Exploring local food system practices and perceptions: Insights from Florida's SNAP-authorized farmers' markets

Leslie Babiak
University of South Florida, babiakla@gmail.com

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Exploring Local Food System Practices and Perceptions:
Insights from Florida’s SNAP- Authorized Farmers’ Markets

by

Leslie Babiak

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Science
Department of Geography, Environment, and Planning
College of Arts and Sciences
University of South Florida

Major Professor: Philip Reeder, Ph.D.
Connie Mizak, Ph.D.
Elizabeth Strom, Ph.D.

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ABSTRACT

Farmers’ markets are heavily touted as bringing a host of benefits to communities. As the most prominent institution for alternative food provisioning, they play a vital role in the direction local food systems develop. Yet, despite heightened interest in creating local food systems that enhance health of ecologies, economies, and all members of communities, the public space of farmers’ markets is far less than inherently equitable. This is particularly concerning given America’s unprecedented crisis of food hardship and related disease, which disproportionally affects lower income populations.

This research addresses the social justice implications of SNAP (food stamp) operations for locally oriented food systems. Pioneering practices of three of Florida’s SNAP-authorized farmers’ markets, and the attitudes and behaviors of one-hundred-seventy-six market patrons, were explored through customer surveys, market manager interviews, and environmental assessments. The embeddedness concept was utilized toward a more critical examination of food valuation beyond the economic. This work advances the concept of embeddedness by applying it to the understudied population of lesser advantaged consumers for which the interplay of marketness and embeddedness is particularly relevant to food purchasing decisions.

Qualitative results showed success in SNAP operations centered on extending the reach of healthy foods to greater share of community, enhancing local farm income, and repositioning farmers’ markets from their reputation as exclusive and expensive. Despite being heterogeneous place-making spaces with unique socio-cultural qualities, the markets shared commonality in their EBT operations and strong mission to serve the local SNAP population. Nonetheless, capacity for implementing and sustaining SNAP operations appears contingent upon innovative strategies and long-range synergistic efforts. Quantitative results uncovered several benefits in attaching SNAP to farmers’ markets: expanded diversity of patron demographics, strengthened market-
shopping behavior, diminished tension between economic and non-economic in food valuation, and fortification of the market as a social space for effecting change.

Much remains to be understood regarding consumer values tied to local food systems, and the impact of SNAP operations on embedded market exchange. It is premature to predict whether SNAP operations will indeed enable farmers’ markets to serve as a transformative mechanism for addressing the social justice arm of sustainability in the developing, alternative food system. Nonetheless, the discoveries made herein hint at the viability for SNAP to better position farmers’ markets aiming to strengthen food system justice; and in so doing, bolster the role of farmers’ markets in helping communities move towards their sustainability objectives.
CHAPTER ONE: INTRODUCTION

This thesis explored the pioneering efforts of three of Florida’s SNAP-authorized farmers’ markets, and the attitudes and behaviors of the individuals that choose to shop there. The research was conducted in an attempt to determine the impact of SNAP operations on various factors tied to farmers’ market participation: expansion of the customer demographic landscape, differences in market shopping habits, and relevance of various attitudinal factors tied to whether to use the farmers’ market. Toward a more complete picture, the market management side was also investigated: Distinct market contexts surrounding logistics, successes, and challenges of conducting SNAP were uncovered to better understand the relationship between farmers’ markets and participation in the SNAP program. Located in High Springs, Sanford, and North East Miami, the markets and their respective communities represent diversity in income, race, and urbanicity. For each market, on-site surveying was a one-time event resulting in an overall response rate of 93.6%: 188 shoppers were approached, 9 declined, and 3 resulted in unusable surveys due to multiple answers where a single response was required and due to significant lack of content. Given the inequitable tendencies of today’s farmers’ markets, amidst America’s unprecedented crisis of food hardship and related disease, it is important to know whether and how SNAP operations can impact the public space of the farmers’ market and the behaviors and values of its participants.

Farmers’ markets are heavily touted as bringing a host of benefits to communities. As the most prominent institution for alternative food provisioning, they play a vital role in the direction that local food systems develop. Yet, despite heightened interest in creating locally based food systems that enhance the health of ecologies, economies, and all members of communities, farmers’ markets have been criticized for their tendency to serve a relatively narrow segment of society. According to Agyeman, Bullard, and Evans (2003, p.2): “A truly sustainable society is
one where wider questions of social needs and welfare and economic opportunity are integrally connected to environmental concerns”. Concurrent with the burgeoning growth in farmers’ markets across the U.S., food insecurity is of epidemic proportion: Currently nearly 1 in 5 Americans, or 47.8 million people, rely upon food stamp benefits (USDA/FNS, 2013). (The food stamp program is now more commonly known as Supplemental Nutrition Assistance Program, or SNAP). Moreover, food hardship is highly correlated with obesity and its related diseases including heart disease, diabetes, and cancers (Neff, 2009). The disproportionate number of lower income individuals that suffer from food hardship and disease manifests the lack of social justice in America’s dominant food system (Allen, 2008).

The 1996 Farm Bill mandate for conversion of federal food stamps from paper to plastic left farmers’ markets largely inaccessible to lower income consumers; particularly consumers who supplement their food shopping with food stamp benefits. During this time, the emphasis of farmers’ markets shifted and markets were reshaped as economic growth engines for downtown cores rather than conduits for community food security. The recent advent of SNAP operations at farmers’ markets offers opportunity to (re)connect lower income consumers with farmers and their offerings; as such, SNAP operations hold potential toward redressing food system inequality. Attaching SNAP to farmers’ markets offers potential toward improving the health of local populations, economies and environments. In addition to providing a viable revenue stream for farmers, every $5 in SNAP benefits generates $9 in community spending; and, $1 billion of food demand by SNAP recipients creates nearly 3,000 farm jobs (USDA/FNS, 2010). Furthermore, farmers tied to local food systems are more likely to practice sustainable agriculture methods that reduce chemical fertilizer and pesticide dependency, preserve water quality, replenish soils, and reduce energy usage (Lyson, 2004). On the other hand, research findings underscore that the ambitious goal of addressing food system justice through direct agriculture marketing is much more challenging on the ground. In fact, discourse in the literature questions whether food justice is compatible with the farmers’ market agenda (Gottlieb and Joshi, 2009). And, while the gradual uptick in farmers’ market SNAP sales over the last few years offers promise, market capacity for
operational logistics and challenges in serving a diverse customer base raises concern over the outcome of attaching SNAP to farmers’ markets.

Linkages exist between environmental sustainability and social justice; and it is the growing recognition of the significance of addressing food system justice in local food system development that drives this research endeavor. As the use of SNAP at farmers’ markets is in its infancy, much can be learned from these early adopters and the factors that may influence success in SNAP operations. Research has established an understanding of the factors driving market participation by the typical farmers’ market customer demographic: female, white, higher educated, and middle to upper income. However, little is known about the food shopping behaviors and attitudes tied to farmers’ market usage from the perspective of lesser advantaged consumers, particularly with respect to how they relate to the ability to use SNAP (Briggs et al, 2010; Neff et al., 2009). By knowing the effects of SNAP operations upon farmers’ markets and their customers, we can better understand farmers’ market potential for strengthening justice within the local food systems we are working to create. And, in turn, gain appreciation for the contribution of farmers’ markets to the long-term sustainability objectives of communities.

In the social space of the farmers’ market, non-economic values tied to locality, quality, and ecology exist alongside and in competition with cost-related concerns in the steering of food purchase behaviors (Feagan et al., 2004; Penker 2006). The concept of embeddedness, or socially centered market exchange, is recognized in the geography and social economics literature as useful in analyzing direct agriculture markets (Hinrichs 2000; Winter 2003). This work has utilized the embeddedness concept toward a closer examination of the interplay of the economic and non-economic, as this is particularly relevant to lower income consumers: research has substantiated that lower income shoppers spend a greater share of their overall income on food (Neff et al., 2009). Based upon findings in the review of the literature, to the best of my knowledge no study has applied the embeddedness concept to the context of SNAP operating farmers’ markets and the study of lesser advantaged consumers.

Florida provides a useful location to examine the effects of SNAP at farmers’ markets. With 1 in 6 Floridians currently using SNAP benefits, the state’s SNAP redemption rate ranks
fourth highest in the nation (FRAC, 2012). In addition, Florida’s strong agricultural history and temperate climate enable year-round market operations; yet, less than 10% of Florida farmers’ markets are SNAP authorized.

This introduction will conclude with a definition of terms section. Subsequent to the introduction, a review of the supporting literature, explanation of the research design and study area, and detailed description of the methods utilized for data collection and analysis are presented. This is followed by analysis and discussion of results, conclusions for study findings, and considerations for further research. Research instruments are furnished in the appendices.

Definition of Terms

Direct agriculture marketing: The sale of food from farmer to consumer while bypassing intermediary parties Norberg-Hodge et al., 2002; Neff et al., 2009). Considered a conduit for localizing the activities tied to food production, direct marketing outlets include community-supported agriculture models (CSAs), roadside stands, community food cooperatives, and farmers’ markets.

Electronic Benefit Transfer (EBT): The process in which the federal Food Stamps program distributes its benefits to recipients. Monthly benefits are loaded onto an EBT card which can be used like a regular debit or credit card at authorized retailers with EBT terminals. At food retail venues where electricity is not accessible, EBT card transactions can be conducted through wireless EBT technology. This expands market capacity to benefit from credit/debit card and Food Stamp revenue while serving a broader range of customers.

Embeddedness: The concept of embeddedness is used to understand the range of motives that influence people to offset financial incentives against social criteria tied to collective, community, or environmental benefits (Sage, 2003). Embeddedness frames non-cost values for economic transaction behavior.

Farmers’ market: Currently, there is no consistent legal definition of the term farmers’ market (Briggs et al., 2010). The USDA has defined a farmers market as a multi-stall market at which
farmer-producers sell agricultural products directly to the general public at a central or fixed location. Market regulations may also permit artisan and food re-sale (i.e. brokers) vendors.

**Food justice:** The right to have access to opportunity and participation surrounding the production and consumption of food that is fresh, nutritious, affordable, culturally appropriate, and grown with care for the well-being of land and people. Food justice strengthens local food systems, community self-reliance, and health of environment (Gottlieb and Joshi, 2010).

**Food system:** The composite of interdependent processes involved in growing, harvesting, transporting, processing, distributing, consuming, and disposing of food (Martinez et al., 2010; Norberg-Hodge, Merrifield, and Goerlick, 2002). Food systems are deeply rooted in a region’s history, culture, diet, and land use policies (Allen, 2004).

**Instrumentalism:** The degree in which actors prioritize economic goals and engage in self-interested or opportunistic behavior to achieve these goals (Block, 1990). Instrumentalism works together with marketness (see Marketness).

**Local food system:** The meaning of ‘local’ in the context of food systems has not been established. A local food system generally refers to a network of food production, distribution, and consumption activities which occur within a delineating geographic boundary, such as county, state, region, that consumers associate with their community (Martinez et al., 2010). Reduction in the use of pesticides and chemicals on food crops, shorter distances of food transport, and reduced packaging are commonly associated with local food systems.

**Marketness:** The degree in which price/cost takes primacy over other factors in economic behavior. Marketness works in tandem with instrumentalism.

**Supplemental Nutrition Assistance Program (SNAP):** The federal Food Stamp program administered by the U.S. Department of Agriculture (USDA) Food and Nutrition Service (FNS). SNAP provides low-income households with a monthly allotment (based on household size and net income) to buy foods from authorized retailers.
CHAPTER TWO: LITERATURE REVIEW

This section provides an overview of the supporting literature on the association of farmers’ markets with sustainable local food systems and the positioning of SNAP within this form of direct agriculture marketing. To begin with, the rise in food insecurity and America’s SNAP trend is documented to describe the scope of the issue. Toward greater understanding of the potential role of farmers’ markets in contributing to community sustainability objectives, an overview of social justice within the context of local food system development is also provided. The second portion establishes the institutional context of direct agriculture marketing and farmers’ markets in particular, and highlights efforts and challenges in bringing SNAP operations to farmers’ markets. The third segment discusses the concept of embeddedness and its utility in understanding the prospects of local food systems. The fourth segment focuses on farmers’ market demographics and the attributes which make farmers’ markets an attractive shopping option for consumers. This leads into the fifth segment which details the perceptions and values surrounding local foods and farmers’ markets by low resource consumers.

Food Insecurity in America

Concurrent with widespread interest in developing more sustainable alternatives to the globalizing industrial food system, more households rely on federal assistance to put food on the table than at any other time in history. According to the Food Research and Action Center (FRAC) (2012), 1 in 5 individuals across the nation have experienced a lack of financial means to buy food for themselves or their family at some point over the past year. Concernedly, food hardship in America is highly correlated with obesity and its related diseases, including diabetes, cardiovascular disease, and cancers, which saddles society with a financial burden estimated at more than $147 billion per year (Center for Disease Control and Prevention [CDC], 2011).
Indeed, 1 in every 3 people nationwide suffer from diabetes; and, for the first time in history, the present generation of children is expected to have a shorter lifespan than their parents (Briggs et al., 2010).

An all-time record of more than 46.5 million Americans (1 in 7 Americans) participated in the nation’s largest food security program, the Supplemental Nutrition Assistance Program (SNAP) in FY2011, redeeming $71.8 billion in SNAP benefits at food retail outlets across the country (Farmers’ Market Coalition [FMC], 2012). SNAP benefits are provided in the form of an electronic benefit card (EBT), which works like a debit card and is accepted at many food retailers for the purchase of food from the basic food groups as well as plants and seeds to grow food at home (Food Research and Action Center [FRAC], 2011a). SNAP households typically receive less than the full monthly allotment and are expected to spend a portion of their other income on food in order to compensate for the difference (Eslami et al., 2011).

Recent data provides insight into the demographic characteristics and shopping behaviors of today’s SNAP participants. The primary source of income among SNAP participants has shifted from welfare to work: in 1989, 42 percent of all SNAP households received cash welfare benefits and only 20 percent had household earnings; in 2009, less than 10 percent received cash welfare benefits, while 33 percent had household earnings from at least one employed adult. Additionally, the sharpest growth in SNAP issuance has occurred among working-age men and women (Leftin, Gothro, and Eslami, 2010). In FY 2010, 34 percent of SNAP participants were white, 22 percent were African American, non-Hispanic, 17 percent were Hispanic, 3 percent were Asian, 4 percent were Native American, and 20 percent were of unknown race or ethnicity (Eslami et al., 2011).

SNAP redemptions have increased over 360 percent in one decade: growing from approximately $16 billion in FY 2001 to over $71 billion in FY 2011 (United States Department of Agriculture, Food and Nutrition Service [USDA/FNS], 2011). The graph in Figure 1: Annual SNAP Redemptions- All Retail Sources: 2001-2011 depicts the Federal Food Stamp trend over the preceding decade. Despite expansion in the types of businesses seeking to capitalize on the SNAP trend, overall customer food-shopping behavior has not changed: In FY 2000, 82% of all
benefits were redeemed at supermarkets and superstores; and, in FY 2010, 83 percent of all SNAP food dollars went to supermarkets and superstores, even though these large chain retailers made up only 17 percent of all SNAP-authorized firms (USDA/FNS, 2010).

Floridians have not been immune to food hardship and its health-related repercussions. 1 in 3 Florida households currently experience food hardship (FRAC, 2012) and Florida’s SNAP redemption rate ranks fourth highest in the nation. Additionally, the 1 in 6 Floridians who currently use SNAP benefits reflects a 170% increase in SNAP participation from January 2007 through January 2012 (FRAC, 2012).

Figure 1: Annual SNAP Redemptions, All Retail Sources: 2001-2011 (USDA/FNS, 2011).

**Food Systems and Food Justice**

In the academic and mainstream literature, a food system has been defined as the composite of interdependent processes involved in growing, harvesting, transporting, processing, distributing, consuming, and disposing of food (Martinez et al., 2010; Norberg-Hodge, Merrifield,
and Goerlick, 2002). A food system has also been described as all activities and relationships that comprise the various food pathways from seed to table, and influence the "how and why and what we eat" (Tansley and Worsley, as cited in Gottlieb & Joshi, 2010, p.5). As such, food systems are deeply rooted in a region’s history and traditions, culture, and land use policies (Allen, 2004).

The modern, industrial food system (also referred to as the globalizing food system, and the dominant food system), has afforded consumers year-round availability of practically all foods; and, it is widely perceived that food marketed through the industrial or global food system is less expensive and more convenient to acquire than locally grown, directly-marketed food. However, from an environmental perspective that advocates for an alternate locally oriented approach to food system development, the globally oriented food system is viewed as a model of food production and distribution that is unsustainable: In failing to regard its costs to man and the environment, the global food system threatens human living standards for current and future generations (Power 1999; Feagan et al., 2004).

In contrast to the industrial food system, a food system is considered to be locally oriented when all aspects of production, distribution, sale, and consumption of food are operated, managed, and owned by the community it serves (Market Umbrella, nd; Brown and Carter, 2003). Initial undertakings in creating alternative food systems focused largely on the food production phase of the food supply chain. Hence, efforts toward development of sustainable agriculture practices were spurred by concerns over the environmental impacts of large-scale industrial agriculture, such as soil erosion, the loss of biodiversity, and surface and groundwater contamination (Power 1999).

In Our Common Future, The World Commission on Environment and Development (WCED) (1987) has asserted that the challenge of sustainable agriculture encompasses not just food production (and farming incomes), but food security, and “requires the systematic promotion of equity in food production and distribution” (p. 141). The WCED goes on to state that applying the concept of sustainable development to efforts that ensure food security requires a systematic, holistic approach focused on ecosystems—not only at national and global levels—but regional
levels as well. Further, the WCED contends that in order to meet the challenges associated with ensuring food security, agricultural systems must evolve to focus as much on people, resources, and the future, as they do on technology, production, and the short term. Echoing the Brundtland Report’s message, Dahlberg (1993) has noted that sustainable agriculture is attained when the other segments of the food system and the rest of society also become more sustainable.

The research has established that equitable food access plays a vital role in the health of the population, environment, and economy (Briggs et al., 2010; Neff et al., 2009; Allen 2008). However, study findings have demonstrated that access to healthy foods in many urban and rural areas is limited by factors such as poverty and race (Allen, 2008; Guptill and Wilkins, 2002). In fact, the highly correlated conditions of food hardship and obesity and disease which disproportionately affects lower income people and people of color is evidence of the lack of social justice in America’s food system (Allen, 2008). Efforts that champion food equity in local food systems have been based on several grounds: access to healthy food is a basic human right, federal subsidies are key to enhancing access for low income consumers, the problem of food security rests in the hands of the community, and the poor represent an enormous local market for farmers (Gottlieb and Joshi, 2010; Alkon and Norgaard, 2009; Allen, 2004).

According to Allen (2008), as the food system is a socially organized system, its problems can be changed by the collective efforts of people. However, social justice, in the form of equitable access to healthy, affordable food is an ambitious goal of alternative food system proponents. The idea that direct agriculture markets can serve as a means for increasing food security for all community members has stirred skepticism among academic analysts who contend that food security and farm security are conflicting objectives that inhibit food justice from fitting into the farmers’ market agenda (Gottlieb and Joshi, 2010).

Direct Agriculture Marketing and Farmers’ Markets

There is substantial evidence for the claim that the presence of various channels for the local exchange of food enhances health, food security, and well-being for persons, communities, and ecological systems (Guptill and Wilkins, 2002, p.40)
Direct agriculture marketing, or the sale of food from farmer to consumer while bypassing intermediary parties, serves as a conduit for routing food production and distribution chains to the local scale (Neff et al., 2009; Norberg-Hodge et al., 2002). As such, direct agriculture marketing is widely recognized as integral to local food system development. The discourse contends that, through direct agriculture marketing, farmers may gain a larger portion of the income generated by their crops and gain control over farm production decisions; while in return, consumers can obtain fresh, high quality food at reasonable prices (Smithers, 2008; Hinrichs, 2000). In shortening the distance between farmers and consumers, direct agriculture marketing helps communities move toward local longer-term sustainability objectives such as preservation of agricultural green space, enhanced agricultural diversity, economic stability, and increased regional self-reliance upon food (Colasanti et al., 2010; Feagan et al., 2004; Lyson, 2004). While direct marketing schemes include community-supported agriculture models, roadside stands, and community food cooperatives, the oldest and most familiar form of direct agriculture marketing is the farmers’ market (Feagan et al., 2004).

Farmers’ markets serve as institutions that not only bolster economic viability of farmers, but also work to enhance the health of communities by providing fresh, often more-sustainably-grown foods in a setting that fosters social connections thought to be fundamental to democratic market exchange (Lyson, 2004; Colasanti et al., 2010). Underscoring how mission and purpose are just as important as what actually transpires at the market, Sharon Yeago of the Farmers’ Market Coalition has remarked that farmers’ markets exist “for the purpose of facilitating personal connections that create mutual benefits for local farmers, shoppers, and communities” (Briggs et al., 2010).

**SNAP at the Farmers’ Market**

Food Stamps in the form of paper coupons once functioned like cash at farmers’ markets, where low income shoppers paid the farmer directly in exchange for produce. Toward reducing Food Stamp fraud and the stigma attached to its usage, the 1996 Farm Bill mandated states to replace paper-based Food Stamps with plastic debit cards tied to an Electronic Benefit Transfer
(EBT) system. As EBT point-of-sale terminals required linkage to electrical power and a phone line, the new technology excluded most farmers’ markets and other non-traditional vendors from participating in the nation’s largest food security program (Briggs et al., 2010).

While lower income populations faced constraints tied to economic access to farmers’ markets, popularity of this type of food provisioning rose sharply. Reborn as economic engines for downtown regions, farmers’ markets took on a new aura featuring specialty food items and other attractions designed to draw the more well-to-do. As reported by the USDA’s Agricultural Marketing Service (USDA/AMS 2012), the number of farmers’ markets across the United States has more than quadrupled in less than two decades. Figure 2 illustrates the increase in the number of markets operating in the U.S. over the past 18 years.

