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United States Department of Agriculture

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***Nutrition Assistance in Farmers Markets:  
Understanding the Shopping Patterns  
of SNAP Participants***

***Final Report***

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**Nutrition Assistance Program Report**  
Food and Nutrition Service  
Office of Policy Support

October 2014

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United States Department of Agriculture

Food and Nutrition Service, Office of Policy Support

October 2014

## ***Nutrition Assistance in Farmers Markets: Understanding the Shopping Patterns of SNAP Participants***

### ***Final Report***

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# Executive Summary

The Food and Nutrition Service (FNS), U.S. Department of Agriculture (USDA) seeks to expand access to fresh fruits and vegetables and other healthy foods through farmers markets (FMs) among Supplemental Nutrition Assistance Program (SNAP) participants. As such, the FNS has funded a portfolio of three large-scale studies regarding different aspects of how farmers markets function within SNAP. This report presents the findings of one of those studies—*Nutrition Assistance in Farmers Markets: Understanding the Shopping Patterns of SNAP Participants*.

The broad research objectives of the study were to:

1. Describe the shopping patterns of SNAP participants redeeming benefits at FMs.
2. Describe why some SNAP participants do not shop at FMs.
3. Describe the characteristics of the FMs serving the participants surveyed in relationship to their shopping decisions.

## I. Methodology

The study design included representative sample of SNAP participants who shopped or lived near sampled FMs for the completion of the Farmers Market Client Survey (FMCS); and sample of SNAP participants from three cities for participation in focus groups. In addition, geographic information systems data were analyzed to study where participants lived and examine the distance and availability of other food and grocery services near the FMs.

### Sampling

The survey used a two-stage sampling process. Stage 1 involved a nationally representative sample of 65 FMs with Electronic Benefit Transfer (EBT) transactions greater than \$1,000 during a 1-year period. The FM sample was stratified by whether the FM offered a SNAP-based incentive programs (SBIP). (Note: SBIPs are provided directly by FMs or indirectly by private organizations, not by the FNS.)

Stage 2 involved a random sample of SNAP participants who had used their EBT card at or near a FM drawn in the first stage. This sample included “FM EBT users,” who were identified

## Executive Summary

through EBT transactions at one of the selected FMs, and “FM EBT nonusers,” who were identified through EBT transactions at any authorized retailer (other than the selected FM) within a catchment area around one of the selected FMs. Thus, the study included (1) SNAP participants who used their EBT card at the selected FMs, and (2) SNAP participants who did not use their EBT card at the selected FMs. A total of 4,752 respondents completed the survey. Later, based on survey responses, participants were grouped into 3,247 SNAP participants who shopped at FMs (“shoppers”) using their EBT card or another form of payment, and 1,499 SNAP participants who did not shop at any FMs (“nonshoppers”) in the past 12 months.

For the focus groups, three cities (Atlanta, San Diego, and San Francisco) were selected in which to hold 12 focus groups that included a total of 106 participants. In each city, two of the focus groups were limited to SNAP participants who were frequent shoppers at a reference FM (defined as those who shopped more than three times in the past 12 months), while the other two were limited to SNAP participants who were nonfrequent shoppers at the reference FM (defined as those who shopped three or fewer times in the past 12 months, including a small percentage who did not shop at a FM in the past 12 months at all). The focus groups in Atlanta and San Francisco were conducted in English. The focus groups in San Diego were conducted in Spanish, as San Diego focus group participants were recruited based on Spanish being their preferred language.

## Data Collection and Analysis

The survey included five sections (Shopping for Groceries, Shopping at Farmers Markets, Shopping at a Farmers Market in Your Neighborhood, Reasons for Not Shopping at a Farmers Market, and About You and Your Household.) In addition, within the sections, certain questions were targeted for specific subgroups (e.g., shoppers who use their EBT card at FMs).

The survey data analysis included (1) univariate and bivariate statistics for describing the SNAP participants and their shopping patterns, (2) logistic regression models for identifying the determinants of shopping at FMs and the use of SNAP benefits at FMs, and (3) exploratory factor analysis for assessing the reasons for shopping at FMs and potential barriers to shopping at FMs among SNAP participants. Standard qualitative data analysis techniques were applied to transcribed focus group data. Finally, GIS data was used to examine distance and availability of services around the farmers market and SNAP participants’ residence.

## II. Results

The overall results are summarized in the following five subsections: general shopping patterns, shopping at FMs, use of SNAP benefits at FMs, reasons for not shopping at FMs, and role of incentives.

### General Shopping Patterns

SNAP participants most often shopped at large grocery stores for all of their groceries, and they were most likely to use their SNAP benefits at these stores. When shopping for fruits and vegetables, SNAP participants most often preferred fresh products, and they shopped for fresh fruits and vegetables more often than they shopped for frozen/canned fruits and vegetables. SNAP participants cited good specials and deals, low prices, high quality, and, importantly, acceptance of the EBT card as reasons for shopping at a particular FM.

### Shopping at Farmers Markets

Among SNAP participants, those who were more likely to shop at FMs included women, people in households with no children, people in households receiving support from other nutrition programs, and those who were aware of incentives for EBT card use. Those less likely to report shopping at FMs included African Americans and other non-White race categories; participants who were unemployed; participants who were homemakers, students, or retired; participants who reported they cannot work; and participants in households with incomes below \$10,000 per year. The majority of shoppers agreed that they could find more variety and better-quality fruits and vegetables at the FM than in other stores. In terms of prices, most shoppers believed that the prices of fresh fruits and vegetables at FMs were lower or at least the same as in other stores.

The most commonly reported reason for shopping at a specific FM was access to high-quality fruits and vegetables. Other key factors that influenced shopping at the FM included activities for children and social services, community-related events, conducive environment, accessibility, and affordability. In addition, focus group participants reported increased selection, wider variety, and the promotion of local businesses and farmers. Notably, both the survey and the

focus groups suggested that positive social experiences offered through FMs served as important reasons that SNAP participants shopped there. In the focus group discussions, shopping at a FM was described as a social event with opportunities for fun as well as learning. Respondents commented that the environment made it easy and enticing for them to try fruits and vegetables through sampling and testing the quality of foods. Interaction with farmers and diversity of produce encouraged participants to purchase fruits and vegetables. Shopping at FMs was described as a family-friendly experience with activities and interactions unavailable through ordinary grocery shopping. These unique experiences distinguished shopping at FMs from shopping at traditional grocery stores, and motivated shoppers to return.

### Use of SNAP Benefits at Farmers Markets

In terms of using SNAP benefits at FMs, in general gender and age did not play a significant role. Among those who shopped at FMs, Black or African Americans, unemployed participants, those who cannot work, and participants with household incomes below \$10,000 were all more likely to use SNAP benefits at FMs if they shopped at farmers markets. Participants who were aware of incentives for EBT card use were more likely to use SNAP benefits when shopping at FMs. Among shoppers who rarely used their EBT card while shopping at FMs, more than one-third were not aware that their benefits could be used at an FM, one in four ran out of money on their EBT card, and almost one in ten declined to use it in order to avoid a perceived sense of social stigma.

### Reasons for Not Shopping at Farmers Markets

The top factors noted as barriers to shopping, among SNAP participants who did not shop at FMs, were related to convenience and prices, with the convenience of shopping for all groceries at one store as the most important reason. Parking and safety at the FM were reported as reasons, though at a lower frequency. Among focus group participants, inconvenient days or hours of operation were cited as barriers to shopping, with several attendees at each focus group site commenting critically that their target market was open for limited hours on inconvenient days. The overwhelming majority of survey respondents who did not shop at FMs were not aware that some FMs offered incentives for using EBT cards. Focus group attendees appeared not to be knowledgeable about specific incentive programs at their local FMs.

## Role of Incentives

There was a high correlation between shopping status and awareness of the financial incentives for shopping at FMs that provide SBIPs. Among survey respondents who were shoppers at a specific market tended to be aware of the incentives, whereas nonshoppers were overwhelmingly unaware of the incentives. Among shoppers at a specific market, the financial incentives were very important for getting shoppers to shop at the FM, and they shopped more at FMs because of these incentives. Furthermore, they reported that their household members ate more fresh fruits and vegetables, which was another benefit of the incentives. However, although they shopped more at FMs, only half of them reported that they used their EBT card more often because of the incentives. In contrast, nonshoppers reported that financial incentives and availability of nutrition information would increase their likelihood of shopping at FMs. Hence, incentives did play a role in the shopping behaviors of both shoppers and nonshoppers at an FM.

## III. Conclusion

As the number of FMs continues to increase across the country, the findings of this study provides valuable insights on the type of supports necessary for encouraging SNAP participants to shop at FMs.

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## 1.1 Overview

The U.S. Department of Agriculture's (USDA) nutrition assistance programs reach one in four Americans. The Supplemental Nutrition Assistance Program (SNAP) is the largest of these programs, serving more than 47 million low-income individuals in an average month during fiscal year 2013.<sup>1</sup> In January 2014, about one in seven people in the U.S. received SNAP benefits.<sup>2</sup> SNAP is designed to provide better nutrition and reduce food insecurity among low-income households, and helps prevent hunger among children and adults, playing a critical role in improving access to fresh, healthy foods among this population. Research indicates that increased consumption of fresh, healthy foods can reduce levels of cardiovascular disease,<sup>3</sup> stroke,<sup>4</sup> some types of cancer,<sup>5</sup> obesity,<sup>6</sup> and other health problems. Recently, the USDA's Food and Nutrition Service (FNS) has placed added emphasis on promoting healthy eating among all nutrition assistance program participants including SNAP, including promoting farmers markets (FMs). Strengthening of local and regional food systems, such as FMs, may have a positive impact on the health of Americans by providing access to fresh, unprocessed fruits and vegetables and other healthy foods.<sup>7</sup>

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<sup>1</sup> U.S. Department of Agriculture, Agriculture Marketing Services. (2014). Supplemental Nutrition Assistance Program data. Available at <http://www.fns.usda.gov/sites/default/files/pd/SNAPsummary.pdf>.

<sup>2</sup> Food Research and Action Center. (2014). SNAP Caseloads Decrease in January 2014. Available at <http://frac.org/reports-and-resources/snapfood-stamp-monthly-participation-data/>

<sup>3</sup> Hung HC, Joshipura KJ, Jiang R, et al. Fruit and vegetable intake and risk of major chronic disease. *J Natl Cancer Inst.* 2004; 96:1577–84.

<sup>4</sup> He FJ, Nowson CA, MacGregor GA. Fruit and vegetable consumption and stroke: meta-analysis of cohort studies. *Lancet.* 2006; 367:320–26.

<sup>5</sup> International Agency for Research on Cancer, World Health Organization. IARC Handbooks of Cancer Prevention: Fruits and Vegetables. Lyon, France: IARC Press; 2003.

<sup>6</sup> 2005 Dietary Guidelines for Americans. Center for Nutrition Policy and Promotion, U.S. Department of Agriculture. Update with citation for 2010 DGAs and use the suggested citation in the DGAs which are a joint USDA and DHHS publication,

<sup>7</sup> U.S. Department of Agriculture, Office of Communications. (2013). Fact Sheet: Strengthening New Market Opportunities in Local and Regional Food Systems. USDA Release No. 0219.13. Available at <http://www.usda.gov/wps/portal/usda/usdahome?contentid=2013/11/0219.xml&contentidonly=true>.

The USDA is pursuing several initiatives<sup>8</sup> to improve access to healthy foods for SNAP participants. One such initiative is to support the availability of FMs and direct access to farm products<sup>9</sup> by working with FMs and direct marketing farmers to improve participants' access to locally grown produce. The FNS funded a portfolio of three large-scale studies to identify strategies to increase the effectiveness of FMs in relation to SNAP, and facilitate shopping at FMs among SNAP participants. The first study, *Nutrition Assistance in Farmers Markets: Understanding Current Operations*, explored characteristics and logistical processes, and motivations for accepting SNAP benefits at FMs.<sup>10</sup> The second study, *Farmers Market Incentive Provider Study*, assessed how organizations design, operate, and evaluate SNAP-based incentive programs (SBIPs), the collaborative partnerships that exist between organizations, and the impact of SBIPs on individual markets. The third study, *Nutrition Assistance in Farmers Markets: Understanding the Shopping Patterns of SNAP Participants*, assessed the characteristics and motivations of those SNAP participants who use and those who do not use FMs, as well as the factors that facilitate and hinder SNAP participants' shopping at FMs.

This report presents findings from the third study. To date, no large-scale research has been conducted with a representative sample of SNAP participants to understand the factors that influence their decisions to shop at FMs. This study was conducted to provide information on the shopping behaviors of SNAP participants who purchase food in and around a nationally representative sample of FMs that redeemed at least \$1,000 in SNAP benefits from June 2011 through July 2012. The sample of FMs was drawn from the sample in the first study. A series of focus groups with SNAP participants augment the data from the client survey by providing rich, subjective insights into the use of FMs. Taken together, these findings will enable the FNS to develop and implement policies and practices that encourage the use of SNAP benefits at FMs.

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<sup>8</sup> These include the Healthy, Hunger-Free Kids Act of 2010; the Health Incentives Pilot; and placement of nutrition messages on fruits and vegetables.

<sup>9</sup> U.S. Department of Agriculture, Agriculture Marketing Services. (2013). Farmers markets and local food marketing. Available at <http://www.ams.usda.gov/AMSV1.0/farmersmarkets>.

<sup>10</sup> U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis. (2013). *Nutrition assistance in farmers markets: Understanding current operations* by Sujata Dixit-Joshi et al. Project Officer: Eric Sean Williams, Alexandria, VA: April 2013. Available at <http://www.fns.usda.gov/research-and-analysis>.

## 1.2 Farmers Markets and SNAP Participants

USDA-administered food and nutrition assistance programs are intended to reduce food insecurity and improve nutrition among low-income Americans. A central component of this effort is to improve access to and promote consumption of fruits and vegetables among SNAP participants. In recent years, the number of FMs that accept SNAP has been rising steadily<sup>11</sup>; however, SNAP redemption rates at FMs remain relatively low.

Since 2009, the number of FMs listed in the USDA Agricultural Marketing Service directory has increased by 74 percent, with an increase of 3.6 percent from 2012 to 2013 (see Figure 1-1).<sup>12</sup> Multiple factors have contributed to the apparent growth<sup>13</sup> of FMs across the nation, including efforts to connect farmers to consumers. For example, in 2008, Congress targeted 10 percent of funds in the Farmers Market Promotion Program to increase Electronic Benefits Transaction (EBT) access at FMs. Since then, the USDA has awarded approximately \$5 million in Farmers Market Promotion Program grants to electronic benefit transfer (EBT) projects. In 2011, Congress doubled funding for the Farmers Market Promotion Program, and gave funding priority to projects designed to increase access.

