this is not complete by the end of the 2 week period, the plot and dues are forfeited; the plot will be harvested by other members or the co-op garden volunteers and cleared at the next workday.
3. Each gardener agrees to donate at least 12 hours to the community work required for a community garden to exist. These hours will be tracked. 6 hours must be completed by July 15 and all 12 hours must be completed by Dec. 15. If the work hour deadlines are not met, the garden plot is forfeited and the gardener's name goes on the end of the wait list. Organized workdays will be held 10am - 12pm the third Saturday of every month and other times throughout the year.
4. Gardeners agree vining plants must be controlled to stay within the assigned plot. If crops are trellised, they must be planted where they will not shade out neighbor's crops. Harvest only from your assigned plot, unless you have permission to do so from other gardeners.

### Appendix 3: Executive Summary for Use By Clarkston Community Center

The purpose of this executive summary is to provide a synopsis of the above process evaluation of the Clarkston Community Center's Food Security Initiative (FSI) that can be distributed to partners and staff of FSI for feedback and recommendations.

#### Background:

Food security is defined by the World Food Summit as "when all people at all times have physical, social and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (FAO 2013). Food insecurity has been steadily increasing in the U.S. since 1995. Almost 15% of households in the U.S. (17.9 million households) experienced food insecurity at some point in 2011. In Georgia, 17% of households are food insecure, with 6.4% experiencing very low food security (Coleman-Jensen et al. 2012). Food insecurity is particularly high in refugee communities due to language, income, transportation, and education barriers (Hadley et al 2010). The impact of food security extends beyond hunger to impact school and work productivity, mental health, and nutrition (Hadley & Sellen 2006)

To fill gaps left in government assistance programs aimed at decreasing food insecurity, many communities are creating small scale programs like community gardens, food pantries, farmers markets and food co-ops. These programs are intended to help lift community members out of food insecurity by connecting them with affordable access to nutritious foods (Cohen, 2002). Despite a rising trend in the creation of these community-led programs, there is little understanding of best practices or challenges to implementing these initiatives (Anderson & Cook, 1999).

The Food Security Initiative (FSI) is a project of the CCC whose mission is to increase the percentage of food insecure families in Clarkston with independent access to affordable, nutritious, culturally appropriate foods. Figures 1 & 2 show an impact pathway and flow chart of the FSI programs.

#### Purpose:

The purpose of this Masters' thesis is to document the challenges, successes and best practices that arose during the implementation of the Clarkston Community Center's Food Security Initiative using process evaluation methodology.

#### Objectives:

1. Determine whether the FSI program reached the target population in sufficient numbers and the most effective recruiting techniques.
2. Determine the dose of each FSI program delivered and received by program participants.
3. Determine the extent to which each FSI program was implemented as planned (fidelity) and what changes occurred during the process of implementation.
4. Document that challenges and successes each program experienced in terms of reach, dose and fidelity and the lessons learned through the implementation process

#### Significance:

Through a process evaluation of CCC's Food Security Initiative, other community organizations can understand how to implement a comprehensive food security program, especially for ethnically diverse populations. FSI staff will use evaluation results to understand the successes of each program and areas where improvement is needed. This process evaluation will also provide a springboard for a more comprehensive impact evaluation of the program and future grant funding for programs. With the knowledge gained from this project, the Clarkston Food Security Initiative can increase the quality of services offered and become closer to its goal of increasing access of affordable, nutritious and culturally relevant foods for food insecure families in the community.

#### Methods:

A process evaluation methodology was used to understand the challenges and successes that arose as FSI was implemented. Each program was evaluated for the population reached, recruitment methods used, proportion of program delivered and received (dose) and the extent to which each program was implemented as planned (fidelity). Overall challenges and barriers to implementation are also detailed. A variety of data sources were used to gather this information, including community surveys, program records and meeting notes. Table 1 depicts the goal and target audience of each program as well as the data sources used to evaluate the six aspects of a process evaluation.