![Figure 2: U.S. Farmers’ Market Growth: 1994-2012](https://www.ams.usda.gov/AMSv1.0/ams)

Recently, legislative and grassroots efforts have focused on improving access to farmers’ markets. For example, the President’s FY2012 Budget Proposal, approved for a minimum of 2 years, has allocated $4 million in funding toward wireless EBT terminals for farmers’ markets, and an added $10 million for market promotion (Community Food Security Coalition [CFSC], 2012). Improvements in cellular technology and more affordable, wireless EBT equipment, have
contributed to a rebound in the number of farmers’ markets accepting food assistance benefits (Briggs et al., 2010). The Farmers’ Market Coalition (2011) has reported a 263% increase in the number of farmers’ markets accepting SNAP benefits from FY 2005 through FY 2010 (Love, 2011). In addition, the number of farmers’ markets (and farm stands) authorized to accept SNAP benefits grew to 2,445 in FY2011, reflecting a 52 percent increase over the previous fiscal year (FMC, 2012). In fact, SNAP clients spent more than $11.7 million in SNAP benefits at participating farmers’ markets in FY2011, representing close to a 55 percent increase over the $4 million redeemed the previous fiscal year (FMC, 2011). Figure 3 depicts the upward trend in EBT/SNAP licensed farmers’ markets, and figure 4 illustrates the potential for farmer revenue through SNAP benefits.

![Number of SNAP Authorized Farmers Markets](farmersmarketcoalition.org/s/2011/04/

These findings are suggestive of the role SNAP can play in providing a viable, alternative revenue stream to farmers while connecting low resource consumers to farmers and their healthy offerings. On the other hand, the small number of transactions and low spending amounts that farmers’ markets may see in the first few years, particularly without the use of targeted outreach
and spending incentives for SNAP customers, may make the costs and inconvenience tied to offering SNAP/EBT services uneconomical and unattractive to many markets. According to Briggs et al. (2010), despite the state subsidies California receives, only 10 percent of California’s farmers’ markets offer SNAP redemption. Moreover, farmers’ market organizations in many states—including Florida—do not receive funding from the State Department of Agriculture; hence, market capacity to secure steady streams of funding and other forms of support is particularly critical to the success of EBT/SNAP market operations (S. Yeago; personal communication; Sept 8, 2011).

Recent findings have pointed out that maintaining a successful SNAP redemption operation requires more than installing EBT terminals and posting signs (Owens and Verel, 2010; Briggs et al., 2010). According to the D.C. Hunger Solutions’ report Food Stamps Accepted Here: Attracting Low-Income Consumers to Farmers’ Markets, markets seeking to serve low resource shoppers must have the capacity to build strong infrastructure for supporting SNAP programs, foster partnerships that are organized around community involvement, perform targeted outreach, and understand and meet the needs of a diverse customer base (2007).

Analyses have indicated that lower income people pay a much larger portion of their overall income on food, as compared to their middle class counterparts (Kaufman et al., 1997;
Ashman et al., 1994). Hence, while EBT can serve as a major motivator for low resource shoppers, affordability remains a key concern (Briggs et al., 2010). While activists and academic scholars have criticized farmers’ markets for their exclusionary, inequitable tendencies (Colasanti et al., 2010; Smithers et al., 2008; Allen, 2004), a prevalent obstacle in drawing low resource consumers to farmers’ markets has rested in the challenge of satisfying both farm security (viable incomes for farmers) and food security (affordable food prices for lesser advantaged shoppers) (Gottlieb and Joshi, 2010; Guthman et al., 2006; Fisher, 1999). Wholesome Wave’s Double Value program, funded by the Kellogg foundation and sponsored by the National non-profit, Farmers’ Market Coalition, doubles the value of SNAP dollars when used at over 200 participating farmers’ markets across the country (Farmers’ Market Coalition, 2011). According to Wholesome Wave, their innovative strategies are addressing issues of food insecurity and farm viability, as well as local economic vitality and public health. In fact, the Double Value Program generated $1 million in revenue in 2010 for farmers, markets, and communities. As a further example, New Orleans’ Crescent City Farmers Market ‘Market-Match’ profited from a 600 percent increase in SNAP redemptions during its 4 month pilot. Moreover, ongoing market patronage by SNAP shoppers following the termination of the program represented a 300 percent residual increase in SNAP sales (Market Umbrella, 2010).

**Embeddedness within Local Food Systems**

While the competitive advantage of the dominant food system centers upon price and convenience, locally based food systems are far less preoccupied with matters of cost and efficiency (Smithers et al, 2008). As such, direct agriculture marketing relies upon consumers who are able to extend their food valuation and consumption behavior—beyond cost-related concerns— and act upon their beliefs and values tied to food, farming, and greater common good (Conner et al., 2010; Sage, 2003). Likewise, as interdependency between farmers and customers is a crucial component of local food system dynamics, concern arises over the outcome of farmers’ markets in their ability to procure an ever-increasing and consistently reliable customer base (Feagan et al., 2004).
Stemming from geography and economic sociology, an unfolding theme in the agro-food literature centers on the concept of “embeddedness”, or socially centered market exchange, and its utility in analyzing direct agriculture markets (Winter, 2003; Hinrichs, 2003, 2000). Researchers have remarked how trade at the farmers’ market is embedded in social interactions to the degree that social contact and rapport are vital components of food-related transactions as they serve to strengthen social connectivity, reciprocity, and trust while fostering interdependency between local farmers and their patrons (Hinrichs 2000, Smithers et al., 2008; Colasanti et al., 2010).

As Hinrichs affirms, “embeddedness, in this sense of social connection, reciprocity, and trust, is often seen as the hallmark (and comparative advantage) of direct agriculture markets” (2000, p.296). While it has been recognized that relations of regard and trust are a part of most economic activity, these characteristics essentially underpin grassroots and alternative movements such as direct agriculture markets, as the expansion of food values are reinforced through the mutually dependent relations fostered in the space of the farmers’ market (Feagan et al., 2009; Sage, 2003).

Informed by the work of Block (1990), Hinrichs remarks: As social and economic values are interwoven in economic transactions, the relevance of price (“marketness”) and self-interested behavior in the prioritizing of economic goals (“instrumentalism”) work together while being in tension with embeddedness (Hinrichs, 2000 p.297). According to Block (1990, p.51):

“High marketness means there is nothing to interfere with the dominance of price considerations, but as one moves down the continuum to lower levels of marketness, non-price considerations take on greater importance. It is not as though prices are irrelevant under conditions of low marketness, it is just that they compete with other variables…..as the marketness of transactions diminishes, economic behavior tends to become more embedded in a more complex web of social relations.”

Hinrichs has cautioned against the tendency by scholars and activists to glorify the socially-related merits of farmers’ markets. Despite social-cultural values and preferences tied to food, relevance of price and the effect of self-interest will still play a role in motivating economic
behavior. In other words, embeddedness will always be tainted by marketness-instrumentalism to some degree. Hinrichs has also argued that tensions between marketness and instrumentalism on one side of the spectrum, and embeddedness on the other, suggest how power and privilege often rests more with higher-educated, higher income consumers than with less-advantaged individuals. Accordingly, demographic and cultural changes in market settings may significantly influence the tensions percolating between marketness-instrumentalism and embeddedness (Hinrichs, 2000). Hinrichs concludes that understanding how embedded values are mediated by marketness (relevance of cost) and instrumentalism (opportunistic behavior to achieve economic goals) is critical to our understanding of the viability and prospects of local food systems (2000, p.295).

Farmers’ Market Customer Values

Literary findings regarding farmers’ market demographics and the attitudes and perceptions of market patrons offer a context for understanding the rationale surrounding farmers’ market participation. Many studies have profiled the typical farmers’ market shopper as being white, middle-aged to older, middle to upper income, well-educated, and female (Lockeretz, 1986, Govindasamy et al., 1998; Wolf and Berrenson, 2003; Conner et al., 2010). However, a study by Blanck, Thompson, Nebeling, and Yaroch (2011) revealed a frequency of at least weekly use of farmer-to-consumer venues in 27 percent of grocery shoppers, with no differences in shopping frequency across sex, race/ethnicity, education, or annual household income.

Research results have also indicated that demographic variables alone serve as a poor proxy for consumer preferences and that attitudinal characteristics provide a more complete picture of consumer motives related to local foods and farmers’ market patronage. Thilmany, Bond, and Bond (2008) found that interest in supporting local farmers was more closely linked to the frequency of farmers’ market patronage than income or race. The work of Zepeda and Li (2006) demonstrated that, although the cost of food was an important attitudinal variable in the decision of whether to patronize local food venues, this attitude held across income levels and food expenditure amounts.
Studies have also demonstrated that the perception of fresh, high quality products drives consumers to patronize farmers' markets (Feagan and Morris, 2009; Wolf, Spittler, and Ahern, 2005). On the other hand, food prices and external transaction costs associated with the time and effort (location, limited hours) required to shop at farmers' markets, as well as limitations on product variety have been frequently cited as deterrents to farmers' market participation (VerPloeg et al., 2009; Andreatta and Wickliffe, 2002; Eastwood et al, 1999). Alternately, the main attraction to supermarkets has consistently been shown to center on convenience (hours, location, and one-stop shopping), followed by food prices (Onianwa et al, 2006; Brown, 2002; Govindasamy et al., 1998). Beyond food quality and freshness, Keeling-Bond, Thilmany, and Bond (2009) demonstrated through a nationwide survey that consumers who frequented direct agriculture markets highly valued food safety and organic and locally grown products. The desire to support farmers and the local economy, interact with food producers and other shoppers, and gain greater understanding of the origin of foods have also been uncovered as common expressions of people's interest in farmers' markets (Stephenson and Lev, 2004; Baber and Frongillo, 2003).

These motivating factors can be interpreted as embedded values because they rely on a wider range of decision criteria, above price and convenience, thus providing a clearer picture of the true costs and values tied to food (Feagan and Morris, 2009). However, as the concept of embeddedness was not purposely used in any of the aforementioned studies, the interplay of economic and non-economic factors in food purchasing decisions neglected to be examined. Progressing forward, Feagan and Morris (2009) utilized the embeddedness concept to investigate farmers' market food shopping motives and the role of distinct market context in shaping consumer values. All attributes that were not associated with cost were categorized as either social, spatial, or natural. Results indicated that patrons were motivated by socially embedded factors such as interaction with other community members, as well as spatially embedded variables such as supporting local farms and getting locally grown food.

In a further study utilizing the embeddedness concept, Conner et al. (2010) assigned marketness-instrumentalism to the variables associated with all shopping behavior (i.e.,
convenience, value, variety) and embeddedness to all attributes associated with reasons to shop at farmers’ markets (e.g., supporting local farms, welcoming atmosphere). In line with Hinrichs’ discussion of the tension surrounding the interplay of marketness-instrumentalism and embeddedness, the researchers’ findings underscore the trade-offs between factors associated with all food purchases and those associated with local food and farmers’ markets: Although Feagan and Morris (2009) did not investigate the relevance of any economic factors beyond price (i.e., convenience), and the embeddedness approach by Conner et al. (2010) did not explore the situated context of the farmers’ market, both studies furthered understanding of the importance of the embeddedness concept in understanding the viability of local food systems. However, It is important to note that neither study featured an explicit focus on lower income consumers.

**Perspectives of Lesser-Advantaged Consumers**

Studies have highlighted how other values exist alongside those related to price in the direct agriculture marketing environment. A study conducted by Weber and Dollahite (2008) established that lower income consumers share many of the same interests and values advocated by mainstream proponents of local food systems: concern over safe production methods (growth hormones and pesticides), as well as a strong expression over the importance of supporting the local economy were uncovered. Although price was most often expressed as the final determinant in the decision of whether to buy local produce, obtaining healthy, safe food presided over price for a number of respondents.

Focused on the perspectives of underserved populations, Colasanti et al. (2010) investigated the attitudes and behaviors that influence farmers’ market customer participation: factors with the highest mean importance for shopping at farmers’ markets were food quality, food safety (from food-borne illness), and ability to support local farms, while the variables with the lowest mean response were availability of organic or pesticide-free foods and ability to do one-stop shopping. While the study population was presumed to be comprised of lower income consumers, the empirical findings shed light on the competition between the interest in purchasing locally grown food versus the over-riding need for convenience and affordability.
In the national report by Briggs et al. (2010), *Real food, real choice: Connecting SNAP recipients with farmers markets*, the authors concede there have been a limited number of studies examining the factors that influence the food shopping decisions of SNAP recipients. An early study conducted by the Oregon Food Bank (Grace et al., 2005) surveyed food stamp recipients in order to identify challenges that markets face in building a food stamp customer base. The study concluded that consumer perceptions of high prices, as well as inconvenient hours and locations and an unfamiliar shopping experience served as constraints toward fostering market patronage. The findings also extend the meaning of cost to include non-monetary, convenience related factors, referred to as opportunity costs.

As the face-to-face interaction between farmers and consumers within the space of the farmers’ market is viewed as an essential part of local food system dynamics (Lyson et al., 1995; Hinrichs 2000; Guthman et al., 2004), of particular concern are the socio-cultural issues brought to light in several studies. The empirical work by Fisher (1999), *Hot peppers and parking lot peaches: Evaluating farmers’ markets in low income communities*, revealed how price-related concerns by less-privileged consumers might outweigh any supposed benefits tied to social embeddedness: A “fundamental tension between farmers obtaining a fair price for their product and low income consumers’ ability to pay such a price” (p.37), permeated the social space of the markets. More recently, through interviews with Food Stamp Administrators and Food Bank personnel, Briggs et al (2010) found that a welcoming atmosphere, often manifested in the degree of friendliness in customer service and the availability of culturally-appropriate foods, were believed to influence market participation by low resource shoppers.

Along these lines, a focus group survey conducted by Colasanti et al (2010) revealed Latina shoppers’ perceptions of an unwelcoming market atmosphere. This was based on their belief that vendors and other market customers were unfriendly and distrustful of their shopping behavior served to deter regular participation at the market. The findings bring to light how different ethnic groups may have different perspectives of farmers’ markets. On the supply side, a study by D.C. Hunger Solutions (2007) concluded that creating a universally welcoming environment was one of the greatest challenges for farmers’ markets that served customers from
two or more cultural groups. Moreover, findings from a California state-wide survey by Guthman and colleagues (2006) supported the conclusion that, despite common expression for food security aims, farmers’ markets were only a ‘win-win’ between customer and farmer when customers were affluent. Managers of the direct agriculture markets perceived food stamp recipients as the least reliable customers; a common belief was that lower income consumers did not attend farmers markets because they were less educated and less concerned about food quality.

This review uncovered substantial findings for the motives and behaviors surrounding farmers’ market usage by the highly profiled farmers’ market customer demographic (i.e., white, middle aged, mid to upper income, well educated). Yet, while the review shed light on the concerns tied to addressing social justice in local food system development, findings reflected a dearth of knowledge regarding the attitudes and behaviors of lesser advantaged groups in relation to local food transactions and farmers’ markets. In addition, the review demonstrated the usefulness of the embeddedness concept toward greater understanding of the broader values tied to food purchase decisions. However, to the best of my knowledge, no study has employed the concept of embeddedness to explicitly explore the contexts of lower income farmers’ markets and the perspectives of the people who choose to use them. These insights point to the need for understanding the behaviors and values linked to farmers’ market usage by lesser-advantaged consumers, and the relationship between these factors and the ability to redeem SNAP benefits at the market. Using the embeddedness concept may offer greater perspective of the competing values underlying market based behavior, and add to our understanding of the potential for SNAP-authorized farmers’ markets in the sustainability of local food systems.
CHAPTER THREE: RESEARCH DESIGN

Criteria for Featured Markets and their Customers

The study utilized a purposively selected sample of SNAP-authorized Florida farmers' markets and their customers, in examining the supply side and demand side of this form of direct agriculture marketing. With the aim of capturing a broad spectrum of opinions, this study sampled for heterogeneity (demographic diversity) within the farmers’ market patron population. According to Salant and Dillman (1994), sample selection depends upon population size and the degree of precision required; and, the use of purposive sampling is appropriate when those being surveyed fit a specific description and purpose of the study. The limited number of SNAP-authorized markets in Florida, the relatively low ratio of SNAP shoppers at farmers’ markets, and the exploratory, formative nature of the study warrant the chosen sample design. The sample was comprised of individuals who contribute to the food shopping for their household: shoppers who use SNAP benefits to purchase food items at farmers’ markets, as well as shoppers who do not use SNAP benefits.

Selection of farmers’ market sites was based on several criteria: (i) being a USDA FNS (Food and Nutrition Service) SNAP-authorized retailer, (ii) currently conducting SNAP operations through the use of at least one EBT terminal, and (iii) having an established base of SNAP clientele. Toward the identification of potential market candidates, an internet-based search was first conducted, utilizing the Florida Department of Agriculture and Consumer Services website, USDA National Farmers Market Directory, Open-Air Farmers Market Directory of Florida, and the UF/IFAS Agriculture Extension Community Farmers Market listing. As smaller markets may not register with the USDA or have a dedicated website, offices of the Florida County Farm Bureaus and the UF/IFAS County Agriculture Extensions were contacted by phone in order to conduct a more thorough farmers’ market search. Finally, market managers were contacted via email or
telephone in order to assess the feasibility of study participation. In the cases in which no response was received after three attempted requests, the markets were omitted from the selection process.

**200 Percent of Poverty Field**

Given the objectives of the study and the income distribution of the sample, it was determined that calculating a 200% of Poverty field would contribute to a clearer picture of study findings. Due to persistently high rates of unemployment and underemployment, over 97 million Americans have fallen into a low-income category, with household earnings between 100 and 199 percent of the poverty level. Recently introduced by the Census Bureau, the low-income category is a supplemental measure offering a more complete picture of poverty.

Table 1: Federal Poverty Guidelines, 2012

<table>
<thead>
<tr>
<th>Family Size</th>
<th>100% of Poverty Level (PL) (of poverty)</th>
<th>200% of Poverty Level (PL) (of lower income)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$11,170</td>
<td>$22,340</td>
</tr>
<tr>
<td>2</td>
<td>$15,130</td>
<td>$30,260</td>
</tr>
<tr>
<td>3</td>
<td>$19,090</td>
<td>$38,180</td>
</tr>
<tr>
<td>4</td>
<td>$23,050</td>
<td>$46,100</td>
</tr>
<tr>
<td>5</td>
<td>$27,010</td>
<td>$54,020</td>
</tr>
<tr>
<td>6</td>
<td>$30,970</td>
<td>$61,940</td>
</tr>
<tr>
<td>7</td>
<td>$34,930</td>
<td>$69,860</td>
</tr>
<tr>
<td>8</td>
<td>$38,890</td>
<td>$77,780</td>
</tr>
</tbody>
</table>

Adapted from: [http://aspe.hhs.gov/poverty/12poverty](http://aspe.hhs.gov/poverty/12poverty)

Issued each year by the Department of Health and Human Services, the federal poverty guidelines are a simplified version of the Census Bureau’s poverty thresholds. The poverty guidelines are used to determine eligibility for certain programs: The Department of Agriculture
uses the poverty guidelines as an eligibility criterion for the SNAP program. Poverty guidelines vary by family size; one set of poverty guideline figures apply throughout the U.S., excluding Hawaii and Alaska (US Department HHS; 2012). Gross annual income guidelines for the federal poverty level at the percentage categories of 100% and 200% are provided in Table 1.

For purposes of data analysis, federal poverty guideline standards were applied to the income and household size data provided by each survey participant. The number of adults was added to the number of children to obtain total household size. Federal poverty guideline values were doubled (see 200% of Poverty Level column in table 1), and each participant was then categorized as either below or above 200% of the poverty level (PL). In other words, based upon household size and annual income, people of poverty (earnings at 100% of PL and below) and people of lower income (earnings between 100 and 199% of PL) comprised the below 200% poverty category; and people of higher income (earnings above 200% of PL) comprised the second category. As eligibility for the Supplemental Nutritional Assistance Program (SNAP) and other government programs is phased out for low-income Americans as they approach 200% of the poverty level, all study participants who identified themselves as receiving SNAP benefits were entered into the below 200% PL category.

In contrast, if the study had strictly used discrete income bracketing in the analyses, study findings for participants who use and do not use SNAP benefits would have been misleading, as a number of the SNAP patron-respondents reported incomes that categorized them in a relatively higher income group that was comprised mainly of those who do not use SNAP benefits. Additionally, using the 200% poverty field resulted in more accurate classification of lower income respondents, regardless of SNAP status, because it also considered household size.

**Problem Statement**

Given the inequitable tendencies of today’s farmers’ markets, amidst America’s unprecedented crisis of food hardship and related disease, it is important to know whether and
how SNAP operations can impact the public space of the farmers’ market and the behaviors and values of its participants.

**Research Questions**

The overall objective of this thesis is to understand the potential for SNAP operations to better position farmers’ markets in their role of strengthening food system justice. This research aims to discern the benefits and challenges related to SNAP operations and the various facets of the farmers’ market experience, from the perspective of market managers and individual users. While interest in direct agriculture markets has been studied extensively, there appears to be little analysis of the interplay of economic and non-economic factors tied to farmers’ market participation, particularly in regard to lower income consumers. This study thus seeks to gauge the extent to which economic and non-economic values compete in driving farmers’ market usage, within the unique context of SNAP-authorized farmers’ markets.

The research questions that this study attempts to answer are as follows:

1. What are the environmental settings and operational logistics of the SNAP-authorized farmers’ markets used in this study; and what are the perceived benefits and challenges associated with SNAP operations at these markets?
2. What are the customer demographic characteristics of these SNAP-authorized farmers’ markets; and, to what extent are these markets attracting a more diverse customer base?
3. How do farmers’ market shopping behaviors relate to income characteristics of market patrons; and, does the ability to use SNAP impact the farmers’ market food shopping behaviors of lower income customers?
4. To what extent are various food transaction-related attitudes important in the decision of whether to shop at the farmers’ market; and, how does the interplay of economic and non-economic attitudinal factors relate to patron-respondent characteristics?
CHAPTER FOUR: STUDY AREA

The state of Florida offers a useful location for the study of SNAP-operating farmers’ markets and their implications for the development of local food systems. Below is a description of why Florida is appropriate for this study, as well as a brief overview of each of the 3 study sites. SNAP participation data is provided at the county level, as this is the smallest scale recorded by the U.S. Census; remaining demographic data is at city scale.

Focusing on Florida

Florida is not immune to the socio-cultural repercussions of food insecurity. 1 in 6 Floridians rely on Food Stamp benefits (FRAC, 2011b); and the state has the fourth highest SNAP redemption rate in the nation, with $4.4 billion redeemed in FY 2010 (USDA/FNS, 2010b). Florida is also among the top 10 states having the highest rates of diabetes (TFAH, 2011). Concernedly, obesity and its diet related diseases—of which a lack of fruits and vegetables has shown to intensify—is highly correlated with food hardship in America. Florida’s long agricultural history, temperate climate, and year-round farmers’ market operations afford the farmers’ markets of the Sunshine State greater capacity to contribute to community food security. At the same time, success of direct agriculture markets relies upon the patronage of consumers who are in a position to shift their food purchase and consumption behavior based upon values that extend beyond the concern for price and convenience.