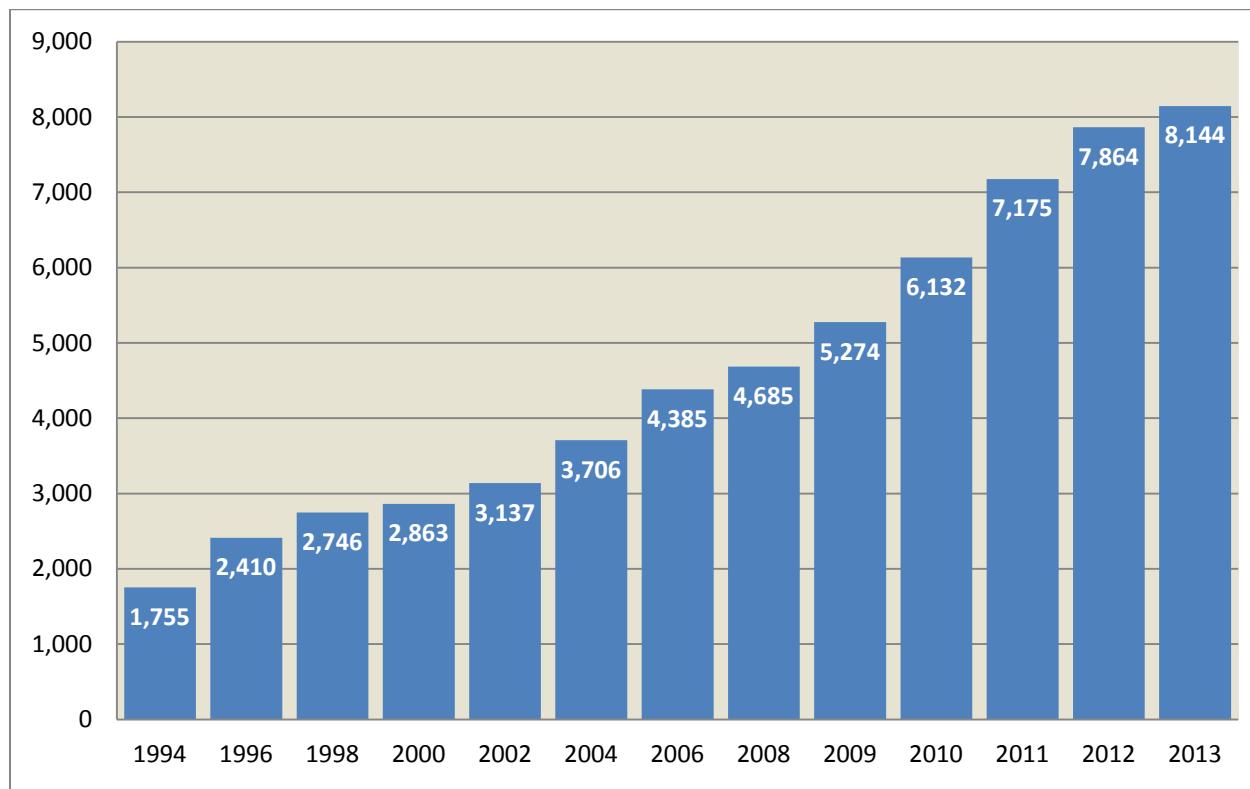
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<sup>11</sup> Community Science. 2013. SNAP Healthy Food Incentives Cluster Evaluation. Final Report. Available at <http://www.fairfoodnetwork.org>.

<sup>12</sup> USDA, Agriculture Marketing Service. (2013). National Count of Farmers Market Directory Listings Graph: 1994-2013. Available at <http://www.ams.usda.gov>.

<sup>13</sup> The increase in FMs is based on the information available in the USDA Agricultural Marketing Service directory, which lists only known FMs.

Figure 1-1. Number of Farmers Markets in the United States, 1994-2013



Source: USDA, Agricultural Marketing Service, Marketing Services Division

Farmers market information is voluntary and self-reported to the Marketing Services Division.

In addition, the FNS also simplified the SNAP authorization process and provided informational support on how to process EBT cards.<sup>14</sup> Between 2011 and 2013, the number of FMs with EBT machines authorized to accept SNAP increased by nearly 66 percent to 4,056, and redemptions of SNAP benefits at FMs increased from \$11.7 million to \$21.1 million.<sup>15</sup> In 2014, the FNS launched a website (MarketLink)<sup>16</sup> to assist FMs and direct marketing farmers in becoming authorized to accept SNAP benefits, including information about and resources for obtaining the necessary equipment to process SNAP benefits. This initiative includes up to \$4 million in equipment grants to provide further support as needed.<sup>17</sup>

<sup>14</sup> USDA, Food and Nutrition Service. Learn About SNAP Benefits at Farmers' Markets. Available at <http://www.fns.usda.gov/snap/ebt/fm.htm>.

<sup>15</sup> Hunt, A., and Blavatsky, G., 2014. SNAP Redemption at Farmers Markets Sees Rapid Growth from 2011 to 2013. Available at <http://wholesomewave.org/snapgrowth20112013>.

<sup>16</sup> MarketLink ([www.marketlink.org](http://www.marketlink.org)) had not been implemented at the time of this study.

<sup>17</sup> National Sustainable Agriculture Coalition. New Resource Helps Farmers and Farmers Markets Accept SNAP Benefits. Available at <http://sustainableagriculture.net/blog/marketlink>.

It is plausible that increased exposure to FMs among low-income populations will increase their purchases and consumption of fruits and vegetables, and that financial incentives will augment this effect. A recent study of Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) participants found that low-income customers who purchased fruits and vegetables at FMs using targeted subsidies consumed more fruits and vegetables than a similar population that purchased fruits and vegetables at supermarkets in the same neighborhood, a difference that persisted even after the subsidy program ended.<sup>18</sup>

## 1.3 Research Objectives

The purpose of this study was to understand the factors that influence where and why SNAP participants shop for fruits and vegetables. The three broad research objectives were to:

1. Describe the shopping patterns of SNAP participants redeeming benefits at FMs.
2. Describe why some SNAP participants do not shop at FMs.
3. Describe the characteristics of the FMs serving the participants surveyed in relationship to their shopping decisions.

## 1.4 Report Organization

This report includes both quantitative findings from the client survey and qualitative findings from focus groups with SNAP participants. Throughout the report's chapters, the focus group findings are interwoven with findings from the client survey. Chapter 2 presents an overview of the methodology used to conduct the study, including study design, instruments, data collection procedures, sampling, and analytic methods. It also presents a summary of the socio-demographic characteristics of study respondents and response rates.

Chapters 3 through 5 present study results, key findings, and special considerations for understanding and interpreting the findings. Chapter 3 presents the findings related to shopping

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<sup>18</sup>Herman D., Harrison G., Afifi A., Jenks E. 2008. Effect of a targeted subsidy on intake of fruits and vegetables among low-income women in the special supplemental nutrition program for women, infants, and children. *American Journal of Public Health*. V 98:1, 98-105.

patterns for fruits and vegetables, shopping patterns at FMs in general, and shopping patterns at specific (local) FMs. Chapter 4 presents the perceived benefits and barriers to shopping at FMs from the perspective of SNAP participants. It includes a discussion of the characteristics of FMs that were frequented by SNAP participants, what they chose to purchase there and why, and what were the most important considerations when they made purchasing decisions. It also explains why most SNAP participants did not shop at FMs. Chapter 5 discusses the role of financial and nonfinancial incentives for shopping at FMs. Finally, Chapter 6 presents a summary of conclusions based on current findings.

This report includes a number of appendices. Appendix A is a technical appendix that provides detail on sampling, study methodology, and data collection procedures. Appendix B describes an incentive experiment used as part of the survey administration to test various financial incentive schemes designed to improve response rates. Appendix C describes the procedures used to pretest the survey instrument. Appendix D contains the study materials, including correspondence with study participants. Appendix E contains copies of the survey and focus group moderator guides. Appendix F describes the weighting procedures used during analysis to adjust for nonresponse and variance estimation. Appendix G offers a summary of findings related to the purchase of plants and seeds.

## Methodology and Data Collection

This chapter describes the study design, instruments, data collection procedures, sampling, and analytic methods, as well as characteristics of the survey respondents and focus group attendees. This chapter provides only an overview. Appendix A provides more details about each component of the methodology and data collection.

### 2.1 Overview of Study Design

The study design included a survey and focus groups of SNAP participants across the United States. In addition, geographic information systems (GIS) data were utilized to examine distance and availability of other food and grocery services around the farmers markets (FMs) and study participants' residences.

The FMs selected for the study were a nationally representative sample of FMs that redeemed at least \$1,000 in SNAP benefits from June 2011 through July 2012, via Electronic Benefit Transfer (EBT) transactions. For sampling purposes, the survey participants included SNAP participants who used their EBT card at the selected FM (FM EBT users) during the past 12 months, and those who did not use their EBT card at the selected FM during the past 12 months but who did use it at any authorized retailer in the catchment area of the FM (FM EBT nonusers).<sup>19</sup> Furthermore, the client survey asked respondents if they shopped at a FM in the past 12 months. Based on their responses, survey respondents were coded as SNAP participants who shopped at FMs (shoppers, including SNAP participants who did not use their EBT card for payment) and those who did not shop at FMs (nonshoppers). Appendix A provides a more detailed description of the sample of survey respondents. Survey data collection, which took place in a 12-week period between July 29, 2013 and October 21, 2013, was implemented via a mail survey and a follow-up telephone interview for nonresponders.

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<sup>19</sup> FM EBT user and FM EBT nonuser status at the time of sampling may or may not match with FM EBT user and FM EBT nonuser status at the time of survey completion.

Twelve focus groups were held with SNAP participants in three major cities between September 23, 2013, and October 2, 2013. The focus group sample was divided into two groups of SNAP participants, based on how often they shopped at their specific local FM: frequent FM shoppers and nonfrequent FM shoppers. All four groups in one city (San Diego) were conducted in Spanish to explore if certain perspectives applied specifically to SNAP participants for which Spanish is their primary or preferred language. The other eight focus groups were conducted in English.

In discussing the study findings, all information was integrated using a combination of quantitative data (from the client survey and GIS data) and qualitative data (from the focus groups) to form a more complete understanding of the shopping behavior of SNAP participants.

## 2.2 Farmers Market Client Survey

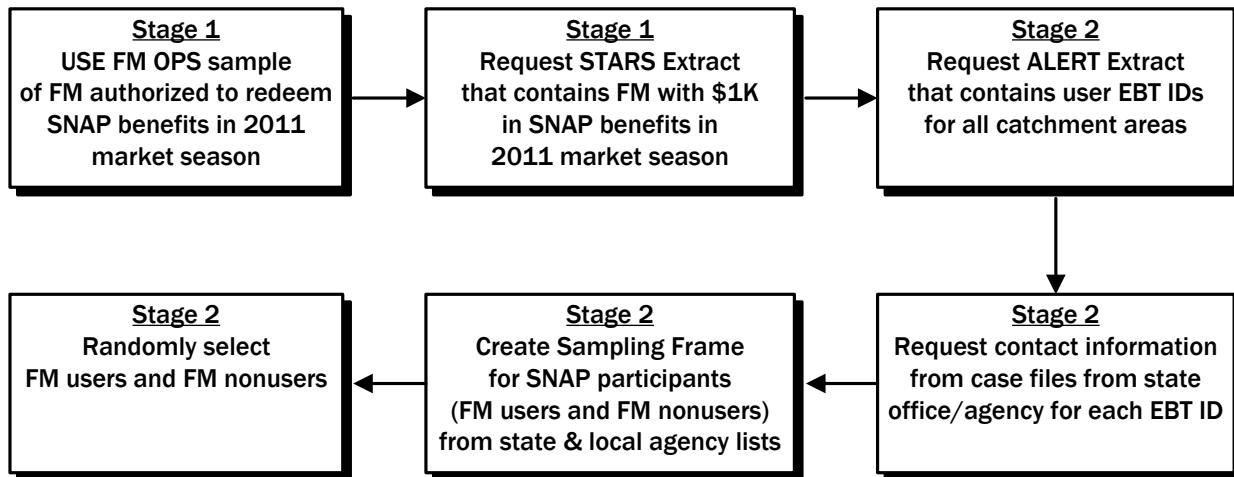
### Study Design

This study implemented a two-stage sampling process based on sampling of FMs and sampling of SNAP participants. Appendix A provides further details regarding the sampling method of FMs and SNAP participants for the study.

Stage 1 involved a nationally representative sample of FMs. The sample was selected from FMs that participated in the *Nutrition Assistance in Farmers Markets: Understanding Current Operations*<sup>20</sup> as depicted in Figure 2-1. Data for this study were collected from a national survey of 1,682 FMs and 570 direct marketing farmers between January and May 2012. The sample included FMs with EBT transactions greater than \$1,000 between June 2011 and July 2012. The FM sample was stratified by whether the FM offered a SNAP-based incentive programs (SBIP). A total of 65 markets were selected for this study.

Stage 2 involved a random sample of SNAP participants. The sample included two groups of SNAP participants: those who used their EBT card at one of the sampled FMs during the past 12 months (FM EBT users), and those who did not use their EBT card at a sampled FM, but used it at any authorized retailer within a predefined area surrounding the sampled FM (FM EBT nonusers).

<sup>20</sup> This report is available on the Food and Nutrition Service website: <http://www.fns.usda.gov/ora>

Figure 2-1. FM Client Survey Sampling Process<sup>21</sup>

## Survey Sampling Frame

### Data Sources for the Frame

The sampling frame was constructed from two sources: (1) an extract file from the FNS Store Tracking and Redemption System II (STARS II) database, and (2) an extract file from the FNS Anti-fraud Locator using EBT Retailer Transactions (ALERT) database:

- The **STARS II database** includes a record for each retailer authorized to accept SNAP benefits; the record includes information about the location, business type, total annual eligible food sales, etc. STARS II is used to monitor the retail organizations that redeem the benefits and assess ongoing participation, withdrawal, and disqualification of retailers.
- The **ALERT database** includes all EBT transaction records and contains the following data items: Store ID (FNS number), Store State, Terminal ID, Card Account Number, Transaction Date, Transaction Time, Transaction Amount, Transaction Sign, Transaction Type, Response Code, Available Balance Prior to Transaction, and Amount (the latter if the response code indicates that the transaction was accepted). The FNS uses the ALERT system to search for signs of fraud, waste, and abuse within the program, by tracking SNAP participants' EBT transactions.

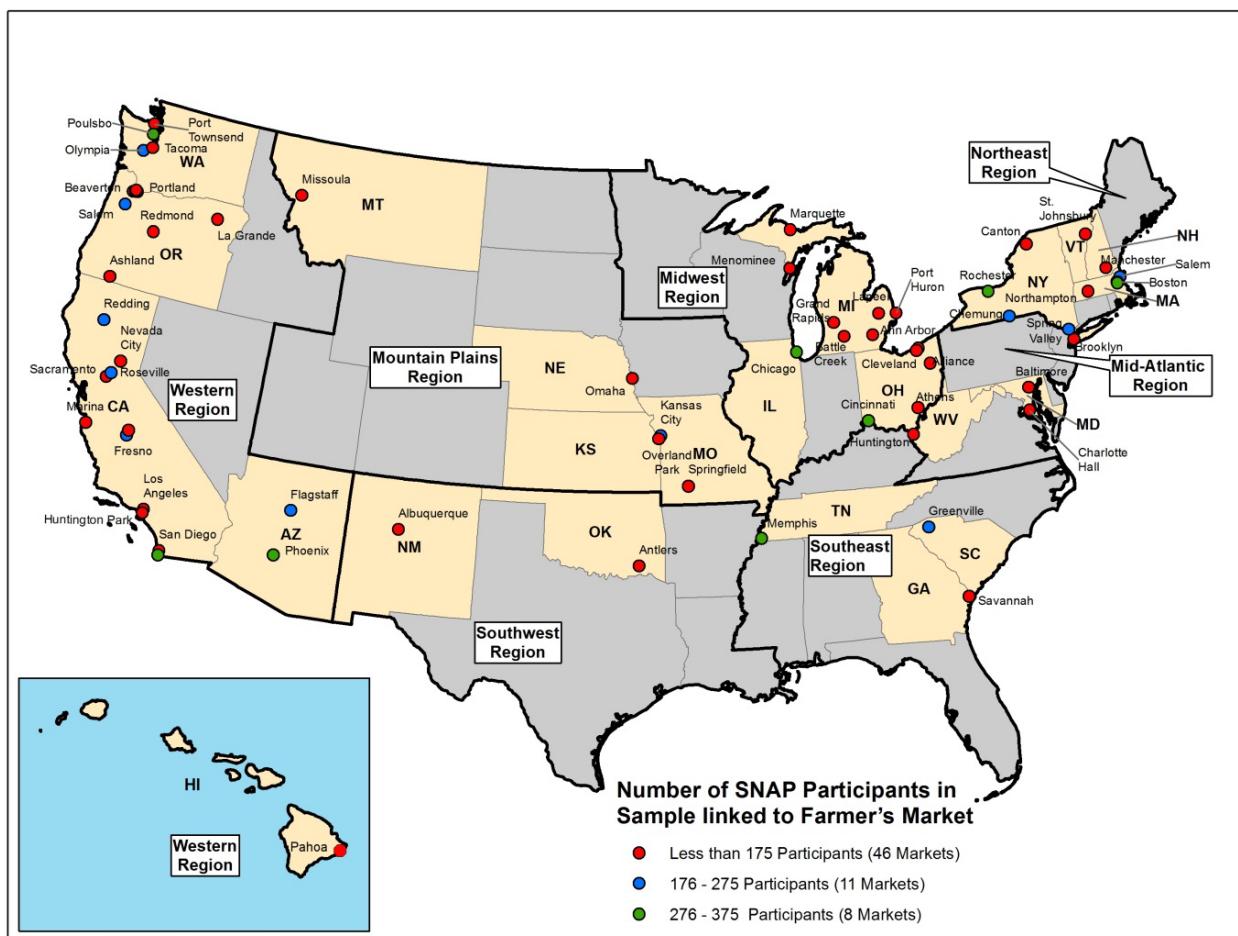
<sup>21</sup> The STARS II database includes a record for each retailer authorized to accept SNAP benefits. The ALERT database includes all EBT transaction records. Refer to the section on data sources for the sampling frame for more details.