#### Results & Recommendations:

All five programs in the Initiative had difficulty in at least one key aspect of implementation. The food pantry struggled with consistently implementing data collection and fulfilling roles of the organizational partnership. The food co-op had difficulties in sufficiently reaching its target audience. Community gardens lacked information on participant characteristics and quantifiable information on the dose received by members of the CSA was not gathered. Finally, the farmers market struggled to recruit low-income and refugee populations. Despite these challenges, all programs excelled in one or more areas of implementation.

#### **Food Pantry**

From September, 2011 to February 2013 the Oak Grove and Table 2 depicts a summary of characteristics for food pantry recipients. CCC run pantries together held 21 distributions and provided approximately 23,601 pounds of food to 769 households. Figures 3a and 3b depict changes in pounds of food and households served over time.

The pantry has fully implemented services, but should incorporate more referrals to other social services and resources into distributions. The target population of low-income food insecure families is being adequately reached over all distributions since September, 2011. However, it is hard to determine if individual pantries host the appropriate audience in terms of food insecurity status and ethnicity. Although the amount of food each family received (dose) was found to be adequate for a month's supply, several barriers make it difficult to maintain consistency in the dose given to household of similar size.

#### Pantry Recommendations:

1. To improve fidelity and availability of information the pantry should train CCC and Oak Grove staff on record keeping and data collection systems.

2. To be responsive to the cultural food needs of the community, the pantry should increase the amount and variety of food distributed. This could be facilitated through more community food drives, and partnerships with grocery stores, farmers markets and local farmers for fresh fruit and produce.
3. To ensure a mutually responsible partnership, deadlines for food to be ordered or bought and stocked in the pantry and consequences for failure to do so should be amended to the MOU between CCC and CUMC. A Standard Operating Procedures (SOP) manual could also be created to document responsibilities and activities needed to effectively run a food pantry.

### **Food Co-op**

The food co-operative cycled through three models of distribution before it settled on the model it uses today. These changes arose through feedback from participants and staff involved in the co-op. To date (March 25<sup>th</sup>, 2013) 17,071 pounds of food have been distributed to 28 separate households and a total of 172 people. Of the 17,071 pounds of food distributed, 86% is non-perishable food from Atlanta Community Food Bank (ACFB), 13% is free fresh food from ACFB, and 1% is from the CCC pantry/co-op garden and donations. The co-op is struggling to reach its target audience. However, the amount of food participants are receiving is adequate to supply their family size for at least two weeks. Further incorporation of outside speakers, cooking demonstrations and community building activities is needed.

### Co-op Recommendations

1. To expand membership and reach its' target population, the co-op should expand recruitment efforts by connecting to other CCC programs like the food pantry and after school programs. Additionally, designing and distributing recruitment flyers in several languages spoken in Clarkston at a range of community events can help the co-op to reach a more diverse audience.
2. To determine need and progress of co-op members a consistent record keeping system for assigning identification numbers to co-op members as they enter should be designed and implemented. The HFIAS food insecurity scale should also be administered upon entry and every two months following entry, in order to measure changes in food security with involvement in the program. A monitoring system for submitting this data should be developed in order to prevent loss of information.
3. To increase likelihood of co-op members moving on to other FSI programs and becoming more food sovereign, the co-op should provide more connections to other social services that can lift them out of food insecurity. Speakers and pamphlets about health care, childcare, educational and English learning opportunities, and chronic diseases can help to form these connections. Co-op staff may also want to consider holding an open forum at each meeting for any member to express their struggles and allow other members to assist them in accessing useful services.

### **Community Garden**

In 2012, the community gardeners harvested around 2,000 pounds of food from individual and shared plots. On average, each of the 25 gardeners recorded in the garden harvest log took home 80 pounds of food in 2012. In the co-op/pantry garden plot over 760 pounds of

food were harvested and distributed to participants of the food pantry & co-op and sold at the farmers market to benefit FSI. The major challenges associated with the garden were having members commit to community workdays and problems with vandalism. The 2013 membership agreement requires a minimum of 12 community work hours to keep a plot.