Taken together, these realities elicit concern over the role of farmers’ markets in food security and other long-term community sustainability objectives. A step toward addressing these concerns lies in examining Florida SNAP authorized farmers’ markets, from the supply side as well as the demand side, and the viability of these markets in (re)establishing connections between farmers and low resource consumers. To the best of my knowledge, no such study has been conducted in the state of Florida.
The communities in which the 3 markets are located represent diversity in income, race, and urbanicity. The study area comprises the cities of High Springs (Alachua County), Sanford (Seminole County), and North East Miami (Miami-Dade County). Figure 5 depicts the location of each study, as well as the magnitude of SNAP participation throughout the state. Table 2 contains SNAP participation data for the respective county of each market, including the percentage of households using SNAP benefits and the proportion of SNAP households above and below federal poverty level.

Figure 5: Study area and SNAP Participant levels, 2011
Source: ers.usda.gov/snap-data-system. Participation counts at the county level are provided by the Small Area Income & Poverty Estimates program of the U.S. Census Bureau. According to the Census Bureau's website, the Census Bureau obtains raw data from the Food and Nutrition Service (FNS), USDA. For most States, the Census Bureau uses counts of participants for the month of July.
Table 2: SNAP Participation by Study Site County, 2011

<table>
<thead>
<tr>
<th>Farmers’ Market</th>
<th>2011 (N) SNAP Participants</th>
<th>2011 (%) SNAP Households</th>
<th>% Change 2010 to 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Springs (Alachua)</td>
<td>35,385</td>
<td>11%</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>65.5% Below PL</td>
<td>34.5% Above PL</td>
</tr>
<tr>
<td>Sanford (Seminole)</td>
<td>43,193</td>
<td>7%</td>
<td>16%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>43.6% Below PL</td>
<td>56.4% Above PL</td>
</tr>
<tr>
<td>Upper East Side (Miami-Dade)</td>
<td>587,088</td>
<td>21%</td>
<td>14%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>47.8% Below PL</td>
<td>52.2% Above PL</td>
</tr>
</tbody>
</table>

Source: U.S.Census Bureau, 2010 Census. Percent of SNAP households also shows the portion of SNAP households classified as above and below poverty level (PL). The smallest scale for SNAP data provided by the U.S. Census is county-level.

High Springs Study Area

According to the 2010 U.S. Census, the city of High Springs, located in Alachua County, has a population of 5,350 people. High Springs is classified as rural and has a population density of 244 people per square mile (U.S. Census Bureau, 2011). The median household income is $54,779, and 16.2% of High Springs’ residents live below the poverty level. In terms of racial composition 82.2% of the city’s population is classified as White, 13.8% Black, 6.6% are Hispanic or Latino, and the remainder is other ethnicities. The gender distribution is close to equal, with nearly 52% of residents being female. The average age of a Sanford resident is 36 years, and approximately 28% of Sanford’s’ population has educational qualifications beyond high school. The average household size is 2.9 people, with just under 76% of the population consisting of families or non-single households.

Sanford Study Area

The city of Sanford’s is classified as mostly urban. Sanford has a population of 53,570 and a density of 2,333 people per square mile (U.S. Census Bureau, 2011). The median household income is $43,470; 18.5% of the people live below the poverty level. In terms of racial
composition 57.3% of the city’s population is classified as White, 30.5% Black, 20.2% are Hispanic or Latino, and the remainder is other ethnicities. The gender distribution is close to equal, with 52% of residents being female. The average age of a Sanford resident is almost 33 years, and approximately 21% of Sanford’s population has educational qualifications beyond high school. The average household size is 2.6 people, with 72% of the population consisting of families or non-single households.

**Upper East Side Study Area**

The Upper East Side Farmers’ Market is located in the eastern coastal region of highly urbanized North Miami. The Miami-Fort Lauderdale-Pompano metro area was ranked among the nation’s top 25 Metropolitan Statistical Areas having the highest rates of food hardship for 2009-2010 (FRAC, 2010). The city of North Miami has a population of 58,786 with a density of 6,991 people per square mile (U.S. Census Bureau, 2011). The median household income is $36,808, and 21.2% of people live below the poverty level. 32.6% of the city’s population is classified as White, 18.9% Black, 27.1% are Hispanic or Latino, and the remainder is other ethnicities. The gender distribution is close to equal, with 52% of residents being female. The average age is close to 32.5 years, and 16.6% of North Miami’s population has educational qualifications beyond high school. Average household size is 3.12 people, with 73% of the population consisting of families or non-single households.
CHAPTER FIVE: METHODS

This study utilized 3 survey instruments for data collection: the Farmers’ Market Manager Survey, Farmers’ Market Environment Assessment Tool, and Farmers’ Market Customer Survey. In this section, a description of each survey instrument is provided, followed by details of the methods employed during data collection and analysis. The survey instruments and informed consent documents may be referenced as follows: Appendix1: Informed Consent: Market Manager, Appendix 2: Market Manager Interview, Appendix 3: Farmers’ Market Environmental Assessment Tool, Appendix 4: Informed Consent: Farmers’ Market Customer, and Appendix 5: Farmers’ Market Customer Survey. The Institutional Review Board (IRB) of the University of South Florida has approved the instruments and methods used in this study.

Farmers’ Market Manager Survey

Significant heterogeneity exists within the institutional form of the farmers’ market, in regards to geography, organizational structure, scale, and mission (Guthman et al, 2006). The aim of the market manager interviews is to form a source of operational context that will offer insight into the dynamics of each market and its approach to connecting SNAP participants with direct agriculture markets. The markets capture variation in size and age, urbanicity, and length of established participation in SNAP.

The survey was largely drawn from the work of the USDA Food and Nutrition Service (FNS) (January 2012) in their formative research of farmers’ markets located throughout the United States. Findings in the extant literature (e.g., Briggs et al., 2010; Grace et al., 2006; Fisher 1990) also formed the basis of several survey questions. The survey begins with an introductory section to gain information about the market manager. The body of the survey contains four sections: General Market Characteristics (e.g., organizational structure, revenue and sales, food environment), EBT and SNAP, Incentive Programs for SNAP Customers, and Community
Outreach and Market Promotion. The survey closes with a final, open-ended question to capture any potential oversight in the questionnaire. The survey is comprised of closed and open ended questions, with the majority of requiring multiple choice answers and yes/no responses.

Managers of the 3 SNAP-participating farmers’ markets were familiarized with the study and invited to participate in the in-depth telephone interview. In order to accurately capture participant responses, permission was sought from each participant to digitally audio-record the interviews. (For those who chose not to have the interview recorded, the interview took place without the use of an audio recording device.) The statement of Informed Consent was read to each respondent, followed by the opportunity to ask any questions prior to commencing the interview. Participants were then led through the structured interview. In closing, each interviewee was given a final opportunity for expression, and then thanked for their time and valuable input. Each interview lasted approximately 30 to 50 minutes.

Data collected from the telephone interview surveys is presented in a detailed, descriptive format. The findings provide a snap-shot of each farmers’ market from the managers’ perspective and experiences, rather than longitudinal analysis, as the sample size is limited and data was gathered from a single interview with each manager.

Information is organized into two sections: Key Findings across markets, and distinct Market Profiles featuring an in-depth look at the operations of each farmers’ market. The arrangement of results reflects the themes of the survey: general market characteristics, revenue and sales, food environment, community outreach, SNAP/EBT operations, incentive programs, and SNAP/EBT promotion strategies.

Farmers’ Market Environment Assessment Tool

The Farmers’ Market Environment Assessment Tool was utilized as an effort to capture the physical environment unique to each market. The questionnaire was drawn from the PRC-HAN Environmental Audit Tool (2009) which has been used by the CDC to analyze land use, walkway, aesthetic, and social features in assessing the healthiness of pedestrian environments. The first section of the Assessment Tool, Market Characteristics, is comprised of 6 questions that
record observations on vendors and market amenities. The second section of the questionnaire, Built Environment Measures, contains 6 questions designed to assess the immediate vicinity of the market, including the presence of public transit stops and the existence of any unpleasant features (e.g., litter, high speed traffic). Questions are formatted with multiple choice answer selections, and space is provided for field descriptions and notation.

The Farmers’ Market Environment Assessment Tool served as protocol in collecting observational data on specific market characteristics as well as the built environment for each of the SNAP-operating farmers’ market sites. Data collection was based upon field observations made during a one-time site visit to each farmers’ market. The food environment was recorded, and the presence of market and built environment entities that might contribute to, or deter from, the market experience were documented.

The data collected from the Farmers’ Market Environment Assessment Tool offers added insight into the diverse contexts of the 3 SNAP-participating farmers’ markets. Findings are presented in tabled format for examination across markets, as well as in-depth descriptive overviews for each market. Details of built environment findings are woven throughout each market profile.

**Farmers’ Market Customer Survey**

This study draws from the work of Feagan and Morris (2009) and of Conner et al. (2010) in the design of a survey that frames farmers’ market participation around the concept of marketness-instrumentalism and embeddedness. In addition to measuring the importance of various food transaction-related attributes, the survey yields information on the demographic characteristics and local food shopping behaviors of farmers’ market patrons.

Insight from the managers of the 3 SNAP-participating farmers’ markets was sought during the design phase of the survey. Concern was expressed by several managers over the amount of time imposed on customers by the survey and the associated potential for a low response rate. In light of this concern, the survey was designed to elicit as much pertinent information as possible with the fewest number of questions.
The first portion of the survey utilized closed-ended questions to collect information on shopping behavior including frequency of farmers’ market shopping, expenditure amounts and methods, produce availability outside the farmers’ market, and whether or not the shopper receives SNAP benefits. Next, participants used a 4 point Likert scale (not at all important to very important) to rate the importance of various factors in their decision of whether or not to shop at the farmers’ market. It is recognized that category order may affect measurement error, particularly in regard to Likert Scale formats. As there is no foolproof solution to the problem of category order effect (Salant & Dillman, 1994), consideration was paid to positioning the selection categories in a manner that helps lead respondents to read through all answer choices prior to selection.

The 14 farmers’ market motivating factors were grouped into (i) variables that signify all food shopping behavior (value, location, hours, use SNAP, use coupons, one-stop shopping, product variety); and, (ii) variables linked to farmers’ market shopping (high quality products, support local farms, gain information on food origin/growing, organic/chemical-free, welcoming atmosphere, safety from food-borne disease, and social opportunity). The first group of variables corresponds to Hinrichs’ marketness-instrumentalism concept and the second group of attributes can be associated with Hinrichs’ embeddedness. The final portion of the survey contains questions designed to collect demographic information: gender, age, race, income level, education level, and employment status.

The farmers’ market customer survey was conducted at 3 purposively selected SNAP-participating farmers’ markets located in the state of Florida. For each site, data collection occurred as a one-time event and the same data collection protocol was used at each market. Following an initial screening in which people were asked whether they contribute to their household food shopping on a regular basis, shoppers were invited to participate in the survey. Those agreeing to participate were handed the informed consent form and were asked to read it prior to filling out the survey. The consent form states the purpose of the study and its voluntary nature, as well as the anonymity of survey participants. The survey was filled out on site by the participants, collected, and then stored until it was used for analyses.
Upon handing in the survey, completed or partially completed, participants were thanked for their time in participating and were handed a $2 market token redeemable toward any market purchase. The decision to offer an incentive was made after consulting with the market managers during the design phase of the survey. It was surmised that the use of a token incentive would pose minimal risk of added bias while encouraging participation.

All data sets were analyzed using Statistical Package for the Social Sciences (SPSS version 20, IBM, New York). In order to determine associations between individual characteristics and farmers’ market shopping habits and attitudes, descriptive statistics were calculated for the independent variables of shopper demographics and the dependent, local-food shopping behavior variables. Mean response values for attitudinal factors related to farmers’ market participation were also calculated, to examine the relation between individual characteristics and these attitudinal variables. While the purposive sample did not warrant rigorous testing for statistical significance, loose associations among independent and dependent variables were made by analyzing variations in responses.
CHAPTER SIX: RESULTS AND DISCUSSION

Following are the results and discussion for the SNAP-participating farmers’ markets under study. Distribution of data is displayed in table and graph formats. Beginning with the supply-side, the findings regarding the operational logistics of SNAP are presented across markets and then as small case studies of each market. Turning to the demand-side, results for customer demographics, local food shopping behaviors, and the importance of various attributes tied to market patronage, as well as how these behaviors and attributes relate to the individual characteristics of market patrons are provided.

SNAP Market Environment and Operations Results

This descriptive research examined the characteristics of the farmers’ markets under study as a step towards understanding the factors that influence market practices centered on SNAP. This section details the results from the in-depth interviews with the farmers’ market managers and the on-site environmental assessments of the 3 markets. The section begins by presenting the results across the farmers’ markets in table format. General characteristics of the 3 farmers’ markets, including the physical environment documented at the time of site visit, are depicted in Table 3. Table 4 represents findings for revenue sources and sales information, as reported by each market manager during the telephone interviews. Food availability information documented during the time of the site visit is presented in Table 5; characteristics related to SNAP participation are contained in Table 6.

Following the tables, market profiles containing descriptive summaries of the findings are provided. The market profiles serve to paint a richer picture of SNAP operations while drawing forth the distinct context of each market. First, market characteristics including organizational structure, staff and vendor information, and the market’s physical environment are presented. This is followed by revenue and sales. Next, findings for the food environment and community
outreach efforts are covered. Fourth, SNAP participation including operation overview, benefits and barriers, incentive programs, and EBT promotional strategies are detailed. Lastly, measures toward a welcoming environment and suggestions for supporting farmers’ markets role in serving SNAP clients are described.

Table 3: General Market Characteristics

<table>
<thead>
<tr>
<th></th>
<th>HIGH SPRINGS FARMERS’ MARKET</th>
<th>SANFORD FARMERS’ MARKET</th>
<th>UPPER EAST FARMERS’ MARKET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year market opened</td>
<td>2001</td>
<td>2007</td>
<td>2011</td>
</tr>
<tr>
<td>Urbanicity</td>
<td>Rural</td>
<td>Mostly Urban</td>
<td>Urban</td>
</tr>
<tr>
<td>Organizational structure:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Owned or operated by an organization</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Days/hours of operation</td>
<td>Thurs:12-6 1st Sat: 9-1</td>
<td>Sat: 9-2</td>
<td>Sat:9-2</td>
</tr>
<tr>
<td># of total vendors</td>
<td>25-50</td>
<td>20-25</td>
<td>12-15*</td>
</tr>
<tr>
<td># of food vendors</td>
<td>18-35</td>
<td>10-18</td>
<td>10-12</td>
</tr>
<tr>
<td># of paid employees</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Manager tenure (years)</td>
<td>1.5</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Budgetary</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Fundraising</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Apply for grants</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Manage volunteers</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Organize vendors</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Outreach/special events</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Produce procurement</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Market physical environment:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Near public transit</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Walkways present</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Signs for SNAP/EBT</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Community-Info booth</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

*It is important to note, in addition to the 10-12 food vendors shown in Table 3, Upper East market sells produce gathered from up to 30 small, local farmers.
### Table 4: Market Revenue and Sales

<table>
<thead>
<tr>
<th>Market revenue sources:</th>
<th>HIGH SPRINGS FARMERS' MARKET</th>
<th>SANFORD FARMERS' MARKET</th>
<th>UPPER EAST FARMERS' MARKET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Public donations</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area businesses</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Fundraising events</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Vendor fees</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

2011 sales:

<table>
<thead>
<tr>
<th></th>
<th>HIGH SPRINGS FARMERS' MARKET</th>
<th>SANFORD FARMERS' MARKET</th>
<th>UPPER EAST FARMERS' MARKET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>DK</td>
<td>DK</td>
<td>$60K (produce)</td>
</tr>
<tr>
<td>SNAP/EBT</td>
<td>DK</td>
<td>EBT: $500-$1000/mo</td>
<td>SNAP: $300-$500/mo</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SNAP: $5,000/yr</td>
</tr>
</tbody>
</table>

*DK: Don’t know (manager’s response)*

### Table 5: Food Environment during Site Visit

<table>
<thead>
<tr>
<th></th>
<th>HIGH SPRINGS FARMERS’ MARKET</th>
<th>SANFORD FARMERS’ MARKET</th>
<th>UPPER EAST FARMERS’ MARKET</th>
</tr>
</thead>
<tbody>
<tr>
<td># of total food vendors</td>
<td>19</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td># of produce vendors</td>
<td>11</td>
<td>2</td>
<td>Produce sources: 14</td>
</tr>
<tr>
<td>Food availability:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh fruits &amp; vegetables</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Breads</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Baked goods</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Fish or seafood</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meat and/or poultry</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Eggs</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Dairy (milk, cheese)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Prepared entrée foods</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Specialty foods</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Food-bearing plants/seeds</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Table 6: SNAP Participation Characteristics

<table>
<thead>
<tr>
<th>Year SNAP authorized</th>
<th>HIGH SPRINGS FARMERS’ MARKET</th>
<th>SANFORD FARMERS’ MARKET</th>
<th>UPPER EAST FARMERS’ MARKET</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>2010</td>
<td>2011</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th># of EBT customers/day</th>
<th>15-20</th>
<th>10-20</th>
<th>8-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>System of operation</td>
<td>Token</td>
<td>Token</td>
<td>Token</td>
</tr>
<tr>
<td>Incentive or coupon program</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Benefits to participation:</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Support local farmers</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Broaden reach in community</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Support local economy</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Improve access to healthy food</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Improve market image</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Reduce food stamp stigma</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>SNAP/EBT Promotion Strategies:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flyers, posters at health centers</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Flyers, posters at local businesses</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Flyers, posters at transit stops</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Mailers to neighborhoods</td>
<td>X*</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Banners or billboard signs</td>
<td>X**</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Newspaper</td>
<td>X*, X*, X*</td>
<td>X*, X*</td>
<td>X*, X*</td>
</tr>
<tr>
<td>Radio</td>
<td>X**</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Local event presentations</td>
<td>X**</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Market website</td>
<td>X**</td>
<td>X*</td>
<td>X**</td>
</tr>
<tr>
<td>Social media site</td>
<td>X**</td>
<td>X**</td>
<td>X**</td>
</tr>
</tbody>
</table>

* Least effective means of SNAP/EBT promotion
**Most effective means of SNAP/EBT promotion

Table 6 depicts the characteristics related to SNAP operations for each market. It is important to note that the reported effectiveness of the SNAP/EBT promotion strategies is based on the market managers’ perspective. The study did not attempt to determine how customers knew about SNAP at the market.

High Springs Farmers’ Market

Everyone in this community, no matter where they come from, wants to do their part, and SNAP lets SNAP-users do their part by supporting local farmers.

High Springs market manager
The High Springs farmers’ market is currently an independent market that runs every Thursday from noon until dusk, and on the first Saturday of each month from 9:00 a.m. to 2:00 p.m. The market has been in operation since 2001, when the city of High Springs first provided a site for vendors to legally park and sell fresh fruits and vegetables. The High Springs farmers’ market is presently located in a park-like setting adjacent to an assisted-living facility. There is a bus stop nearby, sidewalks lead to the market, and trees provide pleasant shade to customers and vendors. Public restrooms and trash bins are available. Plans are underway for a new market site. Slated for completion in late 2012, the site will feature a community kitchen and large pavilion.

The market’s only paid staff is the market manager. Having held this position for the last eighteen months, the manager oversees market operations, finances, vendors and volunteers, fundraising, community outreach, and activities tied to the construction and completion of the new facility. The market averages 25 vendors, but during the winter months the number can swell to 50. There were 31 market vendors on the day of survey, of which 19 were food vendors. The other vendors sell plants, flowers, health and beauty products, and artisan wares. The market accepts cash, credit and debit cards, and EBT cards; additionally, some vendors accept personal checks.

The High Springs farmers’ market is self-sustaining, with the market receiving revenue mainly through flat-rate vendor fees, local fundraising events, business sponsorships and donations. In addition, the manager reported that numerous community members donate their time and efforts in support of the market. The manager was not able to provide monthly or annual sales figures.

The market sells a wide variety of food products: fresh produce, breads and baked goods, eggs and dairy products, specialty foods (i.e., honey, spices, jams), and food-bearing plants. There is at least 1 poultry vendor (free-range chicken) and 1 seafood vendor available year-round. Prepared foods, or hot entrée items, are sold during the winter months. On the day of survey, 11 of the 19 food vendors offered fresh fruits and vegetables, including organic varieties.
As part of its outreach efforts, the market partners with local schools and holds fresh-food centered events. Lacking electricity and water at its current site, the market plans to use the community kitchen at its new facility to host cooking demonstrations that will educate residents about preparing seasonal, local and organically grown food. Additionally, 501 (c) (3) organizations are welcome to use the market free of charge, for their fundraising efforts.

High Springs market was the first farmers’ market in the state of Florida to accept SNAP benefits. According to the manager, High Springs is a diverse community with a large number of people relying upon food stamps; having SNAP at the market is viewed as a way to serve the whole community. In support of the SNAP program launch in 2006, the city of High Springs was awarded a grant from the Project for Public Spaces, through funding from the Kellogg Foundation. The manager estimated, in a given day, 15 to 20 customers use the EBT system to shop with their SNAP benefits. The transaction fee tied to each EBT transaction is paid by the City of High Springs.

The market has one EBT terminal and uses a token system, with green tokens dispensed to credit and debit card customers and yellow tokens to SNAP customers. The manager’s assistant handles all EBT terminal transactions at the customer information/EBT booth. Signs that read “EBT/SNAP Accepted Here” are posted at the central information/EBT booth and the food vendor stalls. The roadway signs advertising the market, posted at the market entrance and near student pick-up lanes at local schools, do not include EBT/SNAP information.

The market manager observed that participating in SNAP attracts families and seniors who may not ordinarily visit the market: knowing they can come out, socialize, and use their SNAP to eat healthy is making a difference for them. On the other end, the manager emphasized that having SNAP customers boosts market sales and farmers’ revenue. The manager went on to say that, everyone in this community—no matter where they come from—wants to do their part: SNAP enables SNAP users to do their part by supporting local farmers.

The manager cited the manner in which SNAP benefits are allocated as a barrier to SNAP participation by markets. The manager went on to say that SNAP recipients seem to spend all their benefits at once, and then come to the market with any leftover benefits. The
manager suggested that, if SNAP were structured so that recipients had to use a portion of their allotment toward fruits and vegetables, it might help make it easier for markets to serve more recipients.