## Survey Sample

### Farmers Markets

The sample included 65 FMs from 23 states: Arizona, California, Georgia, Hawaii, Illinois, Kansas, Maryland, Massachusetts, Michigan, Missouri, Montana, Nebraska, New Hampshire, New Mexico, New York, Ohio, Oklahoma, Oregon, South Carolina, Tennessee, Vermont, Washington, and West Virginia. Figure 2-2 provides a map of the location of the FMs.

**Figure 2-2. Location of Farmers Markets Linked to SNAP Participants**



## SNAP Participants

Once the Stage-2 sampling frame was created, a systematic sample of SNAP participants was selected for the client survey. The sample of FM EBT users was selected by the target or reference FM. The sample of FM EBT nonusers was selected by catchment area (within a 2-mile radius of the sampled FM).

Based on the precision requirements, the targeted number of completed surveys was 3,700, including 1,700 FM EBT users and 2,000 FM EBT nonusers (see Table 2-1). This included FMs with and without SBIPs. Assuming an 80 percent response rate, the initial sample included 4,626 SNAP participants. A second assumption was a 3-month attrition rate of 11 percent for SNAP participants. Thus, the final sample size to draw from the sampling frame was 5,197 SNAP participants.

**Table 2-1. FMCS Sample Size**

	FM EBT Users (1,700 Completes)		FM EBT Nonusers (2,000 Completes)	Total
	With SNAP-Based Incentive Programs	W/o SNAP-Based Incentive Programs		
Sample draw	1,194	1,194	2,809	5,197
Attrition (11%)	131	131	309	571
Sample Completes (80%)	1,063	1,063	2,500	4,626
	850	850	2,000	3,700

In many cases, contact information provided by state agencies was incomplete, missing, or incorrect, which contributed to difficulty reaching SNAP participants within the sample. It is likely that many SNAP participants use temporary (prepaid) cellular telephones or change telephone numbers often. Given the potential challenges in reaching participants, a reserve sample of 5,197 SNAP participants was also drawn. Thus, the total sample size drawn was 10,394 SNAP participants.

Table 2-2 provides a breakdown of the FMs and SNAP participants recruited by FNS region. About 40 percent of SNAP participants invited to participate in FMCS were from the Western region, followed by 21 percent from the Northeast region and 19 percent from the Midwest region.

**Table 2-2. Number of Farmers Markets Sampled and Study Participants Invited to Participate in the Survey by FNS Region (N=10,394)**

FNS Regions	Number of Farmers Markets	Number of SNAP Participants
Mid-Atlantic region	3	274
Midwest region	13	1,927
Mountain Plains region	5	720
Northeast region	13	2,195
Southeast region	3	742
Southwest region	2	241
Western region	26	4,295
<b>Total</b>	<b>65</b>	<b>10,394</b>

Data Source: FMCS sample file.

Note: These 65 farmers markets were a subsample of the 579 farmers markets that responded to the Farmers Market Operations Survey.

## Survey Instrument

The survey identified two types of shoppers based on their self-reported shopping habits: (1) SNAP participants who shop at FMs (shoppers) and (2) SNAP participants who did not shop at FMs (nonshoppers). The shoppers category was further divided into (a) shoppers who used their EBT cards at FMs in the past 12 months (FM EBT users) and (b) shoppers who did not use their EBT cards at FMs in the past 12 months (FM EBT nonusers). Both shopper status and FM EBT use status were coded based on the responses of SNAP participants who completed the survey. This supplanted the status that was derived from the anti-fraud location using EBT retailer transactions (ALERT) data for sampling purposes. The five sections of the survey instrument, the targeted group, and types of questions are summarized in Table 2-3.

Before the survey was finalized for data collection, the survey instrument underwent cognitive testing with a small number of SNAP participants. Appendix C provides more information on the cognitive testing and the results.

Table 2-3. Client Survey Structure

Section	Targeted Group	Question Type/Category
A: Shopping for groceries	All	<ul style="list-style-type: none"> <li>▪ Type of stores for grocery shopping</li> <li>▪ Fruit and vegetable purchases (frozen/canned and fresh)</li> <li>▪ SNAP/EBT card use for fresh fruits and vegetables, and plant seeds</li> <li>▪ Reasons for shopping where most fruits and vegetables are purchased</li> </ul>
B. Shopping at FMs	Shoppers at FMs	<ul style="list-style-type: none"> <li>▪ Fresh fruit and vegetable purchases at FMs</li> <li>▪ Payment methods at FMs</li> <li>▪ Spending patterns at FMs</li> </ul>
C: Shopping at a FM in your neighborhood	Shoppers at a specific (local) FM	<ul style="list-style-type: none"> <li>▪ Shopping patterns and history</li> <li>▪ Transportation to FMs</li> <li>▪ Reasons for shopping at the specific (local) FMs</li> <li>▪ Payment methods and SNAP/EBT use at FMs</li> </ul>
D: Reasons for not shopping at a FM	Nonshoppers	<ul style="list-style-type: none"> <li>▪ Reasons for not shopping at FMs</li> <li>▪ Potential reasons to start shopping at FMs</li> </ul>
E: About you and your household	All	<ul style="list-style-type: none"> <li>▪ Household composition</li> <li>▪ Other types of assistance received</li> <li>▪ Demographics</li> </ul>

## Survey Data Collection

The client survey was designed, tested, and administered in two formats: hardcopy and telephone. Completed hardcopy surveys were scanned and stored in electronic form for later retrieval. The computer-assisted telephone interviews (CATIs) were conducted using Voxco, a system package that provided the CATI system.

All study materials were reviewed by FNS, translated into Spanish, and approved by the Office of Management and Budget. Appendix D includes a copy of the introductory letter, reminder letter (i.e. follow up request to complete the survey), thank you letter (with incentive payment), and the cover letter that accompanied a re-mail of the survey upon request (i.e. survey was lost or misplaced). The introductory letters and reminder letters sent to participants included a survey. Appendix E includes a copy of the English and Spanish versions of the client survey.

The study included incentives for sampled SNAP participants to complete the client survey. The survey completion incentive was provided in two parts: an initial payment sent with the invitation mailing, and a thank you payment sent after survey completion. In order to test the effect level on response rate, there were four incentive groups: Group 1 = \$5 initial and \$10

thank you; Group 2 = \$5 initial and \$20 thank you; Group 3 = \$10 initial and \$10 thank you; and Group 4 = \$10 initial and \$20 thank you. Each participant was randomly assigned to one of the four groups. Appendix B presents a summary of the incentive experiment.

## Response Rates

Response rates were calculated at both market and participant levels (referred to as person level). The overall response rate was the combination of the market-level response rate<sup>22</sup> and the person-level response rate (where the person-level response is conditional upon the market-level response). Table 2-4 presents unweighted and weighted case counts by response status at the market and person levels. (See the next section for a summary of the methodology used to apply weighting to adjust for differences in sampling and response rates). Table 2-5 presents weighted response rate by type of SNAP participants and survey completion incentive group. For the weighted counts and weighted response rates, market- and person-level base weights were used at the market and person levels, respectively. Note that the market-level base weight was somewhat different for FM EBT users and FM EBT nonusers.<sup>23</sup> For FM EBT users, the market-level base weight included a measure of size that reflects the size of the market, while for FM EBT nonusers, the market-level base weight did not include such a measure of size because it was not available due to data limitation.<sup>24</sup>

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<sup>22</sup> In the two-stage sample design, market-level units (FMs or EBT-authorized stores within a 2-mile radius of eligible FMs, i.e., within the catchment areas) were the first-stage sampling unit through which the SNAP participant-level frame was constructed and participants were sampled. When a state did not provide any SNAP participant names or contact information, SNAP participants associated with sampled markets in that state would have had no opportunity to be included in the second-stage frame. Although the decision to not provide the information was by the state, this situation is functionally equivalent to losing market-level units to nonresponse, and the response rate at the market level is an essential component in the correct calculation of the overall response rate.

<sup>23</sup> EBT user or EBT nonuser at a sampled FM at the time of sampling.

<sup>24</sup> For nonusers the calculation of a market-level size measure in a similar fashion would have required 12 months of transaction records for more than 70,000 EBT-authorized stores located within a 2-mile radius of each of the 591 eligible FMs, and an extract of that magnitude from the ALERT database would have been prohibitively large. To limit the size of the data request, we restricted the data extract to SNAP-authorized stores from a much smaller subset of catchment areas. This subset included 1) the catchment areas of the 70 sample FMs, and 2) the catchment areas of additional eligible FMs located near any of the 70 sample markets. After an investigation of various alternatives, a decision was made that when an eligible FM was located within 10 miles of any sampled FM, the SNAP-authorized stores in its catchment area would also be included in the ALERT data extract request. The number of SNAP-authorized stores for which ALERT data extract were requested was reduced to about 15,000, but at the cost of not having the full set of EBT transaction data needed for calculating the size measure.

Overall, the response rate was higher among FM EBT users (50 %) than among FM EBT nonusers (37 %). The response rate tended to increase with the amount of the survey completion incentive payments: Group 2 (\$25 total) and Group 4 (\$30 total) had higher response rates than Group 1 (\$15 total) and Group 3 (\$20 total). FM EBT users who received the largest survey-related incentive payment had the highest overall response rate (55 % weighted).

**Table 2-4. Case Counts at Market and Person Levels by Response Status and Level**

Number of Cases by Response Status and Level of Unit	FM EBT Users		FM EBT Nonusers	
	Unweighted	Weighted	Unweighted	Weighted
Market				
Complete	65	114,999.6	65	522.9
Nonresponse	3	3,556.9	3	51.8
Ineligible <sup>a</sup>	2	5,252.4	2	9.1
Total	70	123,808.9	70	583.8
SNAP participant				
Complete	2,465	54,377.6	2,287	5,337,623.7
Nonresponse	2,284	52,135.7	3,293	7,687,136.7
Ineligible	27	633.3	38	93,309.4
Total	4,776	107,146.6	5,618	13,118,069.8

<sup>a</sup> Refers to two markets that were later found not to be FMs based on USDA requirements.

**Table 2-5. Farmers Market Client Survey Response Rates**

Level of Unit	FM EBT Users Weighted Percent	FM EBT Nonuser Weighted Percent
Market	97.0	91.0
SNAP participant	51.1	41.0
Overall	49.5	37.3
Incentive payment Group 1: \$5 initial / \$10 thank you		
SNAP participant	46.4	36.1
Overall	45.0	32.9
Incentive payment Group 2: \$5 initial / \$20 thank you		
SNAP participant	53.1	43.8
Overall	51.5	39.8
Incentive payment Group 3: \$10 initial / \$10 thank you		
SNAP participant	47.9	39.4
Overall	46.4	35.9
Incentive payment Group 4: \$10 initial / \$20 thank you		
SNAP participant	56.7	44.6
Overall	55.0	40.6

## Weighting, Nonresponse Adjustment, and Variance Estimation

This section provides a brief summary of weighting, nonresponse adjustment, and variance estimation. Appendix F provides a more detailed description of the methodology for calculating base weights, nonresponse adjustments, and replicate weights.

Sampling weights are required to produce unbiased estimates from the survey data. Each sampled SNAP participant is assigned a sampling weight, which reflects his or her chance of selection to this study. Consequently, when sampling weights are applied, the estimates would be generalizable to the entire study population. In addition, since not all SNAP participants who received the survey responded, nonresponse adjustments are needed to produce unbiased estimates. Nonresponse adjustment allows us to use data from responding SNAP participants to make appropriate inferences to the universe of all SNAP participants. Finally, replicate weights are calculated by dividing the sample into subgroups. These replicate weights enable us to compute standard errors for the estimates that can be used in statistical significance tests.

## Survey Data Analysis

The initial analyses were descriptive statistics of the SNAP participants who responded to the survey. Second, the general shopping patterns of SNAP participants were summarized, including where they shop for groceries, frequency, and the reasons. This included shopping for frozen/canned and fresh fruit and vegetables as well as EBT use at various types of stores. Bivariate tables were used to examine shopping patterns by FM shopping status. The tables included weighted percentages and unweighted number of responses. Next, the shopping patterns at FMs in general and at a specific FM were examined. Findings on the main reasons for shopping as well as factors perceived as barriers to shopping at FMs were tabulated. Subgroup analyses between the FM EBT users and FM EBT nonusers were conducted.<sup>25</sup>

Multivariate logistic regression models<sup>26</sup> were used to examine the dichotomous outcome (yes/no) of shopping at FM among all participants, and of using SNAP benefits among shoppers. Multivariate analysis included variables such as demographics characteristics (e.g., age, gender,

<sup>25</sup> FM EBT user and FM EBT nonuser at the time of survey completion.

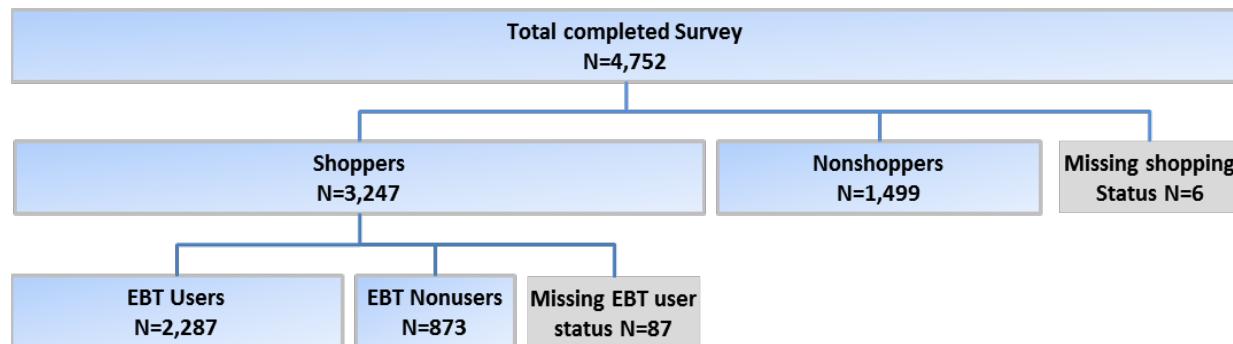
<sup>26</sup> Logistic regression is the appropriate regression analysis to conduct when the dependent variable is dichotomous (binary) and it predicts the probability that the outcome variable takes on a value of 1.

race), work status, income, immigration status, having children in the house, receipt of support from other nutrition programs, and awareness of SBIPs at FMs. Findings were presented regarding the main reasons for shopping at FMs, as well as factors perceived as barriers to shopping at FMs. Exploratory factor analyses<sup>27</sup> were conducted to identify primary reasons SNAP participants shop at FMs. Finally, the role of financial and nonfinancial incentives for shopping at FMs was examined.