*Community Garden Recommendations:*

1. To increase community building among garden members, workdays could be incentivized through post-work activities such as potlucks, family game days and other outings.
2. In order to minimize vandalism in the garden and make gardeners feel safer, the ACGA recommends several tips to deter vandalism in community gardens. A few key tips not yet used by the Clarkston community garden are listed here:
  - a. “Make short picket fences or wire to deter animals and honest people
  - b. Spend more time in the garden
  - c. Invite everyone in the neighborhood to participate in community work days
  - d. Involve children in learning gardens
  - e. Plant thorny plants along the fence as a barrier to fence climbers
  - f. Make friends with neighbors whose windows overlook the garden. Trade them vegetables for a protective eye.
  - g. Plant less popular vegetables like root crops along common walking areas
  - h. Plant unusual varieties of vegetables like purple cauliflower or white eggplant to confuse vandals
  - i. Plant a ‘vandal’s garden’ at the entrance. Mark it with a sign: ‘If you must take food, please take it from here.’ (*Starting a Community Garden*)”
3. To ensure the garden is reaching its target population, create short surveys that measure characteristics of members (such as ethnicity/country of origin, family size, income, and food security status) when new members enter. Surveys on participant satisfaction, personal impact of the garden and food insecurity status could also be administered every two months to measure the impact of the garden on members’ lives over time.
4. Currently, the garden harvest log is organized in a way that makes it difficult to determine how much food one member’s plot has produced in comparison to other plots. Creating a separate notebook page for each gardener to record his or her harvests and work hours will simplify data collection and also allow gardeners to measure their harvests and volunteer hours more easily. This can be used as an incentive for gardeners and a way to build community through friendly growing competitions.

**Farmers Market**

From May to October of 2012, there were 26 different produce, prepared foods and craft vendors at the Clarkston Farmers Market. From June to October, all vendors made a total of \$12,681. The average revenue for a single market was \$2,536. Patrons to the market spent \$7.11 on average at each market, although there was a drastic increase by \$2 for the last market. SNAP (food stamp) dollars spent at the market also increased drastically at the last market, moving from \$54 at the September market to \$444 after doubling at the October market. Over \$1,000 SNAP dollars were spent during the entire season, with an average of \$180 per market.



Patrons to the market and vendors gave suggestions for changes to the market through the DCBOH survey, an online post-market consumer survey and community survey at the October market. The most common suggestions said the market needed to be weekly, have more produce, value-added products and prepared foods, and incorporate more kids activities, music and entertainment.

*Farmers Market Recommendations:*

1. The development and implementation of a more aggressive marketing plan will continue Street Teams to reach low-income and international populations, provide extensive signage on market days, spread awareness of the doubling of SNAP benefits and increase partnerships with apartment complexes and refugee resettlement agencies in order to reach the target population of the program in sufficient numbers.
2. In order to increase the dose received by patrons to the market, expanding the number and variety of vendors selling at the market will provide a plethora of fresh foods and crafts for patrons to shop from. This will also continue to support the local food system and provide jobs and income to residents of Clarkston who grow food or make crafts that can be sold at the market.
3. In order to easily monitor successes, a single master spreadsheet should be used to compile all pertinent data throughout the market season. The compilation of a short report at the end of market season should also be continued to judge successes over the lifespan of the program.

**CSA**

Despite struggles with the five CSA shares subsidized for community members with SNAP benefits, there was a high retention rate in the CSA, with 75% of the 2012 CSA members signing up for the 2013 season. Members received shares with six to eight items each week, valued at around \$25. Due to feedback from SNAP recipient CSA members that indicated they did not think the food was worth paying a higher price, shares in the 2013 season will no longer be subsidized for members with SNAP benefits. Very little data was available surrounding this program.

*CSA Recommendations:*

1. To judge the dose given and received in the program, increase record keeping and data collection related to the weight of shares, and composition of produce distributed each week.
2. To ensure the target population is reached, collect information on member characteristics (such as family size, ethnicity, and income, food security status, reason for CSA membership) at beginning and end of season. This comparison data can also be used to measure the impact of the CSA on individuals' food security. A short survey about eating behaviors and knowledge of local foods could also be administered before and after to show changes in knowledge, attitudes and behaviors.
3. In order to gauge further interest in SNAP CSA shares and understand attitudes and beliefs of the Clarkston community around local food, create open community forums and education around the importance of local, good food from an individual consumer standpoint.

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