The market does not participate in any spending incentive programs, such as Wholesome Wave Double Value Program (WWDV) which provides a dollar for dollar match on produce purchases for SNAP clients. The market manager stated that none of the customers have inquired about bonus programs or coupons. The manager explained that the customers know what they want to buy and how they will buy it: The ability to use SNAP benefits for locally grown fruits and vegetables is the primary incentive for SNAP recipients to shop at the High Springs farmers’ market.

Promotional strategies used by the market to raise awareness of the market’s SNAP-participation include distribution of printed materials at health care facilities and local businesses, banners and signs at schools, newspaper and radio advertisements, and EBT/SNAP information on the market’s website and social media sites (Facebook). The market manager perceived the school signage, radio ads, market website and Facebook to be the most effective approaches, with newspaper ads being the least effective.

In catering to the needs of a diverse customer base, the market aims to include food items for everyone’s tastes. To this end, products from outside the region, such as Latin food items grown in South Miami, are offered at the market. The market also plays a wide variety of music to foster a welcome environment where everyone can feel comfortable. The manager emphasized that the market makes its customers aware that healthy, local foods are available here at affordable prices.

The manager noted that the ability to use SNAP to purchase junk foods helps fuel the obesity epidemic and rising health care costs. The manager said that when people eat a healthy diet, they feel better, they want to continue to eat healthy, and the cycle continues. The manager suggested that health-related agencies could do more to raise awareness among SNAP users and lower income households about the benefits of eating fresh, healthy foods and how the farmers’ market fits into this.
Sanford Farmers’ Market

EBT at the market is helping to change the stigma attached to food stamp users, and the image associated with farmers’ markets as being exclusive and expensive.

Sanford market manager

The Sanford farmers’ market, founded in 2007 by its current manager, is recognized as the largest and longest running farmers’ market in Seminole county. Initially an independent market, the market is currently operated by the City of Sanford and is open every Saturday from 9:00 a.m. until 2:00 p.m. Located in the center of downtown historic Sanford’s Magnolia Square, the market features brick cobblestone walkways and a central fountain area that offers shade and seating. The market is surrounded by a variety of small retail shops and cafes, and a public bus stop is located across the street. At the time of the site visit, there were no public restrooms.

The market has one paid market manager, who is considered an employee of the city. The manager is responsible for financial management, including budgeting and accounting. The manager also handles fundraising, grant applications, managing volunteers and vendors, community outreach and special events, and design and fabrication of promotional materials.

The number of vendors at the Sanford market ranges from 20 to 25. There were 21 vendors present on the day of the site visit, with 11 vendors selling food items. Plants, jewelry, and home and garden-related products are also sold. A children’s tent features various activities such as crafts and face-painting. Cash, checks, and credit, debit and EBT cards are accepted.

The primary revenue source for the Sanford market comes from the vendors, who pay $20 for each Saturday of market participation. In addition, the manager pays out-of-pocket for live music, EBT transaction fees, and the monthly vendors’ tax. The manager also reported that all operational costs tied to the start-up of the market were covered by the manager’s personal funds. Aside from SNAP/EBT, the market manager does not keep track of annual sales information, as vendors maintain their own records and are not required to report sales amounts. The manager estimated last year’s EBT and credit card sales ranged from $500 to $1000 per month, with $300 to $500 per month derived from SNAP transactions. The manager noted, the market has shown an increase in revenue each month, as a result of accepting SNAP benefits.
The Sanford market is a source of locally produced foods, including fresh fruits and vegetables, cheese, eggs, nuts, honey and jams, pickles and hot sauces, prepared entrée items, and a variety of breads and baked goods. Herb and tomato plants are also sold, and local citrus and seafood are available seasonally. At the time of the site visit, 2 vendors sold organically grown fruit and vegetables; the highest portion of vendors sold baked goods and snack items.

The market conducts community outreach through seasonal events, such as the Holiday Evening Market which features a toy and food drive. Additionally, works of art created by children visiting the market are posted throughout Sanford, in memory of community triumphs and tragedies.

In April 2010, the Sanford market became the first farmers’ market in the central Florida region to accept SNAP benefits. According to the manager, when the market began to show signs of becoming trendy, the manager wanted to do more to make the market accessible for everyone. The city initially declined the manager’s proposal for SNAP/EBT participation. As the local economy worsened and the number of SNAP applicants mounted, the city grew more receptive and granted the manager permission to apply for SNAP-authorization.

The first two years of Sanford’s EBT operation and promotion has been funded by a $37,770 grant from the USDA, as part of a national effort to encourage people on nutrition subsidies to shop at farmers markets. According to the manager, 10 to 20 customers use the EBT system to shop with their SNAP benefits in a given day. The market has one EBT terminal and uses a token system: SNAP customers use their EBT cards to purchase tokens in $1, $5, or $10 denominations, and then use the tokens to buy food from participating farmers and food vendors. A market banner advertising EBT hangs above the EBT station at the information booth. Market flyers showing that the market accepts SNAP/EBT are also available at the EBT station. On the day of the site visit, there were no SNAP/EBT signs posted at the food vendor stalls; and, from most vantage points, the EBT banner was largely obstructed from view by the information booth’s overhead canopy.

As a benefit in accepting SNAP, the manager mentioned that EBT operation at the market is helping to change (1) the stigma attached to food stamp users, and (2) the image
associated with farmers’ markets as being exclusive and expensive. At the same time, the manager identified the difficulty in disproving the myth of high prices at farmers’ markets, and in conveying that all people are welcome, as key challenges for the market. The manager also acknowledged that getting the word out about SNAP/EBT at the market is a slow process and oftentimes a source of frustration. One of the barriers facing the Sanford farmers’ market, although it is not known whether it is related to SNAP operations, is the recent loss of vendors. The manager explained that with the surge of new markets in the region, nearly half of the Sanford market vendors have been lured away by offers for discounted vendor fees and such.

The Sanford farmers’ market does not offer any type of coupon program to SNAP customers. Approximately one year after the market began accepting SNAP benefits, the manager approached the city in regard to implementing an incentive program. The manager was informed that the city was not in a position to fund the program and was not interested in pursuing the matter.

Promotional strategies used in spreading the word about SNAP at the Sanford farmers’ market include newspaper advertisements, distribution of flyers to local residences, Goodwill, Salvation Army, and local libraries, and posting EBT/SNAP information on the market’s website and on the social media site Facebook. The manager remarked that the response from SNAP/EBT recipients through Facebook has been phenomenal, and perceives this as the most effective way to spread the EBT message. Newspaper advertisements, flyers to surrounding residences, and the market’s website were rated the least effective.

Toward addressing the needs of a diverse customer base and promoting a welcoming atmosphere, the manager noted that food vendors are reminded to keep prices affordable and are encouraged to hold weekly specials. The manager also mentioned the market requires all vendors selling SNAP-eligible foods to participate in the SNAP program. Additionally, the manager explained that the market tokens were purposively designed to reduce any discrimination between those who shop with SNAP and those who do not. (The market’s EBT tokens bear a subtle difference on the backside, in order to track SNAP dollar spending at the market.)
Toward supporting the role of farmers’ markets in SNAP operations, the market manager wished that local community groups, health clinics and other social service agencies would be more receptive to informing clients that their SNAP dollars are welcome at the farmers’ market.

**Upper East Side Farmers’ Market**

The ability to accept SNAP benefits has advanced our market in its mission to support local economy, local farmers, and local community by giving real people real food.

Upper East Side market manager

The Upper East Side farmers’ market has been in operation since February 2011 and is managed by Urban Oasis, a 501 (c) (3) organization. In addition to operating 2 other farmers’ markets, Urban Oasis engages the community in creating a culture of healthy, locally grown food through the conversion of residential yards into environmentally friendly, urban gardens. The market operates every Saturday from 9:00 a.m. until 2:00 p.m.

Approximately one month prior to site visit, the market had relocated to city-owned Legion Memorial Park. Sandwiched between an upscale neighborhood and a poorer one, the market serves as common grounds for the residents of both. Positioned just outside the park entrance, the market fronts the heavy traffic of Biscayne Boulevard. While this high-speed vehicular traffic could be regarded as an unpleasant feature, the manager perceived this as a positive attribute in providing market exposure.

Customers access the market by bike, car, or bus; a bus stop with a bench is located just a few steps away. Paved, accessible sidewalks lead to a grassy area where the vendors set up their tents and tables. Within one-half mile of the market, public restrooms and plentiful parking are available on the grounds of Legion Park. At the time of the site visit, the market lacked seating, and the sole source of shade came from the fabric canopies of some of the vendors.

Having managed the market since its inception in 2011, the manager is the market’s only paid staff member. The manager handles finances and record-keeping, fundraising, grant application and reporting, oversight of volunteers and vendors, community outreach, and matters related to produce procurement and retail. The manager reported that members of the local
organization, Youth Lead, participate in a substantial share of the market duties. Through Youth Lead, lower-income students trained in youth activism and environmental justice are offered a 6 month paid apprenticeship with local farmers’ markets and community gardens. Working at the Upper East Side market, the youth acquire job skills through hands on experience in local food system operations. Youth lead apprentices are involved in the sale of produce, customer relations, and community outreach in spreading the word of EBT acceptance at the market.

The number of vendors at the Upper East Side market typically ranges from 10 to 18. In addition, each week the market manager gathers produce from up to 30 small local farms and brings it to the market, where Youth Lead members and local volunteers help sell the fresh food items. The manager explained that Upper East Side’s market model was born out of necessity, as the farmers in the region lack the time required to sell at the market. On the day of the site visit, 12 vendors were present, with 6 vendors selling food items in addition to the produce tent manned by Youth Lead. The other vendors sell landscape plants, goods made from recycled textiles, and other artisanal wares. The market accepts cash, credit/debit and EBT cards, and personal checks.

Revenue sources for the market include federal and state agencies, local business organizations, and market vendor fees. In 2011, the market was awarded $8,000.00 by the National Farmers’ Market Promotion Program. And, through the Miami-Dade Health Department, a federal stimulus grant funded by the Center for Disease Control recently provided the Upper East and Brownsville markets (also operated by Urban Oasis) with $35,000. The market manager reported $60,000 in annual produce sales and $5000 in SNAP sales; annual sales figures for the other vendors were not known.

The market sells a diverse assortment of seasonal fruits and vegetables, all locally grown within 150 miles of Miami. While fresh produce comprises the bulk of the foods available, organic breads and baked goods, eggs, hormone-free sausage and jerky, organic rice, and specialty foods including guacamole, salsa, honey, and jams are also sold. Guarapo (sugar cane juice) and made-to-order beverage blends of fresh fruit served in coconut shells tend to sell out quickly.
On the day of the site visit, the produce tent featured items from more than a dozen local farmers. Volunteers encouraged customers to sample the flavors of lesser known varieties, such as caimito (star apple) and mamey (a tropical fruit prevalently grown in Mexico and Cuba). Food labels identifying the origin (farmer’s name and farm location) and growing method (organic, spray-free, and conventional) were placed near each product. Several of the farmers stopped by the market to observe the flow of sales and chat with customers, offering advice on food preparation and growing methods while inquiring about family matters and the like.

Upper East’s community outreach includes operating farm stands at community events, conducting health fairs in conjunction with the Miami-Dade Health Department, and bringing a USDA representative to the market to assist customers in applying for SNAP. The market also holds monthly cooking demonstrations that emphasize how making meals with fresh fruits and vegetables is healthier and less expensive. Building the community around the growing and eating of local food, events are also organized at small farms and urban gardens where produce and seeds are traded, and food and garden demonstrations are held. To help close the food loop, the market accepts donations of fresh produce scraps from customers and vendors. At the end of market day, Youth Lead interns deliver the compost material, via bicycle, to a nearby urban farmer.

The market has been authorized to accept SNAP since it first opened in February of 2011. According to the manager, accepting SNAP at the market fit the core mission of the organization of making fresh local food accessible and affordable to everyone. The manager estimated that 8 to 10 customers shop with their SNAP benefits on any given day. During the course of the market’s first year in operation (47 Saturdays), the market had over 70 new SNAP customers.

In place of a central EBT booth, the market operates one EBT terminal at the produce tent; and, although tokens are available, they are not commonly used. After customers select produce items, Youth Lead interns use brown paper bags to tally the food prices by hand, and payment is processed for the amount due by swiping SNAP customers’ EBT cards. A banner is displayed inside the produce tent, informing shoppers that SNAP/EBT is accepted at the market.
At the time of site visit, the road signs placed in front of the market did not include SNAP/EBT advertising.

The market manager observed that participating in SNAP helps increase market revenue while reaching a diverse audience. The manager felt that offering SNAP for lower income shoppers helps reduce the stereotype of farmers’ markets as expensive boutique marketplaces that cater to people with more money. The manager expressed that SNAP operations have advanced the market in its mission to support local economy, local farmers, and local community by giving real people real food that is healthy and local. The amount of documentation and the time consuming application process, particularly for managers that are already overworked and underpaid, were mentioned as potential barriers to SNAP participation by farmers’ markets.

The Upper East Side market uses an incentive program to encourage SNAP customers to visit the market. Wholesome Wave, a nonprofit funded by national foundations, individual donations, and partnerships with government agencies and community organizations, has provided the market with $16,000 in funding over the past 18 months. The Wholesome Wave Double Value Coupon Program (WWDV) gives SNAP users an extra $10 in free produce when they spend $10 in produce at the market.

The manager explained, given the size and structure of the market, the decision was made to forego the paper coupons ordinarily used for promoting and redeeming WWDV. Instead, the $10 is simply matched at the point of sale. The manager mentioned, when space permits, small signs advertising the WWDV Program are posted on the produce tables. On the day of site visit, WWDV was not visibly advertised. After working their way through the produce line, a number of customers were pleasantly surprised to learn that they could in fact obtain $20 worth of produce for $10.

The manager noted that the price-matching incentive at the market could be more effective, and explained that transportation is a major impediment toward getting lower-income shoppers to show up when the market is open for just a few hours, one day each week. The manager believed that the quality of the produce is the primary reason why lower income shoppers come out to the market: The spending incentive is initially important in drawing new
customers, but it lessens in importance as people grow used to shopping at the farmers’ market and get hooked on the quality and the experience. The manager felt that the market would ultimately be capable of maintaining a SNAP customer base without the aid of the spending incentive.

Strategies used in promoting SNAP participation at the Upper East Side farmers’ market include distribution of printed material (flyers and posters) to health care facilities, local businesses, and local transit stations, post cards to neighborhood residents, newspaper advertisements and press releases for special events, and posting of SNAP/EBT acceptance on the internet (market website and Facebook). As aforementioned, through community outreach efforts, Youth Lead interns also help spread the word about SNAP/EBT at the market. The manager remarked that it was difficult to determine the impact of the strategies utilized. However, the manager singled out the market’s visual presence afforded by its physical location, as key. Additionally, the manager perceived the website and social media sources as highly effective.

The manager stated, in working toward satisfying an ethnically and socio-economically mixed customer base, the market maintains a high level of integrity in its commitment to understanding the needs of the communities it serves. According to the manager, a good number of the market’s vendors reside in lower-income communities. Living in Little Haiti, the market’s paid musician has also become a regular vendor at the market. Additionally, the Youth Lead interns working the produce tent are from impoverished neighborhoods such as Liberty City. The manager said spreading the message that the market values all its customers--of all economic strata-- while communicating that the market’s mission is to reach those financially less privileged, has helped the market attract and retain lower income customers.

The manager suggested that Health Centers should actively support the role of farmers’ markets in combating obesity and diabetes, and should spread the word that buying local produce supports one’s own health as well as the health of the local economy. The manager added that the Upper East Side market has a strong partnership with the local Health Center: To help introduce people to the farmers’ market, Jesse Trice Community Health Center purchases $10 market tokens and distributes them to clients during dietary counseling sessions. The
manager also suggested that Double Value and other financial incentive programs at farmers’ markets should be restricted to the purchase of locally grown food products.

This section has presented key findings as well as rich market profiles, garnered from the in-depth interviews with the study’s market managers and from the observations recorded during site visit at each of the markets. Diversity in market settings, challenges and benefits to market participation in SNAP, and strategies for building the SNAP customer base have been uncovered in an attempt to gain understanding of the pioneering efforts of these SNAP-participating farmers’ markets.

Directing the analysis toward the demand side, the following sections present and discuss the results for the study’s market patron-respondents. Distribution of data is arranged in table and graph formats: Frequency of response is shown as count (N) and relative frequency distribution is shown as percentage (N%). With 1 missing response in the employment field and 1 missing for race/ethnicity, the tables report ethnic and employment-related data for 175 respondents.

Above 200% poverty (N=102) and below 200% poverty (N=74) are used as a metric for higher and lower income respectively. As stated previously in the data analysis section, below 200% poverty is considered the threshold for qualification of federal assistance programs, including SNAP. The below 200% poverty group is comprised of SNAP shoppers (N=29) as well as SNAP-less shoppers (N=45). The SNAP-less shoppers are respondents that qualified as being of lower income or of poverty, based upon reported household income and size, but who reported as not being SNAP recipients at the time of survey. (71%, 32/45 of SNAP-less have reported annual household incomes of $20K or less)

Bearing in mind the study’s context of SNAP operations, and given the distribution of respondents across income categories, results for farmers’ market shopping behaviors and food-transaction related attitudes are largely drawn from the scale of above and below 200% poverty. Within the below 200% poverty group, differences in demographic characteristics and farmers’ market behaviors and attitudes are examined across respondents who use SNAP benefits as well as those who do not.
Farmers’ Market Demographic Landscape Results

In order to examine how income and other individual characteristics relate to the behaviors and attitudes tied to farmers’ market usage, the patron demographic landscape must first be uncovered. This section provides findings toward answering the questions concerning the consumer demographic of the SNAP-authorized markets under study. Distribution of demographic data is provided in tables 7 through 10, with the highest values in bold type. Table seven provides participant responses for gender, age, race/ethnicity, and education, for each farmers’ market, as well as in aggregate. Table 8 provides responses for the individual characteristics of employment, household income, 200% poverty as income, and SNAP recipiency. Tables 9 and 10 provide more in-depth information regarding shopper demographics, by showing individual characteristics by SNAP status and by income level. Some of the data shown in the tables is also presented in graph form, in figure 6.

Table 7: Gender, Age, Ethnicity, and Education by Farmers’ Market

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<thead>
<tr>
<th>INDIVIDUAL CHARACTERISTICS</th>
<th>HIGH SPRINGS (HS)</th>
<th>SANFORD (SAN)</th>
<th>UPPER EAST (UE)</th>
<th>TOTAL</th>
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<td>N</td>
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<td>N%</td>
<td>N%</td>
<td>N%</td>
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<td>39</td>
<td>42.4%</td>
<td>8</td>
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<td>RACE/ETHNICITY</td>
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<td></td>
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<td></td>
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<td>Hispanic</td>
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<td></td>
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</tr>
<tr>
<td>College degree</td>
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<td>26</td>
<td>59.1%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>92</td>
<td>52.3%</td>
<td>44</td>
<td>25.0%</td>
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Table 8: Employment, Income, and SNAP Status by Farmers’ Market

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<tr>
<th>INDIVIDUAL CHARACTERISTICS</th>
<th>HIGH SPRINGS (HS)</th>
<th>SANFORD (SAN)</th>
<th>UPPER EAST (UE)</th>
<th>TOTAL</th>
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<td></td>
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<td>N</td>
<td>N%</td>
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<td>EMPLOYMENT</td>
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<td>Unemployed</td>
<td>13</td>
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<td>22.7%</td>
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<td>Working</td>
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<td>47.2%</td>
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<tr>
<td>Retired</td>
<td>35</td>
<td>38.5%</td>
<td>7</td>
<td>15.9%</td>
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<td>16.3%</td>
<td>4</td>
<td>9.1%</td>
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<tr>
<td>$10-20K</td>
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<td>25.0%</td>
<td>10</td>
<td>22.7%</td>
</tr>
<tr>
<td>$21-40K</td>
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<td>15.9%</td>
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<td>$41-60K</td>
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<td>$61-80K</td>
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<td>&gt;$80K</td>
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<td>9.8%</td>
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<td>INCOME by 200% POVERTY</td>
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<tr>
<td>Above 200% Poverty</td>
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<td>47.8%</td>
<td>26</td>
<td>59.1%</td>
</tr>
<tr>
<td>Below 200% Poverty</td>
<td>48</td>
<td>52.2%</td>
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<tr>
<td>SNAP STATUS</td>
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<tr>
<td>SNAP recipient</td>
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<td>16.3%</td>
<td>8</td>
<td>18.2%</td>
</tr>
<tr>
<td>Non-recipient</td>
<td>77</td>
<td>83.7%</td>
<td>36</td>
<td>81.8%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>92</td>
<td>52.3%</td>
<td>44</td>
<td>25.0%</td>
</tr>
</tbody>
</table>

As women customarily handle most of the household food shopping, the finding that the majority of the respondents were female (76%; 133/176) was of no surprise and accords with the literature. The sample was also skewed toward white, with the ratio of white to non-white respondents as 72% (126/175) to 28% (49/175) respectively. Although white shoppers were the majority across all 3 markets, the overall number of shoppers reporting as white was lower than the findings in other North American farmers’ market studies (e.g., Conner et al., 2010). Of the 49 non-white respondents, 21 (43%) identified as African American, 12 (25%) as Hispanic, 6 (12%) as Asian, 4 (8%) as Native American, and 6 (12%) reported as other. Given the sample...
size, subsequent analyses for ethnicities will utilize the classification non-white to represent all ethnic identities that did not report as white.

The distribution for age was approximately symmetric, with a skewness value of -0.029. (According to Bulmer (1979), skewness values from -0.5 to +0.5 constitute approximate symmetry). Although the leading age category was 40-59 years (43%; 72/176), those who were not middle-aged (under 40 years, 60 years and over) made up 57% (101/176) of the market study sample. A relatively high number (46%; 81/176) of respondents did not have a college degree, and approximately 41% (71/175) were non-working (unemployed or retired).

Mean household income was $45,000; and distribution of income was approximately symmetrical with a skewness of 0.068. At the aggregate level, distribution of the data was found to be roughly bimodal: There were nearly as many with reported earnings of $10,000-$20,000 (21%; 37/176), as those with reported earnings in excess of $80,000 (22%; 39/176). Additionally, the same number of shoppers (12.5%; 22/176) reported annual earnings of less than $10,000, as those who reported earnings of $61,000-$80,000. The median range for household income for the High Springs farmers’ market was $30-$39,000, with more than 41% (38/92) of High Springs' patrons reporting earnings of $20,000 or less, and 52% (48/92) characterized as below 200% poverty. In the context of the study sample, the market emerges as a lower-income farmers’ market. In addition, 31% (15/48) of those below 200% poverty reported as SNAP shoppers. Approximately 58% (53/92) of High Springs’ participants had less than a college degree; and, the gainfully employed category contained only 47% (63/91) of the market's patron-respondents. Nearly 43% (39/32) of participants comprised the older-age bracket of 60 years or more.