## Characteristics of Survey Respondents

The survey identified SNAP participants who shopped at a FM (shoppers) and those who did not (nonshoppers). Among shoppers, the survey identified shoppers who used their EBT card at FMs (FM EBT users) and those who did not (FM EBT nonusers). These characteristics are based on survey responses (not from status at the time of sampling). Figure 2-3 presents the breakdown of FM shoppers vs. nonshoppers, and of FM EBT users vs. FM EBT nonusers. The survey also identified a group of SNAP participants who shopped at a specific local FM.

**Figure 2-3. Breakdown of Survey Respondents by FM Shopper and EBT Card Use Status**



Among the survey respondents, 68 percent (n=3,247) were FM shoppers and 32 percent (n=1,499) were FM nonshoppers. Among the shoppers, 70 percent (n=2,287) were FM EBT users and 27 percent (n=873) were not. Also among the shoppers, 75 percent (n=2,443) were shoppers at a local FM.

<sup>27</sup> Factor analysis is a statistical technique that allows the researcher to “group” individual survey items into general categories based on their co-occurrence. See Appendix H for the results of exploratory factor analysis.

Table 2-6 summarizes the demographics of survey respondents. As shown, women were overrepresented as survey respondents (73% of survey respondents were female, vs. 62% of the adult SNAP population in 2012<sup>28</sup>). The largest age groups represented by survey respondents were ages 30-39 and 40-49 (both 24%). The largest race/ethnic group represented was White (48%), followed by Black or African-American (34.9%) and Hispanic, Latino, or Spanish ethnicity (26.5%). Overall, 35 percent of respondents were employed, while 24 percent reported that they were unable to work. More than half (55%) of survey respondents reported their household income at less than \$10,000.

Survey respondents' households were more likely to include children (60%, vs. 45% for the general SNAP population in 2012) and less likely to be single-person households (34%, vs. 50% for the general SNAP population in 2012).

As shown in Table 2-7, the majority of respondents (66%) reported having at least one additional person in the household. Nearly 80 percent reported having no one in the household over the age of 60. Roughly 28 percent reported having at least one child under the age of 5 in the household. Nearly half (47%) of respondents reported having at least one child between the ages of 5 and 17 in the household. Overall, 39 percent of respondents were born outside the United States; among those, 88 percent had been U.S. residents for 10 years or more. This percentage is higher than the percentage of the general SNAP population in 2012 born outside of the United States, (7%). This may in part be due to limiting the sampling of SNAP participants to those who resided within the catchment area of selected FMs. There was also significant number of markets in the sample from California where more than one-fourth of the total foreign born population in the US resides<sup>29</sup>.

<sup>28</sup> U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis, Characteristics of Supplemental Nutrition Assistance Program Households: Fiscal Year 2012, by Kelsey Farson Gray and Esa Eslami. Project Officer, Jenny Genser. Alexandria, VA: 2014.

<sup>29</sup> The US Census Website. <http://www.census.gov/prod/2012pubs/acs-19.pdf>

Table 2-6. Demographic Characteristics of Survey Participants

Characteristics	Weighted Percent (Std. Error)	Unweighted N
Gender		
Male	26.9 (1.5)	1,137
Female	73.1 (1.5)	3,540
Age groups		
18-29 years old	20.1 (1.1)	977
30-39 years old	23.5 (1.8)	1,264
40-49 years old	23.4 (1.2)	894
50-59 years old	16.5 (0.6)	782
60 or older	16.5 (1.9)	773
Hispanic, Spanish, Latino origin		
Yes	26.4 (4.8)	838
No	73.6 (4.8)	3,705
Race		
Black or African American	35.0 (3.7)	885
White	47.8 (3.4)	2,525
Asian	6.3 (1.1)	179
American Indian or Alaska Native	5.6 (0.8)	303
Native Hawaiian or other Pacific Islander	1.3 (0.3)	28
Other or multi-racial	3.9 (0.8)	250
Work status		
Employed	35.0 (1.2)	1,627
Unemployed	23.9 (1.0)	1,005
Homemaker/student/retired	17.5 (0.9)	841
Can't work	23.6 (1.0)	1,083
Household income		
Under \$10,000	54.6 (1.8)	2,377
\$10,000 - \$19,999	30.0 (1.3)	1,285
\$20,000 - \$29,999	9.7 (0.4)	476
\$30,000 or more	5.7 (0.5)	241
Language spoken at home		
English only	75.6 (3.8)	3,715
Spanish only	9.7 (2.2)	292
English and Spanish only	9.7 (1.5)	279
Other languages	5.0 (0.7)	202

Note: There were 4,752 survey respondents who received these questions. Missing observations are excluded in the denominator for calculating percentages. Percentages may not add up to 100 percent due to rounding.

Data Source: Shopping for Fresh Fruits and Vegetables Survey, Section E.

Table 2-7. Household Characteristics of Survey Participants

Characteristics	Weighted Percent (Std. Error)	Unweighted N
Number of people in the household		
One <sup>a</sup>	34.4 (1.9)	1,634
Two	20.9 (1.3)	891
Three	16.0 (0.8)	691
Four or five	21.1 (1.8)	959
More than five	7.6 (1.5)	363
Number of people over 60 years old		
Zero	77.8 (2.2)	3,465
One	16.8 (1.9)	729
Two	4.4 (0.6)	138
Three	0.3 (0.1)	8
More than three	0.7 (0.1)	26
Number of people with and without children		
With	60.0 (2.3)	2,653
Without	40.0 (2.3)	2,055
Number of children under 5 years old		
Zero	71.8 (1.8)	3,097
One	20.0 (1.2)	822
Two	6.6 (1.0)	303
Three	1.2 (0.4)	52
More than three	0.5 (0.1)	14
Number of children 5 to 17 years old		
Zero	52.9 (2.7)	2,339
One	19.9 (0.9)	819
Two	14.6 (1.3)	612
Three	7.2 (1.1)	315
More than three	5.5 (1.1)	236
Born outside the U.S.	38.7 (2.5)	1,397
How long in the U.S.?		
Less than 1 year	1.2 (0.5)	10
1 year to 5 years	3.7 (0.6)	49
5 years to 10 years	7.0 (1.3)	80
10 years or more	88.1 (1.1)	1,233

<sup>a</sup> Number includes 202 respondents who reported zero as the number of people in household.

Note: There were 4,752 survey respondents who received these questions. Missing observations are excluded in the denominator for calculating percentages. Percentages may not add up to 100 percent due to rounding.

Data Source: Shopping for Fresh Fruits and Vegetables Survey, Section E.

Table 2-8 shows the type of nutrition support that survey respondents receive. More than half of survey respondents had children (60%), and 72 percent of these children received free or reduced meals at school. Most respondents reported that they did not receive assistance from other nutrition programs such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the Senior FM Nutrition Program, or Meals on Wheels, which is not an FNS program. Select characteristics of the survey respondents were compared with the latest data available on the characteristics of general SNAP population.<sup>30</sup>

**Table 2-8. Support Received From Other Nutrition Programs**

Characteristics	Weighted Percent (Std. Error)	Unweighted N
Have children living in the household	60.0 (2.3)	2,653
Child receives free/reduced price school lunch		
Yes	72.4 (1.5)	1,833
No	27.6 (1.5)	705
Child in Head Start		
Yes	28.5 (1.3)	686
No	71.5 (1.3)	1,843
WIC benefits		
Yes	26.2 (1.7)	1,142
No	73.8 (1.7)	3,527
WIC FM Nutrition Program coupons		
Yes	10.8 (1.6)	614
No	89.2 (1.6)	4,047
Senior FM Nutrition Program coupons		
Yes	4.0 (0.4)	273
No	96.0 (0.4)	4,410
Meals on Wheels or Senior Nutrition Program <sup>a</sup>		
Yes	3.5 (0.5)	173
No	96.5 (0.5)	4,522
Some other type of food assistance		
Yes	31.0 (1.5)	1,801
No	69.0 (1.5)	2,881

<sup>a</sup>This question was asked of all survey respondents regardless of age of household members.

Note: There were 4,752 survey respondents who received these questions. Missing observations are excluded in the denominator for calculating percentages.

Data Source: Shopping for Fresh Fruits and Vegetables Survey, Section E.

<sup>30</sup> U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis, Characteristics of Supplemental Nutrition Assistance Program Households: Fiscal Year 2011, by Mark Strayer, Esa Eslami, and Joshua Leftin. Project Officer, Jenny Genser. Alexandria, VA: 2012.

## 2.3 Focus Group Samples and Data Collection

The intent of the focus groups was to gather insights into issues that affect SNAP participants' FM shopping decisions. With assistance from the FNS, three focus group sites were selected based on geographic, cultural, and linguistic diversity and the presence of a FM that offered SBIPs (referred to here as the target market). The selected locations were Atlanta, San Diego, and San Francisco. Georgia and California happen to be the two states with the highest amount of SNAP redemption at FMs and other farm-to-retail venues.<sup>31</sup>

Focus group attendees were recruited from among SNAP participants within targeted zip codes in each of the respective study sites, based on proximity to the target market. All recruiters followed a detailed recruitment protocol and screening protocol to ensure that the recruited individuals were eligible. After participant eligibility was confirmed, each individual was scheduled to attend one of the four focus groups conducted in the city. Each focus group lasted approximately 60 minutes. To ensure attendance of 8 to 10 attendees per group, a total of 13 individuals were recruited per group to account for attrition, and each attendee received \$60 for his or her time and participation. The focus groups were conducted by a moderator and co-moderator using a focus group moderator guide (see Appendix E)<sup>32</sup>.

Eligible attendees were assigned to one of two focus group categories. Those indicating that they shopped three or more times in the past 12 months at the target market were assigned to the “frequent shoppers” group. Those who shopped fewer than three times (including never) within the past 12 months at the target market were assigned to the “nonfrequent shoppers” group. Two focus groups of each type were conducted in each city, for a total of 12 groups.

It is important to underscore that “frequency of shopping” refers explicitly to shopping at a *specific* FM, and not at FMs *in general*. During the focus groups, attendees in both groups reported shopping at other FMs in addition to the target market. Thus, the nonfrequent shoppers groups contained attendees who might be considered frequent FM shoppers when taking into consideration all the FMs they may have shopped at in the past 12 months. However, screening in this manner afforded the opportunity to compare and contrast attendees’ perspectives with regard to their shopping behavior at a specific market known to offer a specific type of SNAP

<sup>31</sup> Hunt, A., and Blavatsky, G., 2014. SNAP Redemption at Farmers Markets Sees Rapid Growth from 2011 to 2013. Available at <http://wholesomewave.org/snapgrowth20112013>.

<sup>32</sup> Note that focus groups in San Diego were conducted in Spanish.

Based Incentive Programs (SBIP). For these reasons, the groupings among focus group attendees were different than the groupings among survey respondents. Survey respondents were grouped based on whether or not they shopped at any FM in the past 12 months, while focus group attendees were grouped based on their frequency of shopping at a specific FM in the past 12 months.

All focus groups were audiotaped, and the recordings were transcribed by a professional transcription service. At the conclusion of each group, the research team conducted a preliminary analysis to inform subsequent focus group protocols. Following the completion of all 12 focus groups, a senior research analyst compiled and analyzed all of the qualitative data.

## Focus Group Attendees

This section presents the demographics of focus group attendees, broken down by frequency of shopping at the target FM and by focus group location. Table 2-9 summarizes the demographics of focus group attendees who were frequent vs. nonfrequent shoppers at the target FM. Across all 12 groups, 70 percent of attendees were female. In order to examine potential perspectives that may be unique to Hispanic SNAP participants, eligible attendees in San Diego were limited to Hispanics whose primary language was Spanish. No such criteria for eligibility were applied at the other study sites. Overall, most attendees identified as Black or African American (38%) or Hispanic (36%).<sup>33</sup> The majority of focus group attendees (64%) were between 30 and 50 years old, and the majority (53%) had a high school education or less.

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<sup>33</sup> The sample in San Diego was intentionally 100 percent Hispanic to ensure representation. The high percentage of Black or African American focus group participants is likely due to location (i.e., Atlanta, GA).

Table 2-9. Focus Group Attendee Demographics, by Frequency of Shopping (N=106)

	Percent	Number of Attendees (N=106)	Number of Frequent Shoppers (N=52)	Number of Nonfrequent Shoppers (N=54)
Gender				
Male	30.2	32	9	23
Female	69.8	74	43	31
Race/ethnicity				
White	17.0	18	6	12
Black or African American	37.7	40	23	17
Hispanic	35.8	38	18	20
Asian	3.8	4	2	2
Other or multiracial	5.7	6	3	3
Age				
Less than 30 years old	15.1	16	11	5
Between 30 and 50 years old	64.1	68	33	35
Greater than 50 years old	20.8	22	8	14
Education				
Less than high school	16.0	17	8	9
High school	36.8	39	16	23
Some college	25.5	27	17	10
College degree	21.7	23	11	12

Note: Frequent shoppers are SNAP participants who shopped at the target FM three or more times in the past 12 months. Nonfrequent shoppers shopped at the target FM less than three times in the past 12 months, including those who did not shop at the FM at all.

Data Source: FMCS Focus Groups Screener Data.

Table 2-10 shows focus group attendee characteristics by shopping frequency, compared across the three sites. Overall, at all sites the majority of frequent shoppers were female. The majority of nonfrequent shoppers were likewise female except in San Francisco, where there were more male attendees (12 males and 7 females). Blacks or African Americans represented the highest number of frequent and nonfrequent shoppers in Atlanta. All attendees in San Diego were Hispanic in both the frequent and nonfrequent shoppers groups. The San Francisco site was evenly split between Blacks or African Americans and Whites, and both shopping groups had a similar distribution of attendees from the remaining race/ethnicity categories. San Diego had the highest proportion of attendees with a high school education or less.

**Table 2-10. Focus Group Attendee Characteristics, by Frequency of Shopping and Location (N=106)**

Characteristic	Percent	Number of Participants	Number of Frequent Shoppers (N=52)			Number of Nonfrequent Shoppers (N=54)		
			ATL	SF	San D	ATL	SF	San D
Total	100.0	106	20	17	15	19	19	16
Gender								
Male	30.2	32	7	2	0	8	12	3
Female	69.8	74	13	15	15	11	7	13
Race/ethnicity								
White	17.0	18	3	3	0	5	7	0
Black or African American	37.7	40	17	6	0	12	5	0
Hispanic	35.8	38	0	3	15	1	3	16
Asian	3.8	4	0	2	0	0	2	0
Mixed/other	5.7	6	0	3	0	1	2	0
Age								
Less than 30 years old	15.1	16	8	2	1	1	0	4
Between 30 and 50 years old	64.1	68	9	11	13	13	12	10
Greater than 50 years old	20.8	22	3	4	1	5	7	2
Education								
Less than high school	16.0	17	0	2	6	1	2	6
High school	36.8	39	7	2	7	11	5	7
Some college	25.5	27	8	7	2	2	5	3
College degree	21.7	23	5	6	0	5	7	0

Note: Frequent shoppers are SNAP participants who shopped at the target FM three or more times in the past 12 months. Nonfrequent shoppers shopped at the target FM less than three times in the past 12 months, including those who did not shop at the FM at all.

Data Source: FMCS Focus Groups Screener Data.

## Focus Group Data Analysis

Themes from the focus group data were identified following the first set of focus groups in Atlanta. Those themes were used to tailor and refine the protocols for subsequent focus groups conducted in other locations. This iterative analytic process continued throughout collection of the qualitative data.