The Sanford farmers’ market, with a median household income range of $40-$49,000, and 41% (18/44) of respondents below 200% poverty, appears as a lower-middle income farmers’ market. Within the below 200% poverty group, 44% (8/18) indicated that they receive SNAP benefits. While 59% (26/44) of Sanford respondents were college graduates, nearly one-fourth (23%; 10/44) reported as being unemployed. The majority (52%) of the Sanford sample were middle-aged.
Upper East, with a median income range of $50,000 to $59,000, and 20% (8/40) classified as below 200% of poverty, emerges as a middle income farmers’ market. Seventy-five percent (30/40) of the customers surveyed at Upper East held college degrees and 85% (34/40) were employed. Of interest, over one-third (36%; 14/39) reported as non-white. Upper East’s age distribution leaned toward a relatively younger crowd, with 47.5% (19/40) being 40 years of age or less.

Figure 6: Shopper SNAP Status and Income Level by Farmers’ Market

Figure 6 shows the percentage of shoppers for SNAP status, as well as for income level, by farmers’ market. In aggregate, 58% (102/176) respondents comprise the above 200% poverty level group and 42% (74/176) comprise the below 200% poverty group. SNAP shoppers comprised 16.5% (29/176) of the study’s patron-respondents, and made up 39% (29/74) of the lower income grouping. At time of survey, 15% of the total U.S. population participated in the national food stamp program; the share of Florida’s population participating in SNAP was 17.8% (Food Research and Action Center/FRAC (a); March 2012)
Table 9: Gender, Age, Ethnicity, and Education by SNAP Status and by 200% FPL

<table>
<thead>
<tr>
<th>INDIVIDUAL ATTRIBUTES</th>
<th>BELOW 200% POVERTY</th>
<th>ABOVE 200% POVERTY</th>
</tr>
</thead>
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<tr>
<td></td>
<td>SNAP (N=29)</td>
<td>SNAP-LESS (N=45)</td>
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<tr>
<td></td>
<td>Count</td>
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<tr>
<td>GENDER</td>
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</tr>
<tr>
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<tr>
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<tr>
<td>&lt;40</td>
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<td>60 +</td>
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<td>RACE/ETHNICITY</td>
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<tr>
<td>White</td>
<td>13</td>
<td>44.8%</td>
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<tr>
<td>African American</td>
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<tr>
<td>Hispanic</td>
<td>2</td>
<td>6.9%</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>13.8%</td>
</tr>
<tr>
<td>Did Not Report</td>
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<td></td>
</tr>
<tr>
<td>EDUCATION</td>
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<td></td>
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<tr>
<td>&lt;College degree</td>
<td>23</td>
<td>79.3%</td>
</tr>
<tr>
<td>College degree</td>
<td>6</td>
<td>20.7%</td>
</tr>
</tbody>
</table>

Toward further examination of the individual characteristics of farmers’ market patrons, table 9 displays the data for individual attributes gender, age, race, and education by SNAP status as well as by income grouping. Employment and household income by SNAP status and by income grouping is shown in table 10. Dominant characteristics for the SNAP sample were female (79%; 23/29), middle age (41%; 12/29), non-white (55%; 16/29), less educated
(79%; 23/29), non-working (38% unemployed, 35% retired), and household income of $20,000 or less (93%; 27/29). There was nearly an equal share between those earning less than $10,000 (45%; 13/29) and those earning $10,000 to $20,000 (48%; 14/29).

Table 10: Employment and Income by SNAP Status and by 200% FPL

<table>
<thead>
<tr>
<th>INDIVIDUAL ATTRIBUTES</th>
<th>BELOW 200% POVERTY</th>
<th>ABOVE 200% POVERTY</th>
<th>TOTAL (N=74)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>SNAP (N=29)</td>
<td>SNAP-LESS (N=45)</td>
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</tr>
<tr>
<td>Count</td>
<td>N%</td>
<td>Count</td>
<td>N%</td>
</tr>
<tr>
<td>EMPLOYMENT</td>
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<td></td>
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<tr>
<td>Unemployed</td>
<td>11</td>
<td>37.9%</td>
<td>11</td>
</tr>
<tr>
<td>Working</td>
<td>8</td>
<td>27.6%</td>
<td>17</td>
</tr>
<tr>
<td>Retired</td>
<td>10</td>
<td>34.5%</td>
<td>17</td>
</tr>
<tr>
<td>Did Not Report</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HOUSEHOLD INCOME</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;$10K</td>
<td>13</td>
<td>44.8%</td>
<td>9</td>
</tr>
<tr>
<td>$10-20K</td>
<td>14</td>
<td>48.3%</td>
<td>23</td>
</tr>
<tr>
<td>$21-40K</td>
<td>2</td>
<td>6.9%</td>
<td>11</td>
</tr>
<tr>
<td>$41-60K</td>
<td>0</td>
<td>0%</td>
<td>2</td>
</tr>
<tr>
<td>$61-80K</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>&gt;$80K</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
</tbody>
</table>

For the below 200% poverty grouping as a whole, distribution of age ranges was relatively uniform, with roughly 40% (30/74) of shoppers reporting as older aged (60 years or more). Employment distribution was also found to be relatively uniform across the lower-income group, with retired (36.5%; 27/74) comprising the largest share and unemployed (30%; 22/74) the smallest. Prevalent characteristics associated with the higher income, above 200% poverty level sample were female (72.5%; 74/102), middle age (52%; 53/102), white (83%; 83/101), college educated (72.5%; 74/102), employed (78%; 79/102), annual household income over $60,000, with some clustering in the $41,000 to $80,000 income brackets. The characteristics for the
higher income grouping are in line with the typified farmers’ market customer demographic that has been brought forth in the literature.

The local food systems literature contends that the future outcome of farmers’ markets relies upon the potential to draw increasing numbers of consumers to direct marketing of food. Likewise, the efficacy of a food justice agenda for farmers’ markets is dependent upon the ability to serve a diverse customer base that includes a robust share of lower-income patrons. With this in mind, it is important to take a closer look at the individual characteristics for the respondents visiting these SNAP-operating markets for the first time.

![Distribution of Individual Characteristics by First-Time Visitor](image)

**Figure 7: Distribution of Individual Characteristics by First-Time Visitor**

The stacked column chart in figure 7 represents a snapshot of the distribution of individual attributes for first-time visitors participating in the survey. In contrast to the prevalent farmers’ market customer demographic, the findings indicate that a relatively high proportion of newcomer respondents are characterized as non-white, of lower-income, below the age of 40, and less than college educated. As shown, the majority of first-time visitors were younger than 40; and the difference in the number of first-timers with and without a college degree was slight. Furthermore, the proportion of newcomers that were of lower income exceeded that of the higher
income newcomers. And, 50% of the lower income first-time visitors were characterized as SNAP recipients.

This section has detailed the demographic composite of the study’s SNAP-operating farmers’ markets, and has brought forth the variations across patron-respondent groupings, as well as across markets. While the overall sample resembles the usual farmers’ market customer demographic in terms of gender and race, and the majority of the above 200% poverty grouping parallels the profiled farmers’ market customer, the patron cohort revealed also reflects a more diverse mix of farmers’ market shoppers than is typically found in the literature. Although speculation regarding any trends cannot be drawn from these findings, the results hint at the potential for this study’s SNAP-authorized farmers’ markets to connect underserved consumers to a source of healthy food and social interaction with local farmers and other community members. The next section will examine farmers’ market shopping behaviors and how they relate to the individual characteristics of study participants.

**Farmers’ Market Shopping Behavior Results**

The literature has established that much remains to be known about shopping behaviors tied to local-food transactions, particularly in regard to lesser advantaged groups (e.g., Briggs et al., 2010). This section details study findings of the farmers’ market shopping habits of a broad cross-section of consumers. Table 11 and table 12 show the distribution of responses for food shopping behaviors at the farmers’ market level. Figures 9 through 12 display the findings for frequency of visitation, produce quantities and market as primary produce source, as well as spending amounts and payment methods. The graphs in the figures depict the relation between these behaviors and the individual characteristics of the patron-respondents.

As shown in Table 11, nearly 19% (33/176) of the sample was comprised of first-time visitors, 35% (62/176) of respondents identified visiting the farmers’ market weekly and approximately 64% (113/176) visit at least twice per month. Momentarily setting aside the first-time visitors in order to examine the more-established customer base, the proportion of respondents characterized as visiting High Springs, Sanford, and Upper East on a weekly basis is
45%, 15%, and 68% respectively. At the lower-income market of High Springs, 86% of the respondents visited at least twice per month; and, at the relatively higher income market, Upper East, close to 94% of patron-respondents also visited this often. This corresponds somewhat to the work of Feagan and Morris (2009) of a predominantly middle class farmers’ market, finding that 60% of the market’s patrons shopped weekly, and 83% shopped a minimum of twice per month. Meanwhile, Sanford patron-respondents appear to shop less frequently, with approximately 50% characterized as shopping at least twice in one month.

Table 11: Shopping Frequency and Produce Amount by Farmers’ Market

<table>
<thead>
<tr>
<th>SHOPPING BEHAVIORS</th>
<th>HIGH SPRINGS (HS)</th>
<th>SANFORD (SAN)</th>
<th>UPPER EAST (UE)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>N%</td>
<td>Count</td>
<td>N%</td>
</tr>
<tr>
<td>SHOPPING FREQUENCY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Time</td>
<td>17</td>
<td>18.5%</td>
<td>10</td>
<td>22.7%</td>
</tr>
<tr>
<td>1 X Week</td>
<td>34</td>
<td>37.0%</td>
<td>5</td>
<td>11.4%</td>
</tr>
<tr>
<td>2-3 X Month</td>
<td>31</td>
<td>33.7%</td>
<td>12</td>
<td>27.3%</td>
</tr>
<tr>
<td>1 X Month</td>
<td>5</td>
<td>5.4%</td>
<td>10</td>
<td>22.7%</td>
</tr>
<tr>
<td>Every Few Months</td>
<td>5</td>
<td>5.4%</td>
<td>7</td>
<td>15.9%</td>
</tr>
<tr>
<td>WEEKLY PRODUCE FROM FARMERS’ MARKET</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>3</td>
<td>3.3%</td>
<td>2</td>
<td>4.5%</td>
</tr>
<tr>
<td>Some</td>
<td>35</td>
<td>38.0%</td>
<td>28</td>
<td>63.6%</td>
</tr>
<tr>
<td>About Half</td>
<td>29</td>
<td>31.5%</td>
<td>10</td>
<td>22.7%</td>
</tr>
<tr>
<td>More Than Half</td>
<td>25</td>
<td>27.2%</td>
<td>4</td>
<td>9.1%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>92</td>
<td>52%</td>
<td>44</td>
<td>25%</td>
</tr>
</tbody>
</table>

Fifty-four percent of respondents (95/176) purchased at least half of their total household produce at the market; and, nearly 26% (45/176) used the farmers’ market as their principle produce source (>50% produce). Strikingly, 40% (16/40) of Upper East’s patron-respondents used the market as their primary produce source, while roughly 9% (4/44) of the Sanford group reported using the market to acquire most of their produce.
Table 12: Spending Amount and Payment Method by Farmers’ Market

<table>
<thead>
<tr>
<th>SHOPPING BEHAVIORS</th>
<th>HIGH SPRINGS (HS)</th>
<th>SANFORD (SAN)</th>
<th>UPPER EAST (UE)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMOUNT SPENT PER MARKET VISIT</td>
<td>Count</td>
<td>N%</td>
<td>Count</td>
<td>N%</td>
</tr>
<tr>
<td>$10 or less</td>
<td>15</td>
<td>16.3%</td>
<td>13</td>
<td>29.5%</td>
</tr>
<tr>
<td>$11-$15</td>
<td>18</td>
<td>19.6%</td>
<td>9</td>
<td>20.5%</td>
</tr>
<tr>
<td>$16-$20</td>
<td>27</td>
<td>29.3%</td>
<td>11</td>
<td>25.0%</td>
</tr>
<tr>
<td>$21-$30</td>
<td>19</td>
<td>20.7%</td>
<td>9</td>
<td>20.5%</td>
</tr>
<tr>
<td>&gt;$30</td>
<td>13</td>
<td>14.1%</td>
<td>2</td>
<td>4.5%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>92</td>
<td>52.3%</td>
<td>44</td>
<td>25.0%</td>
</tr>
<tr>
<td>PAYMENT METHOD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>85</td>
<td>92.4%</td>
<td>41</td>
<td>93.2%</td>
</tr>
<tr>
<td>Credit/Debit</td>
<td>13</td>
<td>14.1%</td>
<td>8</td>
<td>18.2%</td>
</tr>
<tr>
<td>SNAP benefits</td>
<td>11</td>
<td>12.0%</td>
<td>7</td>
<td>15.9%</td>
</tr>
</tbody>
</table>

The average spending range across all 3 markets was $16 to $20, with nearly 26% (45/176) of all shoppers spending this amount, as shown in table 12. While EBT (Electronic Benefit Transfer) technology provides customers with the option of using credit and debit cards for their purchases, findings show cash as the preferred method of payment for the study respondents: Approximately 90% (159/176) reported using cash, and 20% (35/176) used credit or debit cards. Of interest, 17% (5/29) of SNAP-recipients indicated that they pay with cash rather than use their SNAP benefits at the farmers’ market. It should be noted that respondents were able to select multiple responses to the question concerning payment methods, thus payment method totals for tabled data exceed 100%.

Delving deeper into farmers’ market shopping behaviors, figure 8 depicts frequency of farmers’ market visits by SNAP status and by income. It is important to make clear that this sub-sample does not include the 33 participants identified as first-time visitors. 80% (45/56) of lower income shoppers and 78% (68/87) of higher income shoppers visited the market at least twice per month. Within the lower income group, this percentage was the same, whether the respondents used SNAP or not. The SNAP shoppers were the only group in which everyone shopped the market at least once per month; and, the percentage of respondents characterized as weekly visitors was
the same for SNAP shoppers as it was for higher income shoppers. These findings show that while the visitation patterns of the study’s higher and lower income patrons are quite similar, the lower income SNAP users appear to visit slightly more regularly.

Figure 8: Shopping Frequency by SNAP Status and by Income

Given that consumption is a relevant metric of farmers’ market participation, it is also important to examine the extent in which patrons use the farmers’ market as a source for fresh produce. Figure 9 displays the amount of household produce that is purchased from the farmers’ market by the various income groupings. On average produce from the farmers’ market contributed to about half of the overall household produce across the income groupings. While 56% (57/102) of higher-income respondents used the farmers’ market for at least half of their produce (about half and more than half, combined), the number of SNAP shopper-respondents who brought home at least half of their total produce from the farmers’ market was 63% (18/29). On the other hand, the majority (51%; 23/45) of lower income SNAP-less shoppers indicated that they acquired some, (or less than half), of their produce from the farmers’ market.
In terms of using the farmers’ market as principal (>50%) source for fresh produce, the portion of SNAP shoppers and higher income shoppers was nearly the same, at 28% (8/29) and 29% (30/102) respectively. For the below 200% poverty grouping (SNAP and SNAP-less combined), 20% (15/74) identified the farmers’ market as their main produce source. Although the finding of a gap in procurement of produce across income groups is not unexpected, the results suggest that SNAP usage may enhance the ability to act upon preferences for high quality, locally sourced foods.

Turning the investigation toward consumer spending habits, the bar graph in figure 10 shows reported spending at the farmers’ market by SNAP status and by income. For each of the groups, the average spending range was $16-$20. According to the USDA, for FY2010 the average purchase amount for SNAP households shopping at farmers’ markets was $16.69. For the 200 percent poverty field, 54% (40/74) of lower income respondents spent $16-$30, and 40% (40/102) of higher income respondents spent the same. In other words, of the 80 respondents with reported spending of $16-$30, 50% (40/80) were of lower-income and the remaining 50% (40/80) were of higher income. As expected, distinct differences in spending emerge at the price point of more than $30. Less than 17% (29/176) of all patron-respondents reported spending
more than $30 at the farmers’ market; and, the number of higher income respondents in this spending category was three-fold the number of lower income respondents.

The most frequently reported spending category was $21-$30 for SNAP patron-respondents, $11-$15 for higher-income respondents, and $10 or less for SNAP-less respondents. In addition, 41% of SNAP shoppers, and 41% of higher income shoppers spent more than $20; 24% of SNAP-less shoppers reported spending within this same range. The differences in spending between the two lower-income patron groupings augment previous findings of the role that food assistance benefits play in generally lessening food hardship. Uncovering a positive association between the amount spent at the farmers’ market and the ability to use SNAP benefits, the finding casts a bit of light upon the potential of SNAP to impact spending power within local food systems.

Figure 10: Amount Spent at Farmers’ Market by SNAP Status and by Income

Examining the final food shopping behavior, figure 11 depicts the results for the various methods of payment by income groupings. Aforementioned, cash was found to be the preferred method of payment. This is not unexpected, as the point-of-sale technology that enables debit, credit, and SNAP card transactions has been a relatively recent innovation at direct agriculture

63
markets. Along these lines, work by Colasanti et al. (2010) uncovered a lack of awareness by lower-income shoppers that EBT/SNAP benefits were in fact accepted at the market. This resonated at time of survey, as a number of study participants shared their surprise in learning that they could use their SNAP cards to buy fresh produce and other food items at the market. Whether in addition to, or in lieu of redeeming SNAP benefits, more than half (59%; 17/29) of SNAP shoppers reported using cash for food purchases. While 17% of SNAP respondents reported paying strictly with cash, the finding also demonstrates that a substantial portion of the SNAP recipients in this study are not limiting their farmers’ market spending to federal food benefit allotments.

Review of the literature revealed that access to healthy foods can be limited by factors such as poverty and race (Allen, 2008; Guptill and Wilkins, 2002). Hence, it is important to consider whether access to fresh produce is an underlying factor that might lend bias to findings tied to market behavior. In answering the survey question, When you are not shopping at the farmers’ market, how easy or difficult is it for you to buy top quality, fresh produce in your neighborhood shopping area, respondents made one selection from (1) very easy, (2) easy, (3) difficult, and (4) very difficult. Across all groupings—SNAP, SNAP-less, and above 200% PL--the

![Figure 11: Payment Methods by SNAP Status and by Income](image-url)
mean, median, and mode response to this survey question was (3) difficult. Hence, none of the strata were shown to have a disproportionate degree of access to other sources of high quality produce. While difficulty in obtaining top quality produce is likely a motivating factor in market patronage, statistical analysis indicates that this factor does not lean more heavily toward influencing the shopping behaviors of any specific group.

This section has brought forth the various food shopping habits of farmers’ market patrons and how these habits relate to income and the ability to use SNAP at the market. While the average rate of visitation, amount of produce, and amount of spending appeared to be the same for both upper and lower income groupings, closer examination revealed that the lower income patron-respondents that used SNAP at the market had as much of a tendency to shop weekly, use the market as primary produce source, and spend in excess of $20, as the study's higher income market patrons. The following section presents findings from the investigation of various motives tied to farmers’ market usage.

**Food Transaction-Related Values Results**

In this section, findings are presented in the attempt to answer the questions concerning the values underlying the decision to use the farmers’ market. Toward greater understanding, the concept of embeddedness is utilized in examining how economic behavior is mediated by non-economic, socially based values that percolate in the farmers’ market environment. As the SNAP-operating markets serve a diverse customer base, it is important to examine the differences in attitudinal factors at more than one scale. Similar to the format in the previous section, results are first analyzed at the aggregate level. For closer investigation, responses are also analyzed across income groups and SNAP status. The mean scores calculated from the Likert scale responses, as well as the proportional values for the response of very important (V.I.; 4) are presented unless otherwise indicated.

The distributions of aggregate sample responses for the importance of the 14 factors that drive farmers’ market patronage are depicted in table 13. Factors with the highest mean
importance for shopping at the farmers’ market were support local (3.83; 85%), top quality (3.82; 86%), and good value (3.70; 75%). Albeit less strongly held than local farm support and top quality, nonetheless 80% of participants reported that the motive for socializing with food growers and other customers was either moderately or very important. The finding for support local holding the highest attachment differs from previous studies. Feagan and Morris (2009) and Conner et al (2010) also showed that support local was an important factor tied to coming to the farmers’ market; however, support local was superseded by freshness, top quality, and safety from food-borne disease.

Table 13: Importance of Various Factors tied to Farmers’ Market Usage

<table>
<thead>
<tr>
<th>How important are each of these factors in your decision of whether or not to shop at the farmers’ market?</th>
<th>Not Important (1)</th>
<th>Slightly Important (2)</th>
<th>Moderately Important (3)</th>
<th>Very Important (4)</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>N%</td>
<td>N</td>
<td>N%</td>
<td>N</td>
<td>N%</td>
</tr>
<tr>
<td>Top quality products</td>
<td>1</td>
<td>0.6%</td>
<td>4</td>
<td>2.3%</td>
<td>20</td>
</tr>
<tr>
<td>Good value</td>
<td>1</td>
<td>0.6%</td>
<td>6</td>
<td>3.4%</td>
<td>37</td>
</tr>
<tr>
<td>Product variety</td>
<td>1</td>
<td>0.6%</td>
<td>9</td>
<td>5.1%</td>
<td>58</td>
</tr>
<tr>
<td>Convenient location</td>
<td>2</td>
<td>1.1%</td>
<td>16</td>
<td>9.1%</td>
<td>55</td>
</tr>
<tr>
<td>Convenient hours</td>
<td>2</td>
<td>1.1%</td>
<td>15</td>
<td>8.5%</td>
<td>54</td>
</tr>
<tr>
<td>One-stop shopping</td>
<td>9</td>
<td>5.1%</td>
<td>48</td>
<td>27.4%</td>
<td>60</td>
</tr>
<tr>
<td>Food safety</td>
<td>6</td>
<td>3.4%</td>
<td>11</td>
<td>6.3%</td>
<td>21</td>
</tr>
<tr>
<td>Products support local farms</td>
<td>0</td>
<td>0%</td>
<td>3</td>
<td>1.7%</td>
<td>24</td>
</tr>
<tr>
<td>Organic or Chemical-free products</td>
<td>3</td>
<td>1.7%</td>
<td>6</td>
<td>3.4%</td>
<td>38</td>
</tr>
<tr>
<td>Info on food origin/farming methods</td>
<td>6</td>
<td>3.4%</td>
<td>27</td>
<td>15.4%</td>
<td>50</td>
</tr>
<tr>
<td>Able to use SNAP</td>
<td>105</td>
<td>61.4%</td>
<td>10</td>
<td>5.8%</td>
<td>17</td>
</tr>
<tr>
<td>Able to use coupons</td>
<td>85</td>
<td>49.1%</td>
<td>29</td>
<td>16.8%</td>
<td>24</td>
</tr>
<tr>
<td>Welcoming atmosphere</td>
<td>0</td>
<td>0%</td>
<td>13</td>
<td>7.4%</td>
<td>44</td>
</tr>
<tr>
<td>Opportunity to socialize</td>
<td>9</td>
<td>5.1%</td>
<td>26</td>
<td>14.8%</td>
<td>51</td>
</tr>
</tbody>
</table>

The factors are listed in the order in which they appeared in the customer survey. Statistical results are given for the calculated mean score for each factor, as well as count (N) and percent (N%) of responses on a scale of 1 (not important) to 4 (very important).
As the factor, able to use SNAP, applies most specifically to the study’s SNAP recipients, it is not surprising that this factor is ranked as least important (1.94; 23%) within the aggregate sample. Obviously, this result is biased as the SNAP shoppers comprise a 16.5% share of the sample population. However, of interest is the finding that nearly 29% of all respondents who do not receive SNAP benefits indicated that the ability to use SNAP was important (recorded response of 2, 3, or 4). This attitude was further supported at time of survey, as a substantial number of respondents remarked that it was important to have SNAP at farmers’ markets for those who need it. Ability to use SNAP will be revisited subsequently, under the investigation of discrete income groups.

Ability to use coupons (2.05; 20%) and one stop shopping (2.95; 33%) were also found to be the least important factors for shopping at the farmers’ market. Being tied to economic savings, coupon use is a measure of marketness. While coupons have recently been introduced as a component of spending incentive programs for SNAP recipients, only one market offered a spending incentive (WWDV), and the incentive was provided without the use of printed coupons. In addition, farmers’ market customers do not typically anticipate coupon redemption to be part of the farmers’ market shopping experience. For these reasons, the finding of low importance is not unexpected. With respect to the ability to do one stop shopping, the results are in line with the study by Conner, et al (2010) which found one stop shopping as amongst those least important to farmers’ market patrons. The remaining opportunity-cost factors, convenient hours and convenient location, hold less strength relative to many of the factors that are more closely tied to farmers’ market food shopping.

Table 14 provides the distribution of values for the attitudes tied to the food transaction experience by SNAP user and SNAP-less subgroups, as well by the lower-income and higher income classifications. For SNAP recipients, the offering of organic or chemical free products was found to be the strongest motivation for coming to the farmers’ market (3.90). In fact, 100% of SNAP patron-respondents reported that organic/chemical free was either moderately important (10%) or very important (90%). Similarly, 100% of SNAP respondents indicated that a welcoming
atmosphere (3.83) was either moderately important (17%) or very important (83%) in their decision to shop at the farmers' market. Supporting local growers (3.79; 83%) and safety from food-borne disease (3.79; 83%) ranked third in importance. In contrast, ability to use coupons (2.75; 29%), one-stop shopping (2.96; 32%), and information on food origin or growing methods (3.29; 50%) were least important for SNAP respondents.

The unexpected strength for organic/chemical-free is in striking contrast to other work in which the offering of organic or spray-free foods was shown to be a weak motive in farmers’ market attendance. For example, in a Michigan study by Colasanti et al (2010), organic or pesticide-free was the least important among 12 factors tied to the desire to use the farmers’ market. The strong focus on organics by the SNAP patron-respondents might be attributed to the fact that natural, organic and chemical-free has rapidly become a mainstream phenomenon which likely plays a part in steering food choices. The finding shows that lower income consumers are indeed interested in eating healthier, and that they value the farmers’ market as an alternative for buying products grown without chemicals and other harmful additives. This attitude is further supported by the strong expression for food safety, sharing the rank of third highest among the 14 factors.

The finding regarding the strong expression for the importance of supporting local, which presided over all cost-related factors, is suggestive of the high value the study’s SNAP shoppers place on the opportunity to contribute to the sustainability of communities by directing their SNAP dollars to the pockets of local food producers. The cost-related attribute good value (3.69; 79%), is ranked nearly midway among the 14 factors, for the SNAP group. It is worthy to recall that in addition to using SNAP benefits, 42% of SNAP patron-respondents reported also using cash for their farmers’ market purchases. It appears that, even when using household funds to augment SNAP benefits, the importance of good value is relatively low to other factors more closely associated with the farmers’ market experience. Of further interest, the mean values for the attitudinal factors show that 6 out of the 7 non-economic values linked to the farmers’ market experience hold greater importance than the opportunity for SNAP recipients to use their SNAP benefits (3.55; 66%) at the market.
Turning to the lower-income respondents that do not receive SNAP benefits, only one factor—top quality—held higher priority than economic concern: Following the primary motive of top quality products (3.89; 89%), good value (3.82; 82%) and support local farms were held equally important; followed by welcoming atmosphere (3.80; 80%). The matched strength for cost/good value and supporting local within this lower income subgroup relates to Hinrichs’ remarks concerning the competing forces of marketness and embeddedness in direct agriculture markets. While the lower income sample held a greater number of SNAP-less respondents, findings for the distribution in the strength of various motives across the SNAP and SNAP-less groupings hint that the opportunity to use SNAP may be loosening the tension within the weavings of the economic and non-economic tied to farmers’ market participation.

Similar to the SNAP patron-respondents, 100% of the SNAP-less respondents reported that a welcoming atmosphere was either moderately or very important. The prominent expression for welcoming atmosphere relates to previous studies finding a pleasant and friendly environment a key factor in farmers’ market participation by lower income groups (Colasanti et al., 2010; Grace, 2005). On the other hand, availability of organic or chemical free foods and concern over food safety were found to be relatively weak in importance for the SNAP-less group.

Though relatively low in overall importance, two of the factors tied to cost-in-time, convenient hours (3.49; 53%) and convenient location (3.49; 57%) were held as nearly equally strong by the lower income group. This may possibly be associated with transportation constraints, as was previously relayed by one of the market managers. The results are consistent with previous studies finding hours of operation and market location as constraints tied to farmers’ market usage for lesser-advantaged consumers (Colasanti et al., 2010; Briggs et al, 2010). In this light, the finding for the study’s SNAP shoppers, whereby the desire for a friendly, welcoming environment and the opportunity for social relations with vendors and market goers were more prominent than concerns for convenience, is rather striking.

As this lower income subgrouping does not receive SNAP benefits, and it was not feasible to determine whether all SNAP-less respondents were indeed eligible for such benefits, ability to use SNAP will not be considered among the variables ranked least important.
Consequently, the attributes with the lowest mean importance for SNAP-less shoppers were ability to use coupons (2.36; 37%), one-stop shopping (3.13; 42%), and obtain information on food growing methods (3.29; 49%). These are the same factors that SNAP shoppers identified as least important. As coupon usage helps stretch food dollars, it was expected that this factor would be of greater value to lower income consumers than responses indicated.

For the lower income grouping as a whole, the offering of top quality products (3.84; 88%) and the opportunity to support local growers (3.81; 82%) while shopping in a welcoming atmosphere (3.81; 81%) for organic or chemical-free foods (3.78; 82%) were the strongest motives behind farmers' market patronage. Additionally, these attributes ranked higher in importance than the opportunity for good value (3.77; 81%). For the upper income respondents, supporting local farms (3.84; 86%) and obtaining top quality products (3.81; 84%) at a good value (3.66; 71%) were the strongest motives for coming to the farmers' market. Opportunities for using coupons (1.72; 11%), being able to do one-stop shopping (2.87; 29%), and socializing with others at the market (3.11; 45%) were perceived as least important by this group. In contrast to the lower income group, the desire for shopping convenience as expressed in product variety (3.56; 62%), hours (3.52; 65%) and location (3.49; 60%) ranked higher in importance than interest in social relations or a friendly shopping environment.

While the strong draw for high quality products at farmers’ markets is well established in the literature, it is worthy of note that support local and top quality products ranked highest in importance for both the lesser and more highly privileged groupings. In fact, 99% of the lower income group and 98% of the upper income group identified support local as either moderately or very important. Of further interest, good value was expressed as either moderately or very important by 97% of lower income participants and 95% of upper income participants.

The discourse in the agrifood system literature has brought forth how the interplay among non-economic, embedded values and marketness values may be charged with tension, particularly for lesser-privileged consumers who may be more constrained by price considerations.
Table 14: Importance of Factors tied to Farmers’ Market Usage by SNAP Status and by Income.

<table>
<thead>
<tr>
<th></th>
<th>Below 200% PL</th>
<th></th>
<th>Above 200% PL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SNAP shopper</td>
<td>SNAP-less</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>(N 29)</td>
<td>(N 45)</td>
<td>(N 74)</td>
</tr>
<tr>
<td></td>
<td>Factor</td>
<td>Mean</td>
<td>% V.I.</td>
</tr>
<tr>
<td>Organic products</td>
<td>Top quality</td>
<td>3.89</td>
<td>88.9%</td>
</tr>
<tr>
<td>Welcoming</td>
<td>Support local</td>
<td>3.82</td>
<td>82.2%</td>
</tr>
<tr>
<td>Support local</td>
<td>Good value</td>
<td>3.82</td>
<td>82.2%</td>
</tr>
<tr>
<td>Food safety</td>
<td>Welcoming</td>
<td>3.80</td>
<td>80.0%</td>
</tr>
<tr>
<td>Top quality</td>
<td>Organic products</td>
<td>3.71</td>
<td>77.8%</td>
</tr>
<tr>
<td>Good value</td>
<td>Food safety</td>
<td>3.60</td>
<td>73.3%</td>
</tr>
<tr>
<td>Social opportunity</td>
<td>Product variety</td>
<td>3.53</td>
<td>57.8%</td>
</tr>
<tr>
<td>Product variety</td>
<td>Convenient Location</td>
<td>3.44</td>
<td>55.6%</td>
</tr>
<tr>
<td>Use SNAP</td>
<td>Convenient Hours</td>
<td>3.44</td>
<td>53.3%</td>
</tr>
<tr>
<td>Convenient Location</td>
<td>Social opportunity</td>
<td>3.40</td>
<td>55.6%</td>
</tr>
<tr>
<td>Convenient Hours</td>
<td>Food information</td>
<td>3.29</td>
<td>48.9%</td>
</tr>
<tr>
<td>Food information</td>
<td>One-stop shopping</td>
<td>3.13</td>
<td>42.2%</td>
</tr>
<tr>
<td>One-stop shopping</td>
<td>Use coupons</td>
<td>2.36</td>
<td>35.6%</td>
</tr>
<tr>
<td>Use coupons</td>
<td>Use SNAP</td>
<td>1.88</td>
<td>21.4%</td>
</tr>
<tr>
<td></td>
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<td></td>
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</tbody>
</table>

For each demographic group, the attitudinal variables are arranged in descending order of mean response, in order to show relative strength of each variable. Proportional values for the response ‘4’, Very Important (V.I.) are also provided. Factors tied to embeddedness are shaded green in order to depict the distribution of non-economic and economic-related variables across the sample groups.
With these points in mind, it is important to more closely examine how the factors good value and support local relate to income and other individual characteristics. Figure 12 depicts the proportional values for the response of good value and support local as being very important, by the 6 strata of annual household income.

![Importance of Good Value and Support Local by Household Income](image)

**Figure 12**: Importance of Good Value and Support Local by Household Income

The importance of support local is high across all income categories; and, regardless of income level (with the exception of $10K-$20K), support local consistently held higher significance than good value in the decision to use the farmers' market. It is interesting to note that as income rises, the importance of support local does not consistently rise, nor does the importance of good value consistently decline. The findings imply that, for the market patrons in this study, support for local farmers—as well as a focus on food costs—cuts across economic lines.

Taking a closer look at the expression for good value over support local within the $10,000 to $20,000 income grouping, differences are revealed from the perspective of SNAP status, as shown in table 15. Examining the mean value scores for the overall importance of the
two attributes, it is apparent that good value is in stronger focus, holding higher importance than local farm support for the SNAP-less shoppers. The finding suggests the use of SNAP may relate to a somewhat diminished focus on cost for lower income shoppers, allowing non-economic concerns to take on greater importance.

Table 15: Importance of Good Value and Support Local by SNAP Status, $10K- $20K Household Income

<table>
<thead>
<tr>
<th>Food-Shopping Attribute</th>
<th>Annual Household Income of $10K to $20K</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SNAP shopper (N14)</td>
</tr>
<tr>
<td></td>
<td>Very Important (4)</td>
</tr>
<tr>
<td>Good Value</td>
<td>79%</td>
</tr>
<tr>
<td>Support Local</td>
<td>86%</td>
</tr>
</tbody>
</table>

![Figure 13: Importance of Good Value and Support Local by Individual Characteristics](image-url)

Figure 13: Importance of Good Value and Support Local by Individual Characteristics
Figure 13 shows the percentage, by individual characteristics, for good value and support local as being very important in choosing where to buy food. For all strata within gender, age, and education, the charted columns indicate that supporting local held higher importance than obtaining good value. Additionally, with each advance in age, concern for good value and interest in supporting local growers also increased. Results also show that non-white and retired are the individual characteristics for which the significance of good value overshadows the expression for local farm support. While good value was stronger than support local for those characterized as retired, an equal number (80%) of unemployed identified good value and support local as very important.

It stands to reason that the unemployed may tend to view their economic situation as temporary, whereas retired individuals are more likely to be faced with the reality of drawing from a fixed income for the remainder of their years, hence maintaining higher regard for value/affordability. For the most part, these findings suggest a weak association between income and other demographic characteristics and the relevance of obtaining good value versus supporting local. On the other hand, the results highlight the competing interests in paying the farmer’s price and having to keep a keen eye on cost, particularly for those with limited means.

Figure 14: Importance of Support Local by Market Visit Frequency
The stacked bar chart in figure 14 shows the proportional responses in identifying local farm support as slightly, moderately, or very important, as determined by the rate of market visitation. (Data showed 0 responses for support local as not at all important.) With each increase in farmers’ market shopping frequency, the level of expression by those most attached to local farm support (response of very important) also increased. Of the respondents that shopped the market once every few months, 71% identified support local as very important. In contrast, over 93% of the weekly shoppers held support local as very important. While the nature of the sample did not warrant testing for statistical significance, the finding suggests a positive link between frequency of market visits and interest in local farm support, as it appears that the most frequent patron-respondents were those most attached to supporting local farmers. This finding is in line with the work of Thilmany, Bond, and Bond (2008) in which support of local was associated more strongly with market visitation rates rather than household earnings.

This section has examined the interplay of economic and non-economic factors held by patron-respondents surrounding the decision to frequent the farmers’ market. Key findings in this section are as follows: Local farm support and top quality products came before the importance of good value, for both higher and lower income groups. However, for lower income respondents that did not use SNAP, good value and support local competed as equally strong priorities. In addition, interest in local farm support was found to be associated more strongly with visitation frequency, than with income and other demographic characteristics. Importance of a welcoming environment was a distinct expression for the lower income group. For the study’s SNAP shoppers, interest in social relations was markedly strong, and numerous non-economic factors were held higher in importance than the opportunity to use SNAP benefits at the market. And, across all groupings, the factors tied to conventional food shopping and cost-in-time—convenient hours, convenient location, product variety, and one-stop shopping—held less strength relative to many of the factors more closely associated with local food shopping at the farmers’ market.
Study Limitations

As with any research endeavor, this study is subject to important limitations which constrain the interpretation of study findings. First, the personal constraints tied to time and travel distance placed a limitation on market sample selection for this study. While less than 10 percent of Florida’s farmers’ markets currently conduct SNAP business, SNAP market locations stretch from Homestead in the far south to Jacksonville near the northeastern border of the state. The distance between market locations, as well as the limited number of days of market operation influenced market selection. The second limitation is tied to the criterion of primary household food shopper in farmers’ market studies. As women tend to be the primary food shoppers, the decision to expand the sampling criteria to include others that contribute to household food shopping was based on the intent to reduce bias in the study. However, as expected, the majority of survey respondents were of female gender.

Third, the distribution of the sample resulted in under-representation of the views of lower income, non-white, lower educated consumers. It is worthy of note that during the time of survey, the manager of Upper East Side remarked that the market was experiencing a noticeable decline in SNAP shoppers. The manager related this phenomenon to the fact that word was slow to spread, particularly to those with limited means, regarding the market’s recent change in location. As farmers’ markets are dynamic social spaces, there is a strong likelihood that results fell short of capturing the markets’ full range of distribution for income and other individual patron characteristics. This constraint, as well as the voluntary method by which the respondents were recruited, contraindicated any testing for statistical significance or any generalization of findings to the greater population.

Fourth, while in-person surveying can be a cost and time-effective way of eliciting a greater number of completed surveys, study results may be biased due to racial barriers and the nature of self-response. Additionally, the self-reported information elicited from the market manager surveys is based on day to day experiences. Although this information provides formative insight and enriches the study context toward deeper analysis, a substantial portion is
anecdotal evidence; as such, the information is not completely verifiable. And lastly, the study represents a mere ‘snapshot’ in time. Consumer preferences, market conditions, and cultural norms evolve, necessitating further research.

Despite these limitations, this study is useful as it provides a starting point of foundational knowledge centered on the nascent efforts of Florida’s SNAP-participating farmers’ markets and the habits and attitudes of their customers. While the findings cannot be generalized, this study may serve as a springboard for more robust investigation and argument for change within alternative food systems. A key strength of this study is that, in applying the embeddedness concept to an understudied farmers’ market customer demographic, the study helps advance the embeddedness concept and its contribution toward the appreciation of local food system prospects.
CHAPTER SEVEN: CONCLUSIONS

Given the inequitable tendencies of today’s farmers’ markets, amidst America’s unprecedented crisis of food hardship and related disease, it is important to know whether and how SNAP operations can impact the public space of the farmers’ market and the behaviors and values of its participants. This work was carried out to discern the impacts that SNAP operations might have upon farmers’ markets and the participation of their customers. The study has laid groundwork in exploring the market dynamics and patron characteristics of three SNAP-authorized farmers’ markets located in Florida. The study has also extended the concept of embeddedness to better understand the values that drive farmers’ market participation by a culturally and economically diverse cohort of shoppers.

Following the reintroduction of each research question, a summation of results and the answers that were uncovered by analyses of the data obtained through the various survey instruments will be presented.

1. What are the environmental settings and operational logistics of SNAP-authorized farmers’ markets; and, what are the perceived benefits and challenges associated with EBT/SNAP operations at these markets?

Analyses of the farmers’ market manager interviews and on-site environmental assessments resulted in a rich picture of the unique context of each market. Overall, the farmers’ markets showed commonality in their EBT operations, and the mission to serve the SNAP users of each community was evident. The markets ranged from 1 to 11 years old, all were in pleasant surroundings with nearby public transportation, and each was the first in its region to accept SNAP benefits. In line with other studies, funding and revenue came from a variety of sources including government agencies and local businesses; vendor fees were the only revenue
common to all three markets. As Florida farmers’ market vendors are not required to report sales to market managers, general sales figures were not known. This has also been a limitation in other studies of U.S. farmers’ markets (USDA/FNS, 2012).

All markets utilized a central EBT station and token system for their SNAP operations, and 100% of the vendors selling SNAP-authorized foods were required to participate in SNAP customer transactions. The number of EBT customers varied between markets, with 15 to 20 EBT shoppers per week for the market with the longest running SNAP operation (6 years) and 8 to 10 EBT customers each week for the market with the youngest SNAP operation (1 year).

Market practices for fostering a welcoming environment included having vendors and volunteers that were of lower income and of color, and offering specialty crop products that appeal to a culturally diverse mix of clientele.

Contrary to previous studies, use of an incentive program was not commonly considered as a critical component to the success of implementing SNAP at these farmers’ markets. Hence, the finding that only one of the three markets offered a spending incentive program (funded through Wholesome Wave) was unexpected. One market perceived little demand for an incentive program from its customers, yet the manager also felt that an obstacle to growing the SNAP customer base was related to the fact that SNAP recipients are not required to use any part of their allotted benefits at the farmers’ market. While a spending incentive would give the market a way to compete with supermarkets for SNAP customers, the time and energy tied to funding and running an incentive program likely serves as a deterrent. In fact, the other market that did not use an incentive program attributed this to unwillingness by the governing body that owned the market, due in part to their perception of the incentive process as burdensome.

Of interest, the market with the incentive program utilized two approaches to attract and retain SNAP customers: In addition to the double value incentive offered to every SNAP customer in the check-out line, the market partnered with the local health department which purchased and then dispensed market tokens to SNAP clients during nutritional counseling sessions, encouraging SNAP clients to try the market out. While the other markets realized the importance
of strong advocacy from public health and other social service agencies, they also expressed frustration over the lack of this type of cooperative relationship. These sentiments echo the work of Briggs et al. (2010), showing lack of support by health care agencies as an obstacle to promoting SNAP at markets. The contrasting experiences emphasize the importance of connecting with affiliate players in the SNAP landscape, in the growing of a SNAP customer base.

Information collected from the market manager interviews also revealed the broad range of strategies utilized by the markets to promote EBT/SNAP, with the social media site Facebook being perceived as the most effective means, and newspaper advertising the least effective. While EBT/SNAP was advertised at each market site, a common theme was the lack of EBT/SNAP advertisement on any signs leading to market entry points. Specific reasons behind this oversight were not determined. EBT operational costs have been cited in the literature as deterrents to farmers’ market participation in SNAP (Briggs et al., 2010). While EBT costs were not an expressed concern by the managers in this study, the required time and documentation tied to the EBT application process was cited as an obstacle to implementing SNAP operations. In line with the work by Briggs et al. (2010), the time required for word to spread about SNAP being accepted at the market and lack of transportation for lower income shoppers were identified as challenges to attracting and retaining SNAP customers.

For the markets featured in this case study, the qualitative results indicate that success in SNAP operations center on providing access to healthy foods for a greater share of the community, enhancing economic viability of local farmers while strengthening community cohesion, and repositioning the farmers’ market away from the prevailing image as exclusive and expensive. However, the results also underscore that success in SNAP operations is contingent upon synergistic efforts toward building market capacity for promoting and sustaining these operations. From the richly detailed impressions garnered from the market manager surveys, it can be concluded that, despite the challenges and demands, SNAP operations are considered a viable means toward enhancing food security for these alternative food provisioning institutions.
2. What are the customer demographic characteristics of SNAP-authorized farmers’ markets; and, to what extent are SNAP-operating farmers’ markets attracting a more diverse customer base?