Coding and analysis began after the first focus group summary was completed. All subsequent focus group summaries were compared with the previous focus groups' themes to further develop and refine the coding process. This process is called the constant comparison method.<sup>34</sup> All focus group summaries underwent this level of coding and analysis. Topline summary

<sup>34</sup>Glaser, Barney G & Strauss, Anselm L., 1967. The Discovery of Grounded Theory: Strategies for Qualitative Research. Chicago, Aldine Publishing Company.

reports were prepared for each study city highlighting themes and findings. These were then synthesized into a single summative write-up with a focus on distinguishing differences and commonalities among the six frequent shopper groups and the six nonfrequent shopper groups.

When presenting focus group data in this report, the number of supporting and illustrative quotes accompanying the interpretive findings is limited to improve readability. Attendees provided varying amounts of responses to the questions, with varying degrees of enthusiasm and emphasis. Thus, the number of quotes presented in this report does not indicate the frequency or importance of the theme as expressed by the focus group participants.

## 2.4 Other Data Sources

In addition to the client survey and focus group data, GIS data were examined to explore the distance and availability of services around the FMs and respondents' residences. To accomplish this, the distance between SNAP participants' home addresses and the target FM was tabulated. Next, the presence of other food retailers within a 2-mile radius of the SNAP participant was tabulated by shopping status at FMs. Computation of distances between the home of the SNAP participant and other vendors helped in the estimation of the distance between the FM and the nearest retailer. GIS data were used to identify food retail services available in the FM vicinity for FM shoppers and nonshoppers. In addition, the distance between the target FM and the nearest food retailer (a supermarket or any food retailer) was calculated also by participant shopping status.

## Shopping Patterns of SNAP Participants

### 3.1 Overview and Key Findings

Farmers markets (FMs) play an important role in providing access to locally produced farm-fresh foods among supplemental nutrition assistance program (SNAP) participants. This chapter describes the shopping patterns for fruits and vegetables among SNAP participants, including their frequency of shopping, effects of seasonality, preferred payment method, level of spending, and perceptions of price. Preferred locations for purchasing fruits and vegetables are summarized, including preferences for the use of FMs. Differences between FM shoppers and nonshoppers in terms of overall characteristics of households and general shopping patterns are presented.<sup>35</sup> Finally, this chapter presents findings regarding shopping patterns at a specific FM, including history of shopping, transportation, distance, items bought, and the use of SNAP benefits. Although this chapter reports on both survey and focus group data, the data tables are based only on data reported by survey respondents.

#### Key Findings

Key findings reported in this chapter include the following:

1. General Shopping Location
  - SNAP participants most often shopped at large grocery stores for all their groceries and were most likely to use their electronic benefit transfer (EBT) cards at these stores.
  - SNAP participants looked for good specials and deals, low prices, and high quality.
  - Acceptance of the EBT card was among the top reasons for shopping at a particular store.

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<sup>35</sup> Unless specifically noted, tests for statistical significance were not conducted.

2. Shopping for Fruits and Vegetables
  - When shopping for fruits and vegetables, SNAP participants purchased fresh products more often than frozen/canned products.
3. Shopping at FMs
  - Among SNAP participants, those who were more likely to shop at FMs included women, people in households with no children, people in households receiving support from other nutrition programs, and those who were aware of incentives for EBT card use.
  - Among SNAP participants, those who were less likely to report shopping at FMs included African Americans and other non-White race categories, participants who were unemployed, homemakers, students, those who reported that they could not work, and people in households with income below \$10,000 per year.
  - The majority of shoppers agreed that they found more variety and better quality fruits and vegetables at the FM than in other stores.
  - Most shoppers believed that the prices of fresh fruits and vegetables at FMs were lower or at least the same as in other stores.
4. EBT Card Usage
  - In terms of EBT card use at FMs, gender and age did not play a significant role in general. Black or African Americans, unemployed SNAP participants, those who cannot work, and SNAP participants with a household income below \$10,000 were all more likely to use SNAP benefits at FMs.
  - SNAP participants who were aware of financial incentives for EBT card use were more likely to use SNAP benefits when shopping at FMs.
  - Among those who did not use their EBT card almost every time they shopped at FMs, more than one-third were not aware that the card could be used at a FM, one in four ran out of money on their EBT card, and almost one in ten declined to use it in order to avoid social stigma.

## 3.2 General Shopping Patterns

In describing SNAP participants' general shopping patterns, it is critical to understand where they regularly purchase groceries, how often they shop, the factors that affect where they shop, and whether they use SNAP benefits each time they shop.

## Venues for Grocery Shopping

When considering the types of stores at which SNAP participants shop for groceries, it should be noted that in responding to these survey questions, SNAP participants could select more than one type of store, and the types of stores are not mutually exclusive of each other, as listed in Table 3-1. For example, a particular store might be considered an ethnic market as well as a small grocery store. Thus, respondents were free to categorize stores as they saw fit. Survey respondents identified large grocery stores as the type of store that they most frequently shopped for groceries. Indeed, all but three percent of the sample indicated that they shop at large grocery stores. Small grocery stores were the second most common response. Slightly more than one-third of survey respondents selected other kinds of stores. The other kinds of stores reported included discount stores (e.g., Big Lots, Family Dollar, Save-a-lot), wholesale stores (e.g., Costco), pharmacies, and Target or Walmart. Additionally, more than 50 percent of survey respondents reported a garden (grown by themselves, a family member, or friend) as a source for fresh fruits and vegetables.

**Table 3-1. Where SNAP Participants Shop for Groceries**

Markets	Weighted Percent (Std. Error)	Unweighted N
Large grocery stores	96.8 (0.8)	4,541
Small grocery stores	69.2 (1.8)	3,229
Convenience stores	30.7 (1.5)	1,326
Ethnic markets	30.0 (3.7)	1,255
Natural organic stores	28.9 (1.4)	1,894
Other kinds of stores	35.5 (1.8)	1,588

Note: There were 4,752 survey respondents who received this question. Respondents could select as many types of markets as applicable. Also, market types are not mutually exclusive from each other, therefore, any individual store could fit into more than one category.

Data Source: Shopping for Fresh Fruits and Vegetables Survey Questions A1, A5, A9, A13, A17, and A21.

This overall shopping pattern was corroborated in the focus group findings.<sup>36</sup> When asked to identify where they typically shop for groceries, most focus group attendees mentioned big name grocery stores.. It was not uncommon for focus group attendees to also include “big box” chains.. Medium to large regional chains were also frequently mentioned.. To a lesser degree, focus group attendees also mentioned discount grocers. Only rarely did focus group attendees indicate that they shopped at local non-name-brand organic or ethnic markets, but among the three study sites, this occurred more commonly in San Francisco. Focus group attendees in San

<sup>36</sup> Four focus groups were conducted in each of three cities: Atlanta, San Diego, and San Francisco. Refer to Chapter 2 for more details on focus group data collection.

Francisco cited local specialty markets, which offer larger selections of organically produced products. In San Diego, several attendees mentioned an ethnic market specializing in Mexican and Central American products. It was extremely rare for focus group attendees to identify convenience stores. Because the focus group question was asked in an open-ended fashion, a small proportion of attendees indicated at the start of the session that they also shopped at FMs. Again, this occurred most commonly in San Francisco, where one-third of the attendees included FMs among the types of locations where they regularly shop.

In summary, both the survey data and the focus group data revealed that most SNAP participants shop at large grocery stores.

### **Frequency of Purchasing Fruits and Vegetables by Type of Store**

Next, the frequency of shopping for frozen/canned and fresh fruits and vegetables by type of store among SNAP participants was examined, as shown in Tables 3-2 and 3-3.

Overall, the majority of SNAP participants claimed that they rarely shopped for frozen/canned fruits and vegetables. For example, almost 64 percent of participants shopped for frozen/canned fruits and vegetables every other week or less often. However, among those who did report shopping for frozen/canned fruits and vegetables, the most common place for purchasing these products was again large grocery stores.

As seen in Table 3-3, more than 61 percent of participants shopped for fresh fruits and vegetables at large grocery stores once a week or more often. While participants appear to purchase fresh products more frequently than frozen/canned fruits and vegetables, this does not necessarily indicate that they prefer fresh fruits and vegetables since frozen and canned products are less perishable and need not be purchased as frequently.

Table 3-2. Frequency of Shopping for Frozen/Canned Fruits and Vegetables, by Market Type

Markets	Once a Week or More Often	Every Other Week	Once a Month or Less Often	Never
Large grocery stores				
Weighted percent (std. error)	26.6 (0.8)	22.6 (0.9)	42.4 (1.2)	8.4 (0.9)
Unweighted N	1,120	907	2,080	397
Small grocery stores				
Weighted percent (std. error)	19.2 (1.5)	16.4 (1.3)	45.8 (2.6)	18.6 (0.9)
Unweighted N	505	402	1,589	683
Natural organic stores				
Weighted percent (std. error)	15.0 (1.4)	10.4 (0.5)	48.2 (1.8)	26.4 (1.4)
Unweighted N	209	157	856	612
Convenience stores				
Weighted percent (std. error)	10.9 (1.4)	7.1 (0.6)	40.0 (2.4)	42.0 (1.9)
Unweighted N	102	77	463	652
Ethnic markets				
Weighted percent (std. error)	20.5 (1.7)	14.5 (1.6)	38.1 (1.0)	26.9 (3.1)
Unweighted N	157	92	512	460
Other kind of stores				
Weighted percent (std. error)	18.8 (1.7)	13.6 (0.8)	50.4 (2.2)	17.1 (1.7)
Unweighted N	245	169	612	504
Any of these stores/markets				
Weighted percent (std. error)	35.7 (1.6)	23.6 (0.9)	40.7 (1.6)	0
Unweighted N	1,553	1,032	2,151	0

Note: There were 4,752 survey respondents who received this question. The denominator for each market type is the number of participants who shop at that store (see Table 3-1) excluding the number of missing for this particular question.

Data Source: Shopping for Fresh Fruits and Vegetables Survey, Questions A2, A6, A10, A14, A18, and A22.

Table 3-3. Frequency of Shopping for Fresh Fruits and Vegetables, by Market Type

Markets	Once a Week or More Often	Every Other Week	Once a Month or Less Often	Never
Large grocery stores				
Weighted percent (std. error)	53.5 (1.3)	23.9 (0.7)	20.9 (1.2)	1.7 (0.2)
Unweighted N	2,487	1,013	914	72
Small grocery stores				
Weighted percent (std. error)	36.9 (3.3)	15.9 (0.6)	40.5 (2.6)	6.6 (1.0)
Unweighted N	1,123	539	1,256	255
Convenience stores				
Weighted percent (std. error)	15.7 (1.7)	6.1 (0.7)	43.9 (1.6)	34.3 (1.9)
Unweighted N	161	93	543	502
Natural organic stores				
Weighted percent (std. error)	27.2 (2.4)	13.0 (1.4)	53.1 (1.5)	6.7 (1.5)
Unweighted N	623	313	849	65
Ethnic markets				
Weighted percent (std. error)	34.1 (1.7)	17.8 (1.5)	40.5 (2.2)	7.7 (1.5)
Unweighted N	290	163	628	145
Other kind of stores				
Weighted percent (std. error)	26.6 (4.4)	21.3 (1.9)	43.9 (3.6)	8.2 (1.7)
Unweighted N	479	295	586	178
Any of these stores/markets				
Weighted percent (std. error)	61.4 (2.5)	20.7 (1.1)	17.9 (1.6)	0
Unweighted N	3,082	971	675	0

Note: There were 4,752 survey respondents who received this question. The denominator for each market type is the number of participants who shop at that store (see Table 3-1) excluding the number of missing for this particular question.

Data Source: Shopping for Fresh Fruits and Vegetables Survey, Questions A3, A7, A11, A15, A19, and A23.

The focus groups captured typology data from attendees with respect to where they tended to shop for fresh fruits and vegetables. As did the survey respondents, focus group attendees mentioned large grocery stores most often. However, relative to survey responses, greater mention of shopping at the small, organic, ethnic, and specialty stores was made in the focus groups when specifically discussing shopping for fresh fruits and vegetables. In addition, a few focus group attendees mentioned that they shopped for fresh fruits and vegetables at FMs without direct prompting. As likewise reflected in the survey data, this suggests that although SNAP participants tended to concentrate their general grocery shopping on large and regional grocery chains, they have access to a wider array of options when shopping more specifically for fresh produce.

As seen in Table 3-4, when shopping for fresh fruits and vegetables, more than two-thirds of participants reported using SNAP benefits for their purchases. The rate of using SNAP benefits for fresh fruits and vegetables is highest (89%) at large grocery stores and lowest (73%) at natural organic stores.

**Table 3-4. Use of SNAP Benefits to Purchase Fresh Fruits and Vegetables, by Market Type**

Markets	Grocery Shoppers Who Use SNAP Benefits for Fresh Fruits and Vegetables	
	Weighted Percent (Std. Error)	Unweighted N
Large grocery stores	88.6 (0.9)	3,904
Small grocery stores	83.3 (0.5)	2,419
Convenience stores	74.2 (1.8)	584
Natural organic stores	72.8 (2.3)	1,417
Ethnic markets	81.9 (1.7)	832
Other kind of stores	81.6 (1.1)	1,083

Note: There were 4,752 survey respondents who received this question. Missing observations are excluded in the denominator for calculating percentages. Missing excludes valid skips.

Data Source: Shopping for Fresh Fruits and Vegetables Survey, Questions A4, A8, A12, A16, A20, and A24.

When asked where they redeemed most of their SNAP benefits, the majority of focus group attendees who responded to this question said that they redeemed the bulk of their SNAP benefits at store locations other than FMs. Attendees often commented that they tended to spend most of their benefits at the grocery store that was most conveniently located to them, and by extension, where they tended to shop most regularly. In many cases, these were large or discount grocery chains, such as FoodCo, Trader Joe's, or Safeway.

**Bulk of SNAP Benefit Redemption**

*Safeway is the closest location to where I live at, so most of mine goes to Safeway. [San Francisco]*

*FoodCo. It's right down the street, right around the corner from my house. [San Francisco]*

Survey respondents were asked the reasons for shopping at the particular retail store where they buy most of their fruits and vegetables (Table 3-5). Survey respondents selected from a list of hypothetical reasons. This provides valuable information regarding the factors that affect people's decisions about where to shop for fresh fruits and vegetables. The most common reason for shopping at a particular store was the availability of "good specials and deals." The second most common reason was "low prices." This is consistent with the theory of shopping, which assumes that the household is a rational decision-making unit that attempts to procure and stock the product it needs at the minimum cost.<sup>37</sup> In essence, rational decision-makers like good deals. Additionally, the store's acceptance of the EBT card, a reason that is relevant only to SNAP participants, ranks very high as well. More than 83 percent of participants stated this was a reason for shopping at a particular store. The other reasons included availability of high-quality fruits and vegetables, proximity to residence, easy to get to, and convenient store hours.

Among the focus group attendees, convenience was commonly mentioned as the main reason for shopping where they did. These responses correspond to the "easy to get to" and "close to where I live" items in the survey. Focus group attendees also referenced the convenient advantages of buying their fruit and vegetables as part of a "one-stop shopping" preference. This general preference for convenience was followed closely by references to quality and freshness.

Although focus group attendees spoke about price and cost, references to "good specials and deals" were not among the top reasons focus group attendees gave for deciding to shop at FMs, in contrast to the survey respondents. Relatively speaking, references to price and cost appeared to be more common in San Diego than in the other focus group locations.<sup>38</sup> Interestingly, the focus group discussions surfaced an important distinction between actual price and perceived value (discussed further in Chapter 4), suggesting that perceived value might be a more critical determinant than unit price.

<sup>37</sup> Blattberg, R., Buesing, T., Peacock, P., and Sen, S. (1978). Identifying the deal prone segment. *J Mark Res*, 15:369–377.

<sup>38</sup> This may be due to potentially higher levels of chronic poverty among the San Diego respondents. Compared with focus group attendees at other locations, San Diego attendees tended to have lower levels of education and greater participation in WIC, and alluded to longer periods of receiving SNAP benefits. In contrast, several attendees in Atlanta and San Francisco stated that their eligibility for SNAP was more recent and due to a recent job loss or health issue.