The survey results have provided a snapshot of the customer demographic landscape of the featured farmers’ markets. While the individual characteristics for the study participants were skewed toward female, white, and gainfully employed, the patron cohort revealed through these findings reflects a more diverse farmers’ market demographic than is typified in the literature.

Although other studies identify farmers’ market patrons in higher income brackets, 47% of the sample was characterized as being of lower income or of poverty. Customers with household incomes of $20,000 or less (59/176) and customers with household incomes in excess of $60,000 (61/176) held nearly an equal share in comprising almost 70% of the study participants. Across the markets, proportional distributions for respondents of higher income, above 200% poverty and lower income, below 200% poverty were roughly 50/50, 60/40, and 80/20.

The overall ratio of white to non-white shoppers was 72% to 28% respectively. Within the higher income group, 82% identified as white; however, the gap between white and non-white was markedly narrow for the lower income group with 58% identifying as white. Nearly half of the study population had less than a college education: approximately 73% of higher income shoppers held college degrees, while nearly the same amount of lower income shoppers were not college educated. Forty one percent of all patron-respondents were non-working (i.e., unemployed or retired); and, for the lower income group, two-thirds identified as non-working.

The survey data for the individual characteristics of first-time visitors also demonstrated expanded diversity of the farmers’ market customer demographic. The majority of first-timers identified as lower income and of poverty (55%). Fifty- two percent were younger than 40 years of age; and 42% were non-white. Close to half (48%) of the first-timers did not have a college degree, and 47% were non-working.

SNAP recipients comprised 16.5% of the study population; at time of survey, 17.8% of Florida’s population participated in the SNAP program. The dominant characteristics for the
SNAP patron-respondents were middle age (41%), non-white (55%), less-educated (79% had less than a college degree), and non-working (38% unemployed and 35% retired). Although it was not possible to determine SNAP eligibility for the lower income respondents who identified as not receiving SNAP benefits, reported income and household size qualified these participants as belonging to the below 200% poverty group. As 200% poverty is considered the cut-off for SNAP eligibility, there is reason to believe that a substantial number of respondents in the below 200% poverty group would indeed qualify for SNAP assistance. (Approximately 67% of the people who are eligible for SNAP actually participate in the program.) It is not unfair to speculate that the markets’ willingness to accept SNAP benefits is sending the message that the market is a welcoming place for lower income people, regardless of the desire to use or the ability to qualify for SNAP benefits.

This study did not determine the extent in which market acceptance of EBT/SNAP served as an initial draw for lower income patron-respondents. However, the findings regarding the expansion of the customer demographic in favor of the characteristics associated with lesser advantaged consumers may be suggestive of the early ripples of a demographic shift in diversity for direct agriculture markets. The demographic characteristics revealed specifically in the study’s SNAP shoppers provide evidence that the integration of SNAP/EBT into market practices is furthering the development of the social space of these farmer’s markets. However, the finding that roughly 61% of the below 200% poverty group were not SNAP recipients shows we cannot assume that SNAP operations are solely responsible for this expansion. Other factors, such as more mainstreaming of organics and the widespread surge in farmers’ market locations, are most likely contributing to increased farmers’ market participation by a broader cross section of society. Regardless of the degree in which SNAP acceptance is directly correlated with bringing lesser advantaged consumers to these markets, it can be concluded that SNAP operations are working as conduits for expanding the cultural and economic diversity that was brought forth in these survey results.
3. How do farmers’ market shopping behaviors relate to income characteristics of market patrons; and, does the ability to use SNAP impact the food shopping behaviors of lower income customers?

The survey results for market visitation frequency approximate the findings in the literature: At the lower-income market of High Springs, 86% of the respondents visited at least twice per month; while, at the relatively higher income market of Upper East, close to 94% of patron-respondents also visited this often. Aside from first-time visitors, the proportion of respondents characterized as weekly visitors for High Springs, Sanford, and Upper East was 45%, 15%, and 68% respectively. In addition, the majority (54%) of the study’s participants obtained at least half of all household produce from the market. Roughly 25% of study participants purchased more than half of their overall produce at the farmers’ market, thus relying upon the market as their principle produce source. However, this number varied widely across the markets, with 27% of High Springs, 9% of Sanford, and a striking 40% of Upper East’s patron-respondents using the market for the bulk of their produce. Findings in the local food system literature are scant in regard to the extent in which direct agriculture marketing serves as the main produce source for consumers; however, Feagan and Morris (2009) concluded that 8% of the market sample was using the farmers’ market for more than half of their fresh food purchases. The prevalent perception that high quality produce was difficult to obtain outside the farmers’ market corresponds with the results indicating that a relatively substantial number of study participants are relying upon these markets as viable outlets for locally sourced foods.

It is not known whether Sanford’s low rate of visitation and produce procurement, relative to the other markets, may be attributed to the finding regarding encroachment of new markets. Even though a comparative advantage for the Sanford market should rest in its capacity to accept SNAP payments, the nearby markets are likely a competing interest for the patrons of this market. In fact, the loss of farmer-vendors, as previously mentioned by the market manager, and the resultant effect on produce availability make this even more likely.
Hinrichs (2000), among others, has remarked that direct agriculture marketing demonstrates how power and privilege rests with the well-to-do, in their ability to prioritize their preferences for high quality food items and an enjoyable social excursion, over concerns tied to cost and convenience. One of the objectives of this study was to determine whether greater participation in the farmers’ market shopping experience, as measured by visitation frequency and produce procurement, would be characteristic of the higher income grouping. The survey data showed that the lower income patron-respondents visited the market an average of two to three times per month, spent an average of $16-$20, and tended to purchase at least half of their overall produce from the market. The higher income sample also visited two to three times per month on average, averaged the same spending amount as the lower income group, and the majority also purchased 50% or more of their produce from the market. The findings show that lower income respondents approach their farmers’ market food shopping in ways that are similar to higher income respondents. Therefore, in regard to the farmers’ market patrons in this study, income alone does not appear to have a significant impact upon market participation.

With that being said, the results for shopping behaviors also shed light on how the ability to use SNAP benefits may heighten farmers’ market participation for lower income customers. The findings revealed that a greater share of SNAP patron-respondents shopped the market weekly (45%), used the market as their primary produce source (28%), and had a stronger propensity to spend in excess of $20 (41%), than the share of lower income respondents who did not use SNAP (39%, 16%, 24%). It is worth recalling that, in addition to using their EBT/SNAP card, forty percent of the SNAP recipients also reported using cash for their market purchases; hence, a substantial number of SNAP shoppers did not confine their farmers’ market spending to their federal food benefit allotments.

In addition, the percentage of SNAP patron-respondents that identified as attending the market weekly, procuring the bulk of their produce, and spending over $20 was equal to, or nearly equal to, the amount of higher income respondents reporting this same degree of visitation (45%), produce procurement (29%), and spending (41%). Lastly, a greater number of SNAP
shoppers (63%) used the market for at least half of their overall produce, than either the SNAP-less group (45%) or the higher income group (56%) of respondents; and, the SNAP recipients were the only group in which everyone shopped at least once per month. The findings seem to indicate that, the extent of farmers’ market participation may be related more to the opportunity for lesser advantaged consumers to use SNAP benefits at the market, rather than to income.

Taken together, the quantitative results provide evidence of a positive association between SNAP usage and the expansion of farmers’ market food shopping behaviors for the study’s lower income individuals: enhancing loyalty (frequency of visits), boosting spending power, and lessening the consumption gap (amount of overall produce) between upper and lower income groups. Although a causal relationship cannot be statistically determined between the use of SNAP and the higher rate of visitation, produce procurement, and spending, the findings suggest that the opportunity to use SNAP at the farmer’s market contributed to the ability for the lower income respondents to participate more fully and hence take greater advantage of the benefits tied to these alternative modes of food provisioning.

4. To what extent are various food transaction-related attitudes important in the decision of whether to shop at the farmers’ market; and, how does the interplay of economic and non-economic attitudinal factors relate to patron-respondent characteristics?

For the study sample as a whole, survey results demonstrated that local farm support (3.83) was the primary motive expressed for coming to the farmers’ market. More than 98% of the respondents believed that this factor was either moderately or very important in choosing where to shop for food. Top quality foods (3.82) and good value (3.70) completed the top three farmers’ market drivers. Factors associated with convenience, such as one-stop shopping and hours of operation, held less strength of importance than many of the variables tied more closely to farmers’ market shopping (e.g., organic products, food safety, welcoming atmosphere). While the findings support the presence of marketness in the relevancy of price and expediency, results
also show varying degrees of attachment to the broad range of non-economic values that are steering the respondents’ food purchasing decisions at these farmers’ markets.

The robust expression for support local was notable for both higher and lower income groupings, as well as across all respondent demographic characteristics. And, for most of the respondent characteristics, the jostling of two critical factors, local farm support and interest in obtaining a good value, revealed a lesser focus on price. The targeting of elite clientele is a common practice of direct agriculture marketing that has contributed to the idea of local food at farmers’ markets as being a high end commodity and status symbol. As food related values are shaped by societal norms and pressures, it cannot be ruled out that this perception may have prompted survey responses to reflect a lower regard for cost. It is also important to consider that people of color and of lower income participated as vendors and/or volunteers at each of the markets. As the market study by D.C. Hunger Solutions (2007) noted in suggesting various measures for serving a culturally and economic diverse mix of clientele: People like to spend their money with people who look like them. Hence, it is likely that the strong motivation tied to support local is partly reflective of this situated context.

Often viewed as an extension beyond oneself toward concern for community good, the literature proclaims that support of the local farmer rests at the center of the socially embedded quality of the market place. Hence, one might conclude that the patron-respondents possess a strong social orientation in their purchasing decisions at the farmers’ market. Heeding Hinrichs’ (2000) cautionary note over the tendency for scholars and activists to amplify the social sentiment of farmers’ markets and minimize evidence of instrumentalism, a more critical reflection is in order.

In marked contrast to the deep commitment attached to supporting local, weaker importance was tied to the social facet of the farmers’ market as a place to interact with farmers and to learn about food origins and the farmers’ food-growing methods. Yet, the vigorous personal interaction filled with inquiry over family matters and exchange of food preparation ideas and such, peppered throughout the space of each market during site visit and surveying,
seemingly contradicts the discovery of a lesser focus on social relations; and makes this finding even more difficult to explain. In addition, the weak expression of interest tied to knowing the particulars about the farmer’s offerings may also be revealing of market context. The majority of the sample population was based in a rural setting. In a rural community steeped in farming tradition such as High Springs, food production is a familiar part of life rather than a unique feature of the farmers’ market experience.

It is also not unreasonable to presume that, in addition to making a connection with the values and concerns of others, the pursuit of supporting the local may be driven by self-serving interests in the name of protecting a reliable source for fresh, healthy foods. The fact that the offering of top quality products was a prevalent factor behind market participation, and that the majority of the patron-respondents believed it was difficult to access other sources of fresh, high quality produce in their communities, make this even more probable. On the other hand, even though the socially embedded character of the market may be tempered by instrumental concern, the end result is interdependence between local farmers and their customers: Market patrons are enhancing economic viability of small farmers and supporting local food system infrastructure, and in return, farmers are strengthening community health and food security.

The survey data for the Likert scale questions assessing the importance of various factors in deciding whether to shop the farmers’ market also revealed that the higher income and lower income respondents prioritized their food shopping values somewhat differently. For the higher income, above 200% poverty group, supporting local growers (3.84), obtaining top quality foods (3.81) at a good value (3.66), with less chance of food borne disease (3.64), and the offering of organic or chemical-free products (3.56) were perceived as more important than factors tied to convenience. However, convenience, typically associated with supermarket food shopping, appeared to prevail over social for the upper income group: The clustered convenience-related factors, product variety (3.56), convenient hours (3.52) and convenient location (3.49), held higher importance than the socially-related factors welcoming atmosphere (3.45), obtaining food information from growers (3.30), and opportunity for social interaction with
vendors and other customers (3.11). The literature has shown that higher income consumers usually face fewer constraints over the ability to prioritize their preferences for local food and the farmers’ market experience. However, the weaker focus for most of the socially-related values, relative to convenience, demonstrates how matters of cost and convenience remain important in food purchase decisions—even amidst strong desire to support farmers—and even by those more privileged.

Comparable to the higher income shoppers, participants characterized as being of poverty or of lower income (the below 200% poverty group) were also most highly motivated by the opportunity to obtain top quality products (3.84) while supporting local farmers (3.81). However, high regard for a welcoming environment (3.81) and for organic or chemical-free products (3.78) were a distinct expression of the below 200% poverty group. While the lower income group believed that the desire to feel comfortable in a socially pleasing atmosphere was equally as important as the opportunity to support local farmers, a welcoming environment was of markedly lower concern (ranking 9/14) for the higher income shoppers. In accord, the opportunity for social interaction at the market (3.47) was also stronger for the lower income group. Previous work (i.e., DC Hunger, 2007; Briggs et al., 2010) has shown that cultivating a friendly environment is important for markets that serve an economically diverse customer base. This finding further supports that market atmosphere may be an incentive, or disincentive, to farmers’ market attendance that falls along socioeconomic lines. The finding also underscores the value in attaching EBT operations to farmers’ markets, as the market’s willingness to accept SNAP as a form of payment can convey an appreciation for the patronage of lower income shoppers.

Along this vein, this study references the relations of regard between food producer and consumer that are deemed necessary toward the success of local food systems, as cited in the critique by Hinrichs (2000) of embeddedness in direct agriculture markets. Survey results made clear that for lower income SNAP users in particular, social connection amidst a welcoming market atmosphere was of significant value beyond the economic transaction: The importance of
a welcoming environment (3.83) and interest in social relations (3.59) came before the importance of using SNAP benefits at the market (3.55), and before convenience tied to market hours (3.45) and market location (3.45). While the strength of expression for the opportunity for social relations is somewhat weak, relative to the other non-economic factors, the SNAP patron-respondents were the only group that held opportunity for social relations with farmers higher in importance than convenience.

This underscores the opportunity for SNAP operations to enhance the role of farmers’ markets in increasing socio-cultural interaction at the local level of food chains. In this light, SNAP may play a role in strengthening the socially embedded quality of the market. The farmer’s acceptance of SNAP benefits as payment not only enables lower income customers to help support the local farming economy, it also helps reinforce the ties between food producers and consumers. Favorable to the goals of community sustainability, these relations of regard can foster interdependence among the diverse members of our society.

The quantitative results also brought to light the differences in the interplay of the various food transaction-related values, suggestive of an association between SNAP usage and the relevance of marketness. First, the data indicated that SNAP patron-respondents believed obtaining organic or chemical-free products (3.90) while shopping in a welcoming environment (3.83), and supporting local farmers (3.79) in return for safely produced food (3.79) of high quality (3.76) were more important than obtaining a good value (3.69). As the relative importance of good value is supplanted by 5 out of the 7 embeddedness-related attributes, it is evident that, for these SNAP shoppers, the values tied to the farmers’ market experience extend above and beyond the price point. As aforementioned, SNAP patron-respondents also expressed keen interest in accessing the social benefits associated with the farmers’ market and prioritized the social relations side of the transaction over marketness-related factors tied to SNAP usage at the market, and over convenience.

Second, while the importance of good value ranked sixth for the SNAP shoppers, only one factor (top quality, 3.89) was more important than good value (3.82) for the SNAP-less patron
respondents. Although the potential for underlying factors to influence survey responses cannot be ruled out, the attitude regarding the acute focus on price by the SNAP-less group is in line with the aforementioned results for spending behavior. Moreover, weaker spending was evident for the SNAP-less respondents despite the fact that the median household income for both groups was $10,000 to $20,000.

Third, survey data indicated the strength of support local and good value did not correlate with income on its own: Local farm support and good value were highly relevant for each of the 6 income strata; hence, interest in supporting local farmers, as well as the perceived need to keep an eye on food costs, cut across economic lines. Yet, in contrast to the higher income group and the SNAP patron group, concern for obtaining a good value and interest in local farm support competed equally in importance for the lower income SNAP-less group. In addition, the struggle between these 2 factors grew more apparent from the distinct perspective of the SNAP-less shoppers with reported household earnings of $10,000 to $20,000: this was the only income-subgroup in which the need for good value overcame concern for local farm support. While this study’s findings suggest that consumers, across a wide span of income levels, may be interested in contributing to the economic viability of farmers participating in locally based food systems, the findings offer an added viewpoint by showing greater tension among these two competing interests for the study’s lower-income shoppers who do not augment their purchasing power with SNAP benefits. These results hint at the prospect for SNAP acceptance at the farmers’ market to ease the proclaimed tension between farmer and lower income market patron over customer concern for cost.

These key suggestive features point out that, for the farmers’ markets under study, SNAP acceptance appears to play a part in reducing the level of marketness in the economic transaction of the lower income consumer. In accord with the writings of Block (1990), results demonstrated that concern for cost remained relevant for both subgroupings; however, the high strength of attachment to various non-cost considerations by the SNAP patron-respondents reflected the diminished level of marketness, as cost-related concerns were not the dominant
standard by which food purchase decisions were gauged. With the lower level of marketness, a stronger attachment to the qualities that are embedded in the farmers’ market experience was evidenced. The prior results for food shopping habits offer further support for a relationship between the use of SNAP and the opportunity to prioritize and act more fully upon these values. Furthermore, this extension of food valuation beyond the economic parallels what has been regarded in the literature (i.e., Feagan et al., 2004) as necessary criterion toward sustaining consumer interest in direct agriculture markets, and as such, essential to the success of local food systems (Hinrichs, 2000).

While it is beyond the limits of this study to determine whether there is a causal relationship between SNAP usage and the strengths of the food transaction values, the findings are telling of the attitudes and interests underlying the decision of whether to visit the farmers’ market or shop elsewhere for food. Given that the success of direct agriculture markets relies upon some degree of diminished concern for price and convenience by its customers, the pronounced strength of commitment to the non-economic factors underlying the SNAP recipients’ food purchasing decisions, and its loose association with market shopping habits, points to the advantage of attaching SNAP operations to farmers’ markets. The results offer the ability to speculate that while the opportunity to use SNAP benefits may be drawing the study’s SNAP users to the market, the values embedded in the farmers’ market experience are bringing the study’s SNAP users back to the market.

The literature asserts that farmers’ markets have the potential to increase customer loyalty to locally oriented food systems, through the social ties between food growers and consumers. Thus, reasoning follows that as the reciprocal relationship between farmer and consumer is fostered over time, the values embedded in the farmers’ market experience are strengthened in its participants. Along these lines, survey results demonstrated a relationship between the strength of local farm support and market behavior: For every increase in shopping frequency, the expression regarding the importance of support for local also increased. Hence, the patron-respondents that visited most frequently were those most attached to supporting their
local farmers. The nature of the sample did not warrant rigorous testing of statistical significance. However, the suggestive feature regarding a positive association between market shopping frequency and strength of local farm support poses a worthy consideration in regard to SNAP operations. While many SNAP-authorized farmers’ markets utilize spending incentives in an attempt to direct SNAP dollars their way, the offering of a tiered spending incentive, tied to the frequency of market visitation, may serve to further strengthen lower income consumer loyalty and interest in supporting local farms, and by some extension, local economies.

The final consideration for this study’s conclusions stems from the motivational variable, ability to use SNAP at the market, which was introduced into this project as a measure of marketness for the SNAP patron-respondents. Unanticipated was the response from the study’s market patrons who do not rely upon food stamp benefits, expressing through the written survey as well as verbally that the use of SNAP at the market was ‘certainly important for others who need it’. This finding is unique in its telling of how SNAP operations can shape the socially embedded character of the marketplace. The concern for SNAP to be available to others is an altruistic value specific to the operational setting of these markets. Consumer values partly reflect the practices and customs of the market (Feagan and Morris, 2009). As SNAP operations become more securely attached to market customs, this value toward others may also grow more deeply rooted over time. According to Allen (2008), participation in the expression of resistance, such as alternative food networks, can influence people’s consciousness and foster ethical consumerism. The unprompted expression reflecting interest and concern for other market patrons hints at the diversity-receptive attitude at these markets. The finding illuminates the potential for farmers’ markets to cultivate activism in food system justice through the business of conducting SNAP transactions.

Closing Statement

The overarching objective of this research was to understand the potential for SNAP operations to better position farmers’ markets in their role of strengthening food system justice. With this in mind, the research was undertaken to explore the behaviors and food transaction-
related values linked to farmers' market usage, in order to discern the impact that SNAP (food stamp) operations might have upon farmers’ markets and the participation of their customers. In contrast to conventional food venues where the value of food is predominantly attached to price and convenience, the farmers’ market food transaction experience is embedded with socio-cultural and ecological qualities. Success of local food systems relies upon consumer desire for these broader, non-economic values, as well as the ability to act upon these values. The concept of embeddedness was utilized in an effort to examine the competition between economic and non-economic factors tied to farmers’ market transactions, as the interplay of these factors is particularly relevant to the food purchasing decisions of lesser advantaged consumers.

The findings surrounding the somewhat minor role of economic factors relative to other, non-economic values sought in the farmers’ market experience coincide with prior research. However, this study’s suggestive features bring to light a weaker position for economic value in the interplay of marketness and embeddedness, as uniquely expressed by the study’s SNAP patron-respondents. While much more was uncovered than expected, much remains to be understood with regard to the values sought by consumers at farmers’ markets and the impact of SNAP operations on embedded market exchange. Hence, it is premature to accurately predict whether SNAP operations will indeed enable farmers’ markets to serve as a transformative mechanism for addressing the social justice arm of sustainability in the alternative food system we are creating.

Nonetheless, taken together, the discoveries made herein have uncovered potential benefits of attaching SNAP operations to farmers’ markets: expansion in diversity of the customer base, enhanced customer loyalty through greater participation, and greater regard for the non-economic factors tied to the value of food. In addition, the presence of SNAP operations suggests opportunity for shaping the socially embedded character of the market place, fostering ethical consumerism and concern for others, and ultimately cultivating food justice activism. From the results of this study, it can be concluded that SNAP operations have the potential to strengthen the social embeddedness quality of farmers’ markets and better position farmers’
markets that aim to address food justice. And, in so doing, SNAP operations offer promise toward bolstering farmers’ markets in their task of helping communities move towards their sustainability objectives.
CHAPTER EIGHT: FURTHER RESEARCH

This thesis explored the potential for SNAP operations to better position farmers’ markets to address the lack of food system justice. This endeavor was undertaken with the hope of deepening understanding for the values that underserved groups hold in the farmers’ market experience, while stimulating discussion and further investigation into the importance of SNAP operations and associated farmers’ market potential in local food system development.