Table 3-5. Reasons for Shopping Where Participants Reported Shopping for Most Fresh Fruits and Vegetables

Reason	Weighted Percent Said Yes (Std. Error)	Unweighted N	How Important Is That Reason?	Weighted Percent Said Yes (Std. Error)	Unweighted N
Good specials and deals	88.5 (0.7)	3,898	Very important Somewhat important Only a little important Not at all important	82.8 (0.6) 15.1 (0.5) 1.8 (0.3) 0.3 (0.1)	3,026 646 110 23
Low prices on the products I buy	88.0 (0.7)	3,872	Very important Somewhat important Only a little important Not at all important	86.3 (0.8) 11.6 (0.7) 1.8 (0.3) 0.3 (0.2)	3,126 572 70 24
Low prices on fresh fruits and vegetables	83.6 (1.5)	3,607	Very important Somewhat important Only a little important Not at all important	84.1 (1.3) 12.5 (1.0) 2.7 (0.3) 0.7 (0.3)	2,813 590 98 39
They take my SNAP/EBT card	83.3 (0.8)	3,833	Very important Somewhat important Only a little important Not at all important	80.8 (0.7) 13.3 (0.4) 3.6 (0.4) 2.2 (0.4)	2,998 487 130 103
High quality fruits and vegetables	78.5 (1.4)	3,738	Very important Somewhat important Only a little important Not at all important	83.4 (0.7) 13.4 (0.5) 2.1 (0.3) 1.1 (0.1)	3,073 504 58 31
Close to where I live	75.8 (0.9)	3,543	Very important Somewhat important Only a little important Not at all important	57.9 (1.3) 31.6 (1.1) 7.3 (0.5) 3.1 (0.6)	1,872 1,242 265 111
Easy to get to	74.3 (0.8)	3,430	Very important Somewhat important Only a little important Not at all important	60.2 (1.3) 30.2 (1.4) 7.5 (0.5) 2.1 (0.3)	1,853 1,154 264 88
Open at convenient times	66.1 (1.0)	3,021	Very important Somewhat important Only a little important Not at all important	60.4 (1.1) 28.1 (1.0) 8.2 (0.6) 3.3 (0.5)	1,652 928 267 101

Note: There were 4,752 survey respondents who received this question. Missing observations are excluded in the denominator for calculating percentages. Missing excludes valid skips. Numbers of missing observations excluded in the denominator for calculating percentages are 71, 117, 57, 59, 58, 72, 63, 68 in the order of reasons listed in the table.

Data Source: Shopping for Fresh Fruits and Vegetables Survey, Questions: A30 through A46.

### Characteristics of Farmers Market Shoppers and Nonshoppers

Next, the general characteristics of FM shoppers and nonshoppers are described and compared. As seen in Table 3-6, gender and age distribution do not appear to differ between the two groups among survey participants. However, a greater proportion of nonshoppers reported an annual income less than \$10,000, or work status as unemployed.

**Table 3-6. Demographic Characteristics of Survey Participants by Farmers Market Shopping Status**

Characteristics	Shoppers (N=3,247)		Nonshoppers (N=1,499)	
	Weighted Percent (Std. Error)	Unweighted N	Weighted Percent (Std. Error)	Unweighted N
Gender				
Male	26.7 (1.7)	738	27.0 (1.5)	396
Female	73.3 (1.7)	2,456	73.0 (1.5)	1,082
Age groups				
18-29 years old	20.1 (1.3)	637	20.2 (1.6)	340
30-39 years old	22.2 (2.0)	864	24.5 (1.9)	400
40-49 years old	25.7 (2.4)	598	21.8 (0.9)	295
50-59 years old	16.0 (1.3)	537	17.0 (1.1)	244
60 or older	16.0 (1.6)	565	16.6 (2.3)	206
Work status				
Employed	35.4 (1.7)	1,150	34.8 (1.1)	476
Unemployed	21.4 (1.3)	639	25.9 (1.4)	365
Homemaker/student/retired	20.8 (2.0)	598	15.1 (1.1)	242
Cannot work	22.5 (1.4)	725	24.2 (1.4)	357
Household income				
Under \$10,000	52.5 (2.4)	1,574	56.0 (1.7)	801
\$10,000-\$19,999	27.9 (1.2)	902	31.8 (1.7)	383
\$20,000-\$29,999	11.4 (0.8)	355	8.4 (0.5)	120
\$30,000 or more	8.2 (1.5)	173	3.8 (0.7)	68

Note: There were 4,746 survey respondents who received these questions. Table 3-6 excludes six participants out of 4,752 because of missing shopping status. Missing observations are excluded in the denominator for calculating percentages. Percentages may not add up to 100 percent due to rounding.

Data Source: Shopping for Fresh Fruits and Vegetables Survey, Questions E9, E14, E11, and E12.

The focus groups provide only limited insight into what types of individuals tend to shop at FMs. Moreover, it is important to note that the survey respondents and focus group attendees cannot be directly compared due to differences in sampling method and recruitment strategy.<sup>39</sup> However,

<sup>39</sup> Survey respondents were grouped as shoppers vs. nonshoppers based on whether or not they shopped at any FM in the past 12 months, while focus group attendees were grouped as frequent vs nonfrequent shoppers based on how often they shopped at a target FM in the past 12 months. As explained in Chapter 2, some focus group attendees in the nonfrequent FM shoppers group could actually be considered frequent shoppers if measured by the frequency of their shopping at any FM.

with this caveat in mind, it should be noted that among focus group attendees, a higher proportion of females tended to be in the frequent shoppers groups, and this tracks with the higher proportion of female shoppers among the survey respondents. However, with respect to age, a higher proportion of younger focus group attendees (less than 30 years old) tended to be in the frequent shoppers groups. Likewise, older focus group attendees (those over 50 years of age) tended to be in the nonfrequent shopper groups. This stands in contrast to the higher proportion of older survey respondents claiming shopper status in the survey. The focus group recruitment method did not capture data on work status or household income, but did collect data on education. A higher proportion of those with less than a high school education were in the nonfrequent shoppers groups. Assuming a correlation between education and income, this also tracks with the survey data findings.

As demonstrated in Table 3-7, a greater proportion of survey respondents who were born outside the United States reported shopping at FMs, compared with those born in the United States. This may be consistent with the fact that in developing regions of the world, consumers most often shop at local markets such as village markets and FMs, as opposed to larger, centralized wholesale markets. Thus, the respondents who were born outside the United States could have had more opportunities to experience shopping at venues that resemble American FMs.<sup>40</sup> The majority of survey respondents who were not born in the United States have been in the country for more than 10 years, and the length of time in the United States was not associated with FM shopping status. Similarly, households speaking languages other than English and/or Spanish at home are more likely to be shoppers than nonshoppers. We did not observe any statistical difference between shoppers and nonshoppers based on race and Hispanic/Latino origin.

As seen in Table 3-8, households that have more than one person and households with children are less likely to shop at FMs than households with no children. Moreover, households with at least one member over 60 years ago are more likely to shop at FMs.

<sup>40</sup> Reardon T., Timmer C., Barrett C. Berdegué J. 2003. The rise of supermarkets in Africa, Asia, and Latin America. *Amer J. Agr. Economics*. 85:5;1140-46.

Table 3-7. Race and Ethnicity of Survey Participants by Farmers Market Shopping Status

Characteristics	Shoppers (N=3,247)		Nonshoppers (N=1,499)	
	Weighted Percent (Std. Error)	Unweighted N	Weighted Percent (Std. Error)	Unweighted N
Born outside the U.S.				
Yes	45.6 (2.8)	995	33.4 (2.6)	400
How long in the U.S.? <sup>a</sup>				
Less than 1 year	2.2 (0.8)	9	0.2 (0.2)	1
1 year to 5 years	3.0 (0.9)	39	4.3 (0.6)	10
5 years to 10 years	7.7 (1.3)	56	6.4 (1.8)	24
10 years or more	87.1 (1.5)	875	89.1 (1.6)	356
Language spoken at home				
English only	73.6 (4.4)	2,541	77.3 (3.7)	1,170
Spanish only	8.8 (2.8)	182	10.4 (1.8)	110
English and Spanish only	10.2 (1.7)	183	9.3 (1.5)	96
Other languages	7.3 (1.4)	149	2.9 (1.1)	52
Hispanic, Spanish, Latino origin				
Yes	25.2 (5.2)	550	27.5 (4.6)	288
No	74.8 (5.2)	2,552	72.5 (4.6)	1,150
Race				
Black or African American	34.4 (4.0)	556	35.2 (3.9)	327
White	46.1 (3.9)	1,774	49.3 (3.3)	749
Asian	7.3 (2.3)	110	5.6 (1.0)	68
American Indian or Alaska Native	6.2 (0.6)	225	5.2 (1.1)	78
Native Hawaiian/Pacific Islander	1.0 (0.4)	19	1.6 (0.4)	9
Other or multi-racial	5.0 (0.9)	184	3.1 (0.8)	66

<sup>a</sup> Among those born outside of the U.S.

Note: There were 4,746 survey respondents who received these questions. Table 3-7 excludes six participants out of 4,752 because of missing shopping status. For each variable, missing observations are excluded in the denominator for calculating percentages. Percentages may not add up to 100 percent due to rounding.

Data Source: Shopping for Fresh Fruits and Vegetables Survey Questions E15, E16, E17, and E13.

Table 3-8. Household Size of Survey Participants by Farmers Market Shopping Status

	Shoppers (N=3,247)		Nonshoppers (N=1,499)	
	Weighted Percent (Std. Error)	Unweighted N	Weighted Percent (Std. Error)	Unweighted N
Number of people in the household				
One <sup>a</sup>	30.8 (2.2)	1,115	37.2 (2.8)	518
Two	23.8 (2.2)	626	18.3 (0.8)	264
Three	15.0 (1.0)	450	16.8 (1.0)	241
Four or five	20.2 (2.2)	646	22.0 (1.5)	313
More than five	10.2 (1.5)	266	5.7 (1.7)	97
Number of people over 60 years old				
Zero	75.3 (2.2)	2,329	80.0 (2.3)	1,136
One	19.0 (1.7)	545	15.1 (2.4)	184
Two	4.7 (0.9)	94	3.8 (0.4)	43
Three	0.2 (0.2)	6	0.3 (0.2)	2
More than three	0.8 (0.2)	18	0.7 (0.3)	7
Number of children under 5 years old				
Zero	68.5 (2.0)	2,094	74.2 (2.4)	1,002
One	22.0 (1.8)	566	18.6 (1.6)	256
Two	6.6 (1.1)	216	6.6 (1.1)	87
Three	1.8 (0.4)	39	0.7 (0.4)	13
More than three	1.1 (0.2)	12	0.0 (0.0)	2
Number of children 5 to 17 years old				
Zero	50.0 (3.0)	1,613	54.8 (3.2)	725
One	21.6 (1.9)	550	18.7 (0.9)	268
Two	13.4 (1.6)	398	15.5 (1.2)	214
Three	8.1 (1.3)	221	6.6 (1.2)	94
More than three	6.9 (1.5)	164	4.4 (1.2)	72
Number of children under 18 years old				
Zero	42.0 (3.1)	1,354	45.3 (3.4)	612
One	19.0 (0.9)	541	19.5 (1.1)	255
Two	15.6 (1.4)	440	18.6 (0.7)	256
Three	10.4 (1.1)	310	7.7 (1.5)	129
More than three	13.1 (1.7)	318	8.8 (1.8)	130

<sup>a</sup> This includes 202 respondents who indicated zero as the number of people in the household.

Note: There were 4,746 survey respondents who received these questions. Table 3-8 excludes six participants out of 4,752 because of missing shopping status. For each variable, missing observations are excluded in the denominator for calculating percentages. Percentages may not add up to 100 percent due to rounding.

Data Source: Shopping for Fresh Fruits and Vegetables Survey Questions E18, E19, E21, and E20.

Table 3-9 presents a summary of nutrition support from other a number of programs by FM shopping status. These other programs include the Nation School Lunch Program free/reduced price lunch and Head Start programs for those with children, assistance from the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), WIC and Senior FM nutrition program coupons, Meals on Wheels or Senior Nutrition Program, and other type of assistance including support from local county and nonprofits. The National School Lunch Program provides free and reduced price lunches to low-income children. Head Start is a program of the Department of Health and Human Services that also provides nutrition and other services to low-income children and their families. WIC provides Federal grants to States for supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age 5 who are at nutritional risk. WIC and Senior FM coupons are funded by USDA grants to States that allow the purchase of a variety of fresh, locally grown fruits, vegetables, and herbs with coupons.

The findings in Table 3-9 indicate that participants who reported receiving support from other nutrition programs were more likely to shop at FMs, with the exception of having a child receiving free/reduced price lunch. As expected, there was a large difference in rates among SNAP participants who received WIC or Senior FM Nutrition Program coupons. Among shoppers, 16 percent and 8 percent reported receiving WIC and Senior FM coupons, respectively; among nonshoppers, the respective rates were 6.5 and 0.4 percent. This suggests that there might be a positive correlation between shopping at a FM and receipt of support from these nutrition programs.

Table 3-9. Support Received From Other Nutrition Programs by Farmers Market Shopping Status

Characteristics	Shoppers (N=3,247)		Nonshoppers (N=1,499)	
	Weighted Percent (Std. Error)	Unweighted N	Weighted Percent (Std. Error)	Unweighted N
Have children living in the household				
Yes	64.0 (3.1)	1,795	57.1 (3.0)	856
No	36.0 (3.1)	1,417	42.9 (3.0)	636
Child receives free/reduced price school lunch				
Yes	71.4 (1.6)	1,236	73.3 (1.8)	596
No	28.6 (1.6)	493	26.7 (1.8)	212
Child in Head Start ( <i>among respondents with children in household</i> )				
Yes	30.5 (1.9)	496	26.7 (1.2)	190
No	69.5 (1.9)	1,224	73.3 (1.2)	618
WIC benefits				
Yes	30.4 (2.0)	802	23.1 (1.9)	339
No	69.6 (2.0)	2,387	76.9 (1.9)	1,137
WIC FM Nutrition Program coupons				
Yes	16.5 (2.6)	509	6.5 (1.0)	105
No	83.5 (2.6)	2,673	93.5 (1.0)	1,370
Senior FM Nutrition Program coupons				
Yes	8.6 (1.1)	256	0.4 (0.2)	17
No	91.4 (1.1)	2,947	99.6 (0.2)	1,459
Meals on Wheels or Senior Nutrition Program				
Yes	5.2 (0.7)	134	2.3 (0.5)	39
No	94.8 (0.7)	3,073	97.7 (0.5)	1,445
Some other type of nutrition assistance				
Yes	33.1 (2.2)	1,317	29.4 (1.4)	483
No	66.9 (2.2)	1,879	70.6 (1.4)	999

Note: There were 4,746 survey respondents who received these questions. Table 3-9 excludes six participants out of 4,752 because of missing shopping status. For each variable, missing observations are excluded in the denominator for calculating percentages.

Data Source: Shopping for Fresh Fruits and Vegetables Survey Questions, E1 through E6 and E8.

Focus group attendees were not directly asked about receipt of other supplemental nutrition programs, but attendees occasionally mentioned receipt of WIC benefits. This predominately occurred in San Diego. While this may simply be due to happenstance, the vast majority of the San Diego attendees in both groups were female and reported that they are, or used to be, WIC clients. Many stated that they shop at the FM because of a WIC benefit, or that they were introduced to the FM as a result of being enrolled in WIC. The relationship between participation in WIC and use of SNAP benefits at FMs is examined in greater detail in Section 4.2.2.

The decision to shop at a FM also was examined by using a multivariate logistic regression analysis. The regression estimate controlled for gender, age group, race, Hispanic/Latino origin, work status, household income, born outside the United States, having children in the household, receipt of support from other nutrition programs, and awareness of incentives for EBT card use. Odds ratios, 95 percent lower and upper bounds for odds ratios, and statistical significance values for each covariate were calculated. The results presented in Table 3-10 indicate that females were 1.3 times more likely than males to report shopping at FMs. Significant differences by age group or Hispanic/Latino origin were not observed. However, Black or African Americans and other non-White race categories were more than 30 percent less likely to report shopping at FMs relative to Whites.

Work status also was a significant predictor of shopping decision. SNAP participants who were unemployed, homemaker/student, or those who reported that they cannot work were all less likely to report shopping at FMs, compared with SNAP participants who were employed. Similarly, higher household income was associated with higher probability of shopping at FMs. SNAP participants with household income greater than \$10,000 per year were 1.16 times more likely to shop at a FM than those with incomes less than \$10,000 per year.

There was some indication that individuals born outside the United States were more likely to shop at FMs, but this was only marginally significant at the 10 percent level. Households with no children were 1.34 times more likely than those with children to shop at a FM. The findings indicate that SNAP participants who received support from other nutrition programs were 1.4 times more likely to report shopping at FMs.

The variable that was most strongly associated with shopping behavior seems to be awareness of incentives for EBT card use. SNAP participants who were aware of such incentives were more than 40 times more likely to shop at FMs. This signifies the importance of incentives in promoting SNAP participants' use of FMs.

Table 3-10. Logistic Regression: Predictors of Shopping at Any Farmers Market

Predictor	Odds Ratio	95% Lower CI Odds Ratio	95% Upper CI Odds Ratio
Females** Males (Ref)	1.30 1.00	1.05 —	1.60 —
Age 18 to 29	1.07	0.82	1.40
Age 30 to 39	1.07	0.83	1.38
Age 40 to 49 (Ref)	1.00	—	—
Age 50 to 59	1.23	0.92	1.66
Age 60 or greater	1.28	0.92	1.78
Black or African American*** Other non-White*** White (Ref)	0.66 0.64 1.00	0.52 0.50 —	0.85 0.82 —
Hispanic/Latino origin Not Hispanic/Latino origin (Ref)	0.82 1.00	0.62 —	1.10 —
Unemployed* Homemaker/student* Cannot work*** Employed (Ref)	0.75 0.76 0.68 1.00	0.59 0.58 0.53 —	0.95 0.99 0.88 —
Income \$10,000 or more*** Income less than \$10,000 (Ref)	1.16 1.00	1.05 —	1.27 —
Born outside the U.S. Born in the U.S. (Ref)	1.20 1.00	0.98 —	1.46 —
No child in the household** Have children in the household (Ref)	1.34 1.00	1.08 —	1.66 —
Receives support from other nutrition programs*** No support from other nutrition programs (Ref)	1.42 1.00	1.19 —	1.69 —
Aware of incentives for SNAP/EBT use*** Not aware of incentives for SNAP/EBT use (Ref)	41.48 1.00	32.91 —	52.29 —

\*= $p$  value  $\leq 0.05$ ; \*\* = $p$  value  $\leq 0.01$ ; \*\*\*= $p$  value  $\leq 0.001$ ; Ref=reference category

Note: There were 4,746 survey respondents who received these questions.

Next, potential differences in shopping at other markets by FM shopping status were explored. Table 3-11 shows that, compared with FM nonshoppers, FM shoppers reported shopping more often at other markets, including smaller grocery stores, natural organic stores, and ethnic markets.

Table 3-11. Where SNAP Participants Shop for Groceries by Farmers Market Shopping Status

Market	Shoppers		Nonshoppers	
	Weighted Percent (Std. Error)	Unweighted N	Weighted Percent (Std. Error)	Unweighted N
Large grocery stores	96.9 (0.9)	3,101	96.6 (1.0)	1,434
Smaller grocery stores	78.5 (1.9)	2,351	62.2 (2.3)	875
Convenience stores	38.0 (2.0)	942	25.2 (1.6)	382
Natural organic stores	43.5 (2.3)	1,658	17.5 (1.8)	234
Ethnic markets	35.1 (3.6)	997	26.0 (4.0)	256
Other kinds of stores	42.4 (2.7)	1,226	30.0 (2.5)	360

Note: There were 4,746 survey respondents who received this question. Table 3-11 excludes six participants out of 4,752 because of missing shopping status.

Percentages based on N=3,247 for shoppers and N=1,499 for nonshoppers.

Data Source: Shopping for Fresh Fruits and Vegetables Survey, Questions A1, A5, A9, A13, A17, A21, and C1.

### 3.3 Shopping Patterns at Farmers Markets in General

The survey data afford the opportunity to examine shopping patterns at FMs in general as well as shopping experiences at a specific FM linked to the participant.<sup>41</sup> This section analyzes data involving the perceptions of FM shoppers in terms of freshness of fruits and vegetables, quantity purchased and consumed, variety of fruits and vegetables at FMs, preferred payment type, and amount of spending when shopping at FMs. In addition, bivariate analyses were conducted of EBT card use at FMs by demographic characteristics, household characteristics, and support received from other food assistance programs. Finally, logistic regression estimation was used to study predictors of EBT card use at FMs.

Table 3-12 presents the perceived freshness and quantity of fruits and vegetables purchased relative to other stores. Almost two-thirds of FM shoppers thought that the fruits and vegetables at FMs were fresher than those in other stores. Only 4 percent of participants believed that FMs have fruits and vegetables that are less fresh than in other stores, and almost 31 percent reported that the freshness at FMs is the same as in other stores. This finding indicates that freshness of fruits and vegetables may be an important factor in shopping at FMs, but not the sole reason.

<sup>41</sup> During sampling, each SNAP participant was linked to a FM in close proximity to his or her residence.

**Table 3-12. Perceived Freshness and Purchase Quantity When Shopping at Farmers Market Among Shoppers**

	Weighted Percent (Std. Error)	Unweighted N
Perceived freshness of fruits and vegetables at farmers markets relative to other stores		
More fresh	65.0 (1.8)	2,313
Less fresh	4.1 (0.5)	90
Just as fresh	30.9 (1.8)	624
Quantity of fruits and vegetables purchased at farmers markets relative to other stores		
Buys more fresh fruits and vegetables	48.1 (1.1)	1,723
Buys fewer fresh fruits and vegetables	23.5 (1.4)	565
Buys about the same amount	28.4 (1.4)	773

Note: There were 3,247 survey respondents who received this question. Missing observations are excluded in the denominator for calculating percentages.

Data Source: Shopping for Fresh Fruits and Vegetables Survey, Question B2 and B4.

Another question that was explored was whether simply shopping at FMs has an effect on the quantity of fruits and vegetables purchased. Since FMs have a concentration of fruits and vegetables in one place, it may be possible that SNAP participants purchase more produce at FMs. Almost half of survey respondents who shopped at FMs (48%) stated that they bought more fresh fruits and vegetables at FMs relative to other stores. However, almost one in four shoppers (24%) stated that they bought fewer fresh fruits and vegetables at FMs relative to other stores. The latter shoppers may be looking for specific fruits and vegetables that they cannot find at their usual store, and/or they may have other reasons to come to FMs.

Focus group attendees often referenced noticeable differences with respect to observed freshness at FMs versus traditional grocery stores. In short, focus group attendees reported experiencing higher levels of freshness and quality with fruits and vegetables available at the FMs. (As discussed in Chapter 4, freshness was one of the most commonly mentioned reasons for shopping at FMs).

Table 3-13 presents information on the variety of fruits and vegetables at FMs relative to other stores. Almost two-thirds of shoppers stated that they buy more variety of fruits and vegetables at FMs relative to other stores.. In addition, 60 percent of shoppers indicated that they eat more fresh fruits and vegetables when they shop at FMs. The findings suggest that improving access to FMs would result in the introduction of a wider variety of fruits and vegetables to the shoppers, and may lead to higher consumption of fruits and vegetables.

Table 3-13. Variety and Consumption When Shopping at Farmers Markets Among Shoppers

	Weighted Percent (Std. Error)	Unweighted N
We buy different fruits and vegetables at farmers markets		
Yes	64.4 (1.5)	2,048
No	35.6 (1.5)	993
We eat more fresh fruits and vegetables when we shop at farmers markets		
Yes	59.9 (1.7)	1,983
No	40.1 (1.7)	1,023

Note: There were 3,247 survey respondents who received this question. Missing observations are excluded in the denominator for calculating percentages.

Data Source: Shopping for Fresh Fruits and Vegetables Survey, Question B3 and B5.

Focus group attendees often underscored how the wide variety of items for sale at FMs influenced their purchasing patterns. Focus group attendees in all three sites commented both on the diversity of items overall, as well as variety within a certain food category. As one San Francisco attendee stated, “*some vendors have like five different types of oranges.*” Such variety often encouraged shoppers to purchase different items during different trips to the market.

Another factor that influenced purchases was the ability to sample the food before purchasing it. As one San Diego attendee put it, “*they are always giving you samples, and once you taste you realize that the flavor is much better than what is offered in the stores.*” They described the “*sampling*” as an important motivator to go to the FM. Such sampling makes shopping at the FM “*a fun activity*” and they often end up buying something they were not planning to buy. Ethnic foods from other cultures were often cited as examples. Many of the shoppers in the focus groups explained that they wait to see what is offered at the market before deciding what to buy, suggesting an element of spontaneous purchase decision-making, rather than planned shopping based on a prepared shopping list. For example, some San Diego attendees indicated that they love to make vegetable soups, and if the market happens to have the vegetables they like to use to make their soups, they will buy them.

Table 3-14 presents the payment type that is most commonly used at FMs among survey respondents. More than two-thirds of shoppers used cash at FMs, though almost half the survey respondents used their EBT card. In addition, nearly one in ten indicated using a WIC Cash Value Voucher or WIC Farmers Market Nutrition Program coupons.<sup>42</sup> When examined specifically among households with children under 5 years old, more than one in five

<sup>42</sup> Note that the WIC Cash Value Voucher and the WIC Farmers Market Nutrition Program Coupons are supplemental to WIC. Regular WIC benefits cannot be used at FMs.

respondents stated using WIC cash vouchers (23%) or WIC Farmers Market Nutrition Program coupons (22%) when shopping at FMs. Similarly, in households with an adult over 60 years old, 21 percent used Senior FM Nutrition Program coupons. These are important tools to improve access to FMs among SNAP participants.

**Table 3-14. Payment Type When Shopping at Farmers Market Among Shoppers**

Type of Payment	Weighted Percent (Std. Error)	Unweighted N
SNAP/EBT card	50.9 (2.7)	2,245
Cash	67.8 (1.7)	2,156
Personal check	2.3 (0.3)	69
WIC cash value voucher	23.4 (4.2)	232
WIC FM Nutrition Program coupon	22.4 (4.3)	192
Senior FM Nutrition Program coupon	20.7 (3.6)	117
Some other way	2.2 (0.3)	131

Note: There were 3,247 survey respondents who received this question. Methods of payments are not exclusive from each other since a participant could choose more than one method of payment. Missing observations are excluded in the denominator for calculating percentages.

Data Source: Shopping for Fresh Fruits and Vegetables Survey, Question B7.

Focus group attendees were asked where they redeemed most of their SNAP benefits and to estimate the proportion of their benefits that they redeem at FMs. The proportion of SNAP benefits that focus group attendees estimated they spend at the FMs varied dramatically. This was especially true in San Francisco and Atlanta, where estimates ranged from 10 percent up to 80 percent. However, the majority of those providing an estimate reported that they spend 30 percent or less of their benefits at FMs. Focus group attendees were not asked to reveal the size of their monthly benefit.

Table 3-15 presents the average spending per FM trip among shoppers. More than one in three shoppers reported spending more than \$20 at each visit to a FM. More than 40 percent of shoppers spent between \$10 and \$20, and 5 percent spent less than \$10 during one trip to the FM. Interestingly, one third of shoppers stated that all of the money they spent at FMs is used for purchasing fruits and vegetables. Since FMs offer other types of products (e.g., honey, meat, seeds), it is striking, but not surprising, that a sizable group came to FMs specifically to shop for fruits and vegetables.

Table 3-15. Level of Spending When Shopping at Farmers Markets Among Shoppers

	Weighted Percent (Std. Error)	Unweighted N
Average spending per trip		
Less than \$5	5.4 (0.5)	98
\$5 to \$10	19.3 (1.3)	579
\$11 to \$15	19.2 (1.3)	557
\$16 to \$20	21.8 (2.5)	795
More than \$20	34.4 (1.2)	1,025
How much of the total money spent on fruits and vegetables?		
None of it	3.3 (0.5)	52
A little of it	10.0 (1.4)	160
Some of it	23.0 (2.2)	409
Most of it	28.4 (1.2)	1,105
All of it	35.3 (3.0)	1,349

Note: There were 3,247 survey respondents who received these questions. Missing observations are excluded in the denominator for calculating percentages. Percentages may not add up to 100 percent due to rounding.

Data Source: Shopping for Fresh Fruits and Vegetables Survey, Questions B8 and B9.

Table 3-16 presents the quantity of fruits and vegetables purchased from FMs relative to other stores. Notably, almost one in 10 shoppers (8 %) reported buying all their fruits and vegetables at FMs. Among the shoppers who did not report buying all of their fruits and vegetables from FMs, 56 percent reported buying the same amount or more of their fruits and vegetables at FMs relative to other stores.

Table 3-16. Quantity of Fruits and Vegetables Purchased From Farmers Markets Relative to Other Stores Among Shoppers

	Weighted Percent (Std. Error)	Unweighted N
I buy all my fruits and vegetables at the FMs	8.1 (0.9)	204
I buy....		
More fruits and vegetables at FMs than other stores	30.5 (1.4)	886
Fewer fruits and vegetables at FMs than other stores	44.2 (1.2)	1,129
Same amount fruits and vegetables at FMs and other stores	25.3 (1.4)	671

Note: There were 3,247 survey respondents who received these questions. Missing observations are excluded in the denominator for calculating percentages. Percentages may not add up to 100 percent due to rounding.

Data Source: Shopping for Fresh Fruits and Vegetables Survey, Questions B10 and B11.

In terms of using SNAP benefits for fresh fruits and vegetables, as shown in Table 3-17, 39 percent of shoppers stated that they do not use SNAP benefits and 52 percent stated that they use a little or some of their SNAP benefits to purchase fruits and vegetables at FMs. This is consistent with shoppers' awareness of SNAP benefit acceptance at FMs (Table 3-18). Among FM shoppers, 40 percent stated that prior to taking the survey, they did not know that the target

FM accepted SNAP benefits. Among those who were aware of acceptance of SNAP benefits, 34 percent learned it from signs posted at FMs and 26 percent learned through word of mouth. These findings indicate that posted signs and talking about acceptance of SNAP benefits at the FMs are two common ways to publicize the information, but may not be effective in reaching the entire population of SNAP participants in an area.

**Table 3-17. Quantity of SNAP/EBT Benefits Spent on Fruits and Vegetables at Farmers Markets Among Shoppers**

	Weighted Percent (Std. Error)	Unweighted N
None of SNAP/EBT benefits	38.9 (2.3)	614
A little of it	16.2 (1.6)	707
Some of it	36.2 (1.9)	1,364
Most of it	7.5 (0.8)	279
All of it	1.3 (0.4)	91

Note: There were 3,247 survey respondents who received this question. Missing observations are excluded in the denominator for calculating percentages. Percentages may not add up to 100 percent due to rounding.

Data Source: Shopping for Fresh Fruits and Vegetables Survey, Question B12.

**Table 3-18. How Shoppers Knew SNAP/EBT Benefits Were Accepted at the Farmers Markets**

	Weighted Percent (Std. Error)	Unweighted N
Did not know	40.1 (2.1)	531
Signs posted at the FMs	34.1 (1.5)	1,622
Word of mouth	26.0 (1.8)	1,083
Signs posted somewhere other than FMs	6.7 (0.9)	306
Flyer in the mail	4.1 (0.7)	245
Some other way	6.8 (0.5)	359

Note: There were 3,247 survey respondents who received this question. Sources of information are not exclusive from each other since a participant could obtain this information from more than one source. Missing observations are excluded in the denominator for calculating percentages.