Further research is needed to understand the varying degrees of embeddedness that are present in the farmers’ market environment. As a supplement to the written customer surveys, open-ended interview questions providing in-depth commentary on patron-respondent motivations may have captured deeper perspective. This would have been particularly helpful given the lower income group’s notable strength of commitment to the farmers’ market as a place for social interaction. Conducting qualitative analysis to draw out the expression for social embeddedness and fine tune the differences across culturally and economically diverse groupings may have been a useful adjunct to this research. In addition, previous work has shown environmental concern to be a weak factor in farmers’ market participation, and limited associations have been uncovered between environmental knowledge and behavior. However, the strong expression for organic products by the study’s SNAP patron-respondents suggests that assessing patron-respondent knowledge and attitudes tied to the environmental implications of purchasing locally sourced foods may have resulted in a valuable contribution to this study.

Future research could provide added insight into the supply and demand sides of SNAP operations at farmers’ markets. First, each of the market managers mentioned the critical role that health-affiliated agencies can play in serving as advocates for SNAP-operating farmers’ markets. One of the markets had forged a valuable connection with the county’s health center whereby the agency appeared to play an integral part in contributing to the market’s SNAP
customer base. The other managers expressed varying degrees of frustration over the lack of support from health care and other social service agencies and were surprised with this disconnect given the common mission of fighting obesity and disease through healthy eating. Focus group conversations with members of social service and other agencies tied to the SNAP landscape, aimed at investigating the attitudes surrounding farmers’ market advocacy, may shed some light on the factors that serve to undermine or foster these critical relationships.

Second, the literature has suggested that spending incentive programs are critical to the implementation of farmers’ market SNAP operations, yet these programs demand time, effort, and funding. As the study was limited to three markets, and only one of the markets utilized an incentive to attract SNAP clients, it was not feasible to determine the impact of the incentive program on SNAP participation. Research aimed at comparing SNAP-authorized markets that use and do not use spending incentives can help determine whether significant differences in spending patterns and visitation frequencies are related to these incentives.

Third, much remains to be uncovered surrounding the motives and deterrents that SNAP shoppers perceive in choosing whether to support local. Surveying of SNAP recipients who use their EBT/SNAP card at farmers’ markets as well as SNAP recipients who do not shop at farmers’ markets, can help determine the differences related to cost and convenience and how they relate to other purchasing criteria. To better discern cultural differences, this should be supplemented by focus group discussions with SNAP participants belonging to various ethnic groups, who redeem and do not redeem their SNAP benefits at farmers’ markets. Work of this nature would offer market managers and other advocates practical insight regarding the incentives and disincentives faced by SNAP shoppers, and may lead to better promotional efforts aimed at connecting SNAP clients to these alternative venues of food provisioning.

And the final consideration for future research has to do with the strength of participation that was found to characterize the study’s SNAP patron-respondents, whereby their market shopping behavior closely paralleled that of the higher income patron-respondents, and their keen interest for organic or naturally grown products of high quality. Albeit, this research is much
smaller in scale, the findings offer contrast to the perspectives brought forth in the California survey by Guthman et al (2006). Their survey of direct agriculture market managers revealed that food stamp customers were perceived as the least reliable; and that lower income people do not participate at farmers’ markets because they are uneducated and less concerned about quality and health. An unreceptive attitude can foster an unwelcome environment that serves as a deterrent to market participation, as supported by the work of Colasanti et al (2010). Hence, these sorts of sentiments can potentially undermine the progression of local food systems. Accordingly, the results raise questions about how lesser-advantaged people are regarded as farmers’ market customers. Along these lines, questions also surface in light of the findings for one of the markets under study and the manager’s dilemma over vendor flight to nearby markets that were not SNAP-authorized. It is not known whether this problem was related to the market’s requirement for all vendors to accept SNAP payments or the explicit recommendations for vendors to maintain affordable pricing and offer weekly specials.

It is important to note that at the time of Guthman and colleagues’ survey, EBT operations for processing SNAP transactions were highly uncommon. It was not until several years later that funding efforts and advances in technology spurred interest in EBT and SNAP authorization at direct agriculture markets. It may be worthwhile to revisit the attitudes and perceptions tied to serving lesser-advantaged consumers. Efforts should include examining common themes and differences among market managers, and vendors, who participate in farmers’ markets that do and do not conduct SNAP transactions. This would help shed light on the tension between embeddedness and marketness from the perspective of other actors in the marketplace.
REFERENCES


Informed Consent: Farmers’ Market Manager

Dear Farmers’ Market Manager:

As a manager of this EBT/SNAP-operating farmers’ market, you are being asked to take part in a research study called: Exploring practices and perceptions of local food systems: Insights from Florida’s SNAP-participating farmers’ markets. This research study examines the operational logistics of SNAP at farmers’ markets, as well as the motives behind consumer patronage. This one-time telephone interview should take between 20 and 30 minutes of your time. In this interview, you will be asked questions about your duties as a market manager, sources of market funding, challenges to SNAP operations, and effectiveness of promotional efforts. Findings from the interview will be included in a published document as part of a graduate-student research project. I am more than happy to provide you with a copy of the final report. And I hope that the results will be beneficial to the continued success of your market’s involvement with SNAP.

Please know that this study presents no known risks to you beyond those faced in everyday life. Please also know that your participation in this survey is completely voluntary. If you refuse to participate or if you choose to withdraw, you will not be penalized in any way. Your privacy and responses to interview questions will be kept confidential. The only people who will be allowed to inspect the records from this research project are the USF Institutional Review Board and its staff, and the research team which includes the Principal Investigator, Leslie Babiak.

Toward obtaining a more accurate record of the interview, we ask you to consider agreeing to a digital audio recording of the interview. The audio recording will be stored on a secure network drive on a password protected computer for 5 years and will then be completely removed from the computer hard drive using the advanced security tool, Eraser 6.0.9. Please understand that this interview can be conducted without an audio-recording; and, it is up to you to decide whether you want to have this interview audio-recorded.

If you have any questions about the research, you may ask Leslie today, or you may contact us using the information below. You may also contact the USF Internal Review Board at (813)-974-5638, if you would like to voice concerns or complaints about the research, learn more about your rights as a research participant, or would like to talk to someone other than the research staff. This project has been reviewed and approved by the USF Institutional Review Board.

It is up to you to decide whether you want to take part in this study. Please understand that when proceeding with the interview (to be scheduled for a later day and time) you are agreeing to take part in this research.

THANK YOU FOR YOUR CONSIDERATION OF THIS RESEARCH
Sincerely,
Leslie Babiak, Graduate Student; lbabiak@mail.usf.edu
Dr. Philip Reeder, Major Advisor; preeder@usf.edu
Department of Geography, Environment, and Planning: University of South Florida
APPENDIX 2:

Farmers' Market Manager Survey

Thank you for agreeing to participate in this interview. I’d like to emphasize that there are no right or wrong answers to these questions. As stated in the Informed Consent document, if it’s okay with you, I would like to audio record our interview. This way, I don’t have to take detailed notes while we’re talking and I can get an accurate record of what you tell me. The audio recording will be stored on a secure network drive on a password protected computer. Will audio recording be okay with you? (Obtain respondent’s verbal consent.) Do you have any questions for me, before I turn on the recorder? (TURN RECORDER ON AND ASK PERMISSION TO RECORD AGAIN.)

ABOUT THE MARKET MANAGER

I’d like to begin by finding out a little bit about you and your market responsibilities.

1. How long have you been a manager at this farmers market?
   - _ _ _ _ _ year(s)
   - _ _ _ _ _ month(s)

2. I have some questions about the kind of work you do at your market. I am going to read you a list of market duties. Please respond with a yes or no regarding whether you are responsible for any of the following:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Developing and monitoring the budget</td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>Fundraising</td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>Applying for grants</td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>Managing volunteers &amp; employees</td>
<td></td>
</tr>
<tr>
<td>e</td>
<td>Recruiting and/or organizing vendors</td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>Community outreach</td>
<td></td>
</tr>
<tr>
<td>g</td>
<td>Collecting fees from vendors</td>
<td></td>
</tr>
<tr>
<td>h</td>
<td>Organizing special events</td>
<td></td>
</tr>
<tr>
<td>i</td>
<td>Any other responsibilities (specify)</td>
<td></td>
</tr>
</tbody>
</table>
SECTION A. GENERAL MARKET CHARACTERISTICS

Now I’d like to ask you a few questions about the general characteristics of this market.

**A1** Is your market:
- Independent.......................................................... I___I → GO TO A3
- Operated in partnership w/ another organization.....I___I
- Owned by another organization...............................I___I

**A1A** What is the name of this organization? ________________________________

**A2** How many other farmers markets does the organization operate?
- I___I___I DON’T KNOW....I___I

**A3** Could you please tell me:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a</strong></td>
<td>Year market started operating</td>
</tr>
<tr>
<td><strong>b</strong></td>
<td>Months (or seasons) in operations</td>
</tr>
<tr>
<td><strong>c</strong></td>
<td>Days of week open</td>
</tr>
<tr>
<td><strong>d</strong></td>
<td>Hours of operation</td>
</tr>
<tr>
<td><strong>e</strong></td>
<td>Number of paid staff including yourself during market season</td>
</tr>
<tr>
<td><strong>f</strong></td>
<td>Number of vendors</td>
</tr>
<tr>
<td><strong>g</strong></td>
<td>Number of fresh produce vendors</td>
</tr>
</tbody>
</table>
| **h** | Forms of payment accepted  
(credit/debit, cash, check, EBT card) |
| **i** | Total annual sales amount in 2011  
AND total sales in EBT/SNAP 2011 |
| **j** | Average monthly sales  
AND EBT/SNAP monthly sales 2012 |

*DK: DON’T KNOW

**A4** Does your market receive funding from the following sources?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>DK</th>
</tr>
</thead>
</table>
| **a** | Vendor fees  
Specify: Flat fee OR Percentage of sales |
| **b** | Government agency (state, city, county, municipal)  
Specify: |
| **c** | Government grants |
| **d** | Private foundation grants |
| **e** | Trade or business associations (e.g., Chamber of Commerce) |
Next, I have some questions about the kinds of foods sold at your market. I will read you a list of food items. Please tell me if your market sells the following, by answering yes or no to each:

<table>
<thead>
<tr>
<th>Food Type</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a Fresh Fruits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b Fresh Vegetables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c Breads</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d Other baked goods (e.g., pies, cookies)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e Fish or seafood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f Meat and/or Poultry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g Eggs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h Cheeses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i Milk and Cream products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>j Prepared foods (e.g., breakfast, lunch, or dinner entrees)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>l Plants or Seeds to grow food at home</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION B: EBT and SNAP

Now I’d like to ask you some questions about the nutrition assistance program, SNAP, that your market participates in.

B1 When did your farmers’ market begin accepting SNAP benefits?
   I I I I I I I I

B2 Can you tell me what made you decide to accept EBT & SNAP at your market?
B3 How many of your food vendors accept SNAP at this market?
   All....I___I→GO TO B3  Most....I___I  A few....I___I  None....I___I

B3A Can you tell me the main reason SNAP benefits were not accepted?

B4 How many customers do you estimate use the EBT system to shop with their SNAP benefits in a given day?  I___I___I___I

B5 Which of the following does your market use to conduct SNAP transactions?
   EBT machine for EBT card swiping....I___I  TOKENS....I___I
   PAPER SCRIP....I___I  Receipts...I___I  OTHER ____________________

B6 In your opinion, what have been some of the benefits for this farmers’ market in choosing to accept SNAP? (e.g., increased vendor sales, increase in different types of customers, support local economy, promote access to healthy food, improved the market’s image)

B7 What do you think makes it difficult for this farmers’ market to accept SNAP? (e.g., difficult application process, start-up costs, EBT staffing/transaction fees, non-participation by vendors, low SNAP customer turnout)
B8 Do you have any suggestions regarding ways that agencies or organizations could support the role of farmers’ markets in nutrition assistance programs such as SNAP?

SECTION C: INCENTIVE PROGRAMS FOR SNAP CUSTOMERS

Now I’d like to ask you a few questions about spending incentives that your market might offer SNAP customers.

C1 Does your market offer incentive or bonus programs (such as Double Value coupons) to encourage SNAP participants to shop at your market?

YES….I__I    NO….I__I→GO TO D1

C2 What type of incentive program is offered?

MATCHING OR BONUS FUNDS….I__I (Name):________________________
PRICE DISCOUNTING….I__I          OTHER….I__I
Specify other:_____________________________________

C3 What is the monetary value of the incentives?
____________________________

C4 Do any organizations, such as foundations or government entities provide any funding, equipment, or other types of support to help fund your incentive program?

YES….I__I    NO….I__I→GO TO C6

C5 Who are your two largest funders or support organizations and what type and amount of funding or support have they provided?
C6 How well do the incentives work, and how do you assess or track how well they work?

C7 Do you feel your market can ultimately reach a point of maintaining a SNAP customer base without offering spending incentives or bonus programs?

YES….I___I          NO….I___I          DON’T KNOW….I___I

C71 Why/Why Not?

SECTION D: COMMUNITY OUTREACH AND MARKET PROMOTION

Lastly, I have a few questions about market outreach and promotional efforts.

D1 Does you market conduct any community outreach activities?

YES….I___I          NO….I___I→GO TO D3

D2 Can you describe for me the community activities conducted by this market? (e.g., food donations, gleaning, cooking demos at market, health screenings)
**D3** Can you tell me about any efforts your market has specifically undertaken to address the needs of a diverse customer base? (e.g., language-appropriate market signage, vendor training in cultural differences in shopping behavior, offering ethnic foods and products,)

**D4** I’m going to ask about the promotional efforts you have used to spread the word that SNAP is accepted at your market. I will read you a list. Please tell me first, whether or not you have used each method. And second, please give me a general idea of the method’s effectiveness, on a scale of 1 to 5, with 1 being the least effective and 5 being most effective:

<table>
<thead>
<tr>
<th>Promotional Efforts</th>
<th>Y/N</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tr>
<td>Printed material (flyers, posters, brochures) to health care facilities</td>
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<td>Printed material to local businesses</td>
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<td>Posters or flyers in mass transit stations or transit stops</td>
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<td>Mailers or flyers to personal residences</td>
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<td>Billboards or banners</td>
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<td>Advertisement in local newspaper</td>
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<td>Radio advertisements</td>
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<td>Workshops, presentations at local events</td>
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<tr>
<td>EBT/SNAP promoted on market website</td>
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<td>Social media (Facebook, Twitter)</td>
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<td>Other:</td>
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SECTION E: CLOSING

E1 Is there anything else you would like to tell me about how SNAP works for your farmers’ market?

Those are all the questions I have for you today.
Do you have any questions for me?
Thank you so much for your participation today. The information you have provided is a valuable contribution to this project.
Would you like for me to send a final copy of the report to either your email address or physical mailing address?
Thank you again.

END
APPENDIX 3:
Farmers’ Market Environmental Assessment Tool

Date of Site Visit: ___________________
Farmers’ Market Name: _________________________________________________
Farmers’ Market Address:________________________________________________

MARKET CHARACTERISTICS
1. Total Number of Farmers’ Market Vendors Today: _____
2. Total Number of Farmers’ Market Vendors Selling Food Items: _____
   2a. Total Number of Farmers’ Market Vendors Selling Fresh or Unprepared Food Items: _____

3. Weather Conditions During the Site Visit:
   - The Temperature is Just Right
   - Too Cold
   - Too Hot
   - Windy
   - Raining
   - Other: Describe ______________________________________________________

4. Is the Market:
   - Indoors
   - Outdoors
   - Both Indoors and Outdoors
   - Other: Describe ______________________________________________________

5. Are Shopping Baskets and or Grocery Bags Provided at this Market:
   - Yes
   - No
   - Other: Describe ______________________________________________________

6. Is there a Booth or Table with Community-Related Information at this Market:
   - Yes: Describe ______________________________________________________
   - No

BUILT ENVIRONMENT MEASURES
7. What types of walkways are present within and leading to the Market?
   - Sidewalks
   - Trails
8. Is there a public transit stop within a 0.5 mile of this Market?
- Bus stop
- Light rail/other transit
- Senior transit
- None

9. What kind of parking is there within a 0.5 mile radius of this Market?
- On-street
- Open lot
- Garage
- None
Other: ______________________________________

10. Are any of the following amenities present at this Market?
- Tree-shaded or canopy-shaded areas
- Trash bins
- Benches or other places to sit
- Bicycle racks
- Working drinking fountains
- Available public restrooms

11. Are there any marketing materials (e.g., signs, brochures, or flyers) indicating that incentives for SNAP or low-income households specifically are accepted at the Market?
- Yes, describe the number and type of materials spotted:
  ______________________________________
  ______________________________________
  ______________________________________
- No

12. Are there any unpleasant features observed at this Market?
- Abandoned cars
- Buildings with broken or boarded windows
- Broken glass; beer or liquor bottles or cans
- Litter
- Stray dogs
- Panhandling, gang presence or prostitution
- Air pollutants
- Heavy or high speed (> 40 MPH) vehicle traffic
Notes:
  ______________________________________
  ______________________________________
  ______________________________________
  ______________________________________

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Dear Florida Farmers’ Market Customer:

As a customer of this farmers’ market, you are being asked to take part in a research study called: Exploring practices and perceptions of local food systems: Insights from Florida’s SNAP-participating farmers’ markets. The student-led research project examines why people shop at farmers’ markets; and this one-time-only survey should take about 5 minutes of your time. In this survey, you are asked questions about food shopping, your reasons for coming to the farmers’ market, and factors like age and size of household. Should you choose to participate in this study today, you will receive $2 in market tokens after handing in your survey as a small show of appreciation for your time.

Please know that this study presents no known risks to you beyond those faced in everyday life. Please also know that your participation in this survey is completely voluntary. If you refuse to participate or if you choose to withdraw, you will not be penalized in any way or lose any types of benefits that you now have. Your privacy and survey answers will be kept confidential; your responses will not be linked in any way to your identity. The only people who will be allowed to inspect the records from this research project are the USF Institutional Review Board and its staff, and the research team which includes the Principal Investigator, Leslie Babiak.

If you have any questions about the research, you may ask Leslie today, or you may contact us using the information below. You may also contact the USF Internal Review Board at (813)-974-5638, if you would like to voice concerns or complaints about the research, learn more about your rights as a research participant, or would like to talk to someone other than the research staff. This project has been reviewed and approved by the USF Institutional Review Board.

It is up to you to decide whether you want to take part in this study. Please know that by proceeding with the following survey you are agreeing to take part in this research.

THANK YOU FOR YOUR TIME IN ANSWERING THIS SURVEY.

Sincerely,

Leslie Babiak, Graduate Student:
lbabiak@mail.usf.edu

Dr. Philip Reeder, Major Advisor:
preeder@usf.edu

Department of Geography, Environment, and Planning: University of South Florida
APPENDIX 5:

Farmers' Market Customer Survey

FARMERS’ MARKET CUSTOMER SURVEY

1. How often do you shop at this farmers’ market when it is open? (Choose one answer)
   - [ ] Today is first time
   - [ ] Every couple months
   - [ ] 2-3 times a month
   - [ ] Once a month
   - [ ] Once a week

2. What amount of your fresh produce is bought at the farmers’ market? (Choose one answer)
   - [ ] None
   - [ ] Some
   - [ ] About half (50%)
   - [ ] More than 50%

3. How much do you usually spend at the farmers’ market? (Choose one answer)
   - [ ] $10 or less
   - [ ] $11-$15
   - [ ] $16-20
   - [ ] $21-30
   - [ ] More than $30

4. Do you participate in SNAP/EBT (food stamp benefits)?
   - [ ] Yes
   - [ ] No

5. What forms of payment do you use at the farmers’ market? (Choose all that apply)
   - [ ] Cash
   - [ ] Credit
   - [ ] Debit
   - [ ] EBT/SNAP
   - [ ] SNAP/Double Value Coupons

6. When you are not shopping at the farmers’ market, how easy or difficult is it for you to buy top quality, fresh produce in your neighborhood shopping area? (Choose one answer)
   - [ ] very easy
   - [ ] easy
   - [ ] difficult
   - [ ] very difficult

7. I would shop at the farmers’ market more often if: (Choose all that apply)
   - [ ] Open different hours/days
   - [ ] Lower prices
   - [ ] I knew how to use the foods
   - [ ] It was closer
   - [ ] I had more time
   - [ ] I had transportation
   - [ ] It was friendlier
   - [ ] More variety
   - [ ] I already shop here as much as I want

8. How important are each of these factors when you are deciding whether or not to shop at the farmers’ market? (Circle one number for each factor below)
   1 Not important at all  2 Slightly important  3 Moderately important  4 Very important

   a) Top quality products
      Not important at all       1   2   3   4   Very important

   b) Good value
      Not important at all       1   2   3   4   Very important
c) Large variety of products
   Not important at all 1 2 3 4 Very important

d) Convenient location
   Not important at all 1 2 3 4 Very important

e) Convenient hours of operation
   Not important at all 1 2 3 4 Very important

f) Can do all shopping in one place
   Not important at all 1 2 3 4 Very important

g) Safety from food-borne disease
   Not important at all 1 2 3 4 Very important

h) Products support local farms
   Not important at all 1 2 3 4 Very important

i) Chemical-free or organic products available
   Not important at all 1 2 3 4 Very important

j) Can get information on how food was grown
   Not important at all 1 2 3 4 Very important

k) Able to use SNAP benefits
   Not important at all 1 2 3 4 Very important

l) Able to use coupons
   Not important at all 1 2 3 4 Very important

m) Welcoming atmosphere
   Not important at all 1 2 3 4 Very important

n) Able to socialize with others in community
   Not important at all 1 2 3 4 Very important

Customer Information
(Please fill in each line or choose one answer for each of the following)

1. Home Zip Code: ________________

2. Gender: ☐ Male ☐ Female

3. Age: ☐ under 20 ☐ 20-29 ☐ 30-39 ☐ 40-49 ☐ 50-59 ☐ 60-69 ☐ 70+

4. Number in household, including yourself:
   _____ children (under 18 yrs.)   _____ adults (18 yrs. & older)

5. Education: ☐ Some high school ☐ High school degree ☐ Some college ☐ College degree
6. Household Income:  
- Under $10,000  
- $10-$20,000  
- $21-$40,000  
- $41-$60,000  
- $61-$80,000  
- Above $80,000

7. Work Status:  
- Full-time  
- Part-time  
- Unemployed  
- Retired

8. Ethnic Background:  
- African American/Black  
- Asian  
- Hispanic  
- Native American  
- White  
- Other: ___________________

THANK YOU FOR CHOOSING TO COMPLETE THIS SURVEY