Data Source: Shopping for Fresh Fruits and Vegetables Survey, Question B13.

Focus group attendees described a handful of ways that they learned that SNAP benefits were accepted at the FM, mainly via word of mouth or by receiving a flyer in the mail. Smaller numbers reported that their social worker told them, or that they saw a sign, either at the local SNAP office or at the market itself, indicating that EBT was accepted.<sup>43</sup>

<sup>43</sup> The report *Nutrition Assistance at Farmers Markets: Understanding Current Operations* included focus group research that was formative for this study. When attendees were asked what strategies would be useful for publicizing that SNAP benefits were accepted at FMs, several stated that posting flyers at health care clinics and elementary schools would be useful in publicizing markets to SNAP clients with children (p. B-7).

Still, during the focus groups, a substantial number of frequent and nonfrequent shoppers expressed a lack of awareness that FMs accepted SNAP benefits. Only a few focus group attendees reported seeing a sign stating that the FM accepted EBT use. A much larger number of focus group attendees commented that they did not see such signs at FMs as often as in other types of retailers. These discussions lead several attendees, especially in San Diego, to comment that the FMs do not advertise that they accept SNAP benefits nearly enough to encourage widespread use, as the following comments illustrate.

#### Lack of Awareness that Farmers Markets Accept EBT

*Man 2: Some folks don't know that markets accept EBT*

*Woman 4: That's a very good point.*

*Man 3: That's not widely known.*

*Woman 4: I think that more people, if they expressed that they do accept it, more people would go. [Atlanta]*

*They did not put a sign. A lot of people don't know. [San Diego]*

*I thought [farmers markets] didn't take them [EBT cards]. That's why I have never tried to buy because I thought it was with cash. [San Diego]*

*I knew about the WIC vouchers, but didn't know about the EBT card. [San Diego]*

Next, characteristics of FM shoppers by EBT card use were examined to understand whether there are significant differences between the two groups. As shown in Table 3-19, no significant difference by gender or age group was observed. Survey respondents who were FM shoppers over the age of 60 were less likely to be EBT card users. Among EBT card users, 28 percent were over the age of 50, compared with 37 percent of nonusers. Work status and household income seem to be important indicators of EBT card use at FMs. Among shoppers who used their SNAP benefits, only 28 percent indicated that they were currently employed. However, among those who did not use SNAP benefits, 43 percent were currently working. Similarly, households with an annual income under \$10,000 were more likely to use their SNAP benefits while shopping at FMs. The results are consistent with the expectations that SNAP participants who are not employed and those with lower household income are more likely to use resources from an assistance program, such as SNAP benefits, while shopping for fruits and vegetables, possibly because they receive larger monthly benefits. This points to the importance of SNAP benefits in improving access to fruits and vegetables in vulnerable populations.

**Table 3-19. Demographic Characteristics of Survey Participants by SNAP/EBT Use at Farmers Markets (N=3,160)**

Characteristics	SNAP/EBT User (N=2,287)		SNAP/EBT Nonuser (N= 873)	
	Weighted Percent (Std. Error)	Unweighted N	Weighted Percent (Std. Error)	Unweighted N
Gender				
Male	26.4 (1.2)	520	27.5 (2.8)	195
Female	73.6 (1.2)	1,736	72.5 (2.8)	666
Age groups				
18-29 years old	22.4 (1.5)	461	18.5 (1.8)	163
30-39 years old	19.6 (2.7)	636	25.3 (2.2)	215
40-49 years old	30.4 (3.1)	433	19.6 (1.9)	155
50-59 years old	16.7 (1.6)	385	14.9 (1.5)	133
60 or older	10.9 (1.1)	349	21.7 (3.0)	192
Work status				
Employed	27.7 (1.8)	778	42.5 (2.0)	351
Unemployed	25.6 (2.4)	501	18.3 (1.7)	128
Homemaker/student/retired	20.1 (2.5)	408	22.7 (3.3)	174
Cannot work	26.6 (1.3)	528	16.6 (1.9)	170
Household income				
Under \$10,000	62.7 (3.1)	1,203	41.1 (2.1)	328
\$10,000 - \$19,999	27.4 (2.0)	654	29.6 (1.4)	227
\$20,000 - \$29,999	4.1 (1.0)	207	19.7 (1.2)	144
\$30,000 or more	5.9 (1.9)	84	9.5 (1.3)	87

Note: There were 3,160 survey respondents who received these questions. Missing observations are excluded in the denominator for calculating percentages. User/nonuser status is missing for 87 shoppers. Percentages may not add up to 100 percent due to rounding.

Data Source: Shopping for Fresh Fruits and Vegetables Survey, Questions E9, E14, E11, and E12.

Table 3-20 presents a summary of demographic characteristics among shoppers who use their EBT card at FMs and those who do not. A greater percentage of Black or African American shoppers used their EBT card at FMs (42%) than did not (24%). Among White shoppers, a greater percent used their EBT card at FMs (55%) than did not (38%). In addition, those who were born outside the United States, those who reported speaking languages other than English at home, and shoppers of Hispanic, Spanish, or Latino origin reported higher use of SNAP benefits at FMs.

Table 3-20. Race and Ethnicity of Survey Participants by SNAP/EBT Use at Farmers Market

Characteristics	SNAP/EBT User (N=2,287)		SNAP/EBT Nonuser (N= 873)	
	Weighted Percent (Std. Error)	Unweighted N	Weighted Percent (Std. Error)	Unweighted N
Born outside the U.S.	46.6 (3.0)	696	42.4 (3.9)	268
How long in the U.S.?*				
Less than 1 year	2.3 (1.2)	7	2.4 (1.1)	2
1 Year to 5 years	3.7 (1.3)	27	2.3 (1.1)	11
5 Years to 10 years	3.9 (1.1)	38	13.1 (2.6)	16
10 years or more	90.1 (1.9)	617	82.2 (2.5)	232
Language spoken at home				
English only	70.6 (5.4)	1,799	76.5 (3.9)	680
Spanish only	10.9 (3.3)	131	7.3 (2.8)	50
English and Spanish only	11.7 (2.2)	138	7.9 (1.5)	38
Other languages	6.7 (1.4)	106	8.3 (1.9)	40
Hispanic, Spanish, Latino origin				
Yes	29.5 (6.1)	401	21.0 (5.5)	140
No	70.5 (6.1)	1,812	79.0 (5.5)	679
Race				
Black or African American	42.2 (5.6)	414	24.3 (3.1)	124
White	38.4 (5.1)	1,232	54.9 (3.7)	499
Asian	8.6 (3.3)	78	6.5 (1.9)	30
American Indian or Alaska Native	4.2 (1.1)	155	8.9 (1.1)	70
Native Hawaiian or Pacific Islander	1.7 (0.7)	15	0.3 (0.3)	3
Other or multi-racial	4.8 (1.0)	140	5.2 (1.3)	39

\* Among those born outside of the U.S.

Note: There were 3,160 survey respondents who received these questions. Missing observations are excluded in the denominator for calculating percentages. User/nonuser status is missing for 87 shoppers. Percentages may not add up to 100 percent due to rounding.

Data Source: Shopping for Fresh Fruits and Vegetables Survey Questions E13 and E15 through E17.

Household composition also may play an important role in deciding whether to use SNAP benefits when shopping at FMs. As demonstrated in Table 3-21, there is some indication that households with children are more likely to use SNAP benefits at FMs. Among EBT card users, 88 percent had at least one child (35% had at least one child under 5 years old and 53% had at least one child between 5 to 17 years old). Among nonusers, the total percentage with at least one child was 74 percent (28% and 46%, respectively). Although the number of people in the household does not seem to be associated with the use of the EBT card at FMs, those households with at least one member over 60 years old less frequently reported using EBT benefits at FMs.

Table 3-21. Household Characteristics of Survey Participants by SNAP/EBT Use at Farmers Markets

Characteristics	SNAP/EBT User (N=2,287)		SNAP/EBT Nonuser (N=873)	
	Weighted Percent (Std. Error)	Unweighted N	Weighted Percent (Std. Error)	Unweighted N
Number of people in the household				
One*	30.5 (3.2)	804	31.1 (2.7)	284
Two	22.1 (2.3)	422	26.1 (3.1)	182
Three	19.5 (1.4)	335	10.1 (1.3)	108
Four or five	18.0 (2.6)	457	21.7 (2.6)	180
More than five	9.9 (1.1)	195	10.9 (2.7)	66
Number of people over 60 years old				
Zero	77.0 (2.3)	1,712	72.8 (2.9)	573
One	16.1 (1.6)	341	22.3 (2.3)	188
Two	5.5 (1.0)	61	4.3 (1.1)	28
Three	0.0 (0.0)	1	0.5 (0.3)	4
More than three	1.5 (0.5)	14	0.1 (0.1)	4
Number of children under 5 years old				
Zero	64.6 (2.7)	1,466	72.2 (3.5)	578
One	25.1 (2.3)	422	18.5 (1.9)	134
Two	7.5 (1.3)	165	6.0 (1.6)	50
Three	1.1 (0.5)	27	2.8 (0.8)	12
More than three	1.7 (0.5)	7	0.5 (0.3)	4
Number of children 5 to 17 years old				
Zero	46.6 (3.8)	1,124	53.8 (3.9)	449
One	25.7 (3.0)	412	17.0 (1.8)	124
Two	13.1 (1.6)	272	12.9 (2.9)	121
Three	9.1 (1.3)	174	7.4 (1.6)	46
More than three	5.5 (0.6)	116	8.9 (3.1)	44
Number of children under 18 years old				
Zero	18.0 (2.4)	938	24.2 (2.7)	379
One	11.4 (1.5)	391	7.4 (1.0)	138
Two	7.7 (1.5)	313	7.0 (0.5)	117
Three	6.9 (0.8)	229	3.7 (1.0)	79
More than three	5.8 (0.6)	238	7.9 (1.9)	76

\* Number includes 202 respondents who reported zero as the number of people in the household.

Note: There were 3,160 survey respondents who received these questions. Missing observations are excluded in the denominator for calculating percentages. User/nonuser status is missing for 87 shoppers. Percentages may not add up to 100 percent due to rounding.

Data Source: Shopping for Fresh Fruits and Vegetables Survey Questions E18, E19, E21 and E20.

Focus group attendees with children in San Diego often cited the needs of their children as a powerful reason to shop at FMs. However, the affect of children on FM shopping was rarely discussed in the other cities. It is important to bear in mind that San Diego attendees were almost all women with families (and most of them reported also receiving WIC benefits). Focus group attendees in San Diego expressed a personal desire to eat more healthfully and serve more healthy foods to their family, but they reported just as often that the motivation to eat fresh, healthy, and/or organic foods emanated from their children. As one attendee explained, she buys

certain items at the FM because her children “*only eat fruits and vegetables*” if they are fresh and organic. Her children “*know the difference*” and this is the only way she can ensure that they will eat their fruits and vegetables, “*It is my obligation to buy from there so that they can eat.*” Another attendee said, “*My daughter does not eat meat, she eats certain vegetables only.*” This attendee went to the FM with the daughter so that the daughter can select the fruits and vegetables she wishes to eat.

Next, bivariate associations between EBT use at FMs and support received from other food assistance programs were examined (Table 3-22). Households receiving benefits through the National School Lunch Program, Head Start, and WIC reported using SNAP benefits at FMs more frequently than those not receiving such benefits. Households with a member receiving Senior FM Nutrition Program coupons or Meals on Wheels reported using SNAP benefits at FMs less frequently than those without these benefits. Households receiving benefits that may be redeemed at FMs using coupons instead of SNAP benefits might be saving their SNAP benefits to purchase items at other food stores.

Table 3-23 shows associations between participant and household characteristics and use of SNAP benefits, using a multivariate estimation. The table presents odds ratios for possible predictors with lower and upper bounds, as well as the statistical significance of each covariate. The evidence suggests that awareness of incentives for EBT use is a very strong predictor. Survey respondents who are aware of such incentives are 2.9 times more likely to use SNAP benefits when shopping at FMs. Unemployed participants and those who cannot work are respectively 1.7 and 1.5 times more likely to be using SNAP benefits at FMs, compared with employed FM shoppers. Participants with household incomes greater than \$10,000 are 21 percent less likely to use SNAP benefits while shopping at FMs. Black or African Americans are 1.6 times more likely to use SNAP benefits at an FM compared with Whites. Hispanic/Latino origin does not seem to be a significant predictor, however, those who were born outside the United States are 22 percent less likely to use SNAP benefits while shopping at FMs.

In general, age does not seem to be associated with the use of SNAP benefits, except that those who are age 60 or older are significantly less likely to use SNAP benefits at FMs. Neither gender, having children in the household, nor receiving support from other nutrition programs appear to be significant predictors of SNAP use.

Table 3-22. Support Received from other Food Assistance by SNAP/EBT Use at Farmers Markets

Characteristics	SNAP/EBT User (N=2,287)		SNAP/EBT Nonuser (N=873)	
	Weighted Percent (Std. Error)	Unweighted N	Weighted Percent (Std. Error)	Unweighted N
Have children living in the household	65.6 (3.5)	1,284	61.4 (3.7)	478
Child on free/reduced price lunch				
Yes	75.5 (1.0)	906	66.9 (4.0)	308
No	24.5 (1.0)	329	33.1 (4.0)	154
Child in Head Start				
Yes	35.0 (2.1)	376	26.8 (2.5)	109
No	65.0 (2.1)	854	73.2 (2.5)	349
WIC benefits				
Yes	32.2 (2.8)	584	28.1 (3.1)	203
No	67.8 (2.8)	1,667	71.9 (3.1)	654
WIC FM Nutrition Program coupons				
Yes	17.3 (2.5)	376	16.3 (4.3)	126
No	82.7 (2.5)	1,874	83.7 (4.3)	726
Senior FM Nutrition Program coupons				
Yes	6.2 (0.7)	164	11.7 (2.1)	81
No	93.8 (0.7)	2,098	88.3 (2.1)	779
Meals on Wheels or Senior Nutrition Program				
Yes	3.9 (1.0)	87	6.3 (0.7)	41
No	96.1 (1.0)	2,176	93.7 (0.7)	822
Some other type of food assistance				
Yes	34.8 (2.5)	959	31.7 (2.3)	320
No	65.2 (2.5)	1,297	68.3 (2.3)	541

Note: There were 3,160 survey respondents who received these questions. Missing observations are excluded in the denominator for calculating percentages. User/nonuser status is missing for 87 shoppers. Percentages may not add up to 100 percent due to rounding.

Data Source: Shopping for Fresh Fruits and Vegetables Survey Questions E1 through E6 and E8.

Table 3-23. Logistic Regression: Predictors of SNAP/EBT Use Among Farmers Market Shoppers

Predictor	Odds Ratio	95% Lower CI Odds Ratio	95% Upper CI Odds Ratio
Females Males (Ref)	0.96 1.00	0.78 —	1.19 —
Age 18 to 29	1.10	0.83	1.45
Age 30 to 39	1.08	0.83	1.40
Age 40 to 49 (Ref)	1.00	—	—
Age 50 to 59	0.91	0.68	1.23
Age 60 or greater ***	0.54	0.40	0.74
Black or African American ***	1.56	1.19	2.04
Other non-White	1.11	0.87	1.40
White (Ref)	1.00	—	—
Hispanic/Latino origin	1.19	0.90	1.58
Not Hispanic/Latino origin (Ref)	1.00	—	—
Unemployed ***	1.70	1.32	2.19
Homemaker/student	1.27	0.98	1.63
Cannot work ***	1.51	1.17	1.95
Employed (Ref)	1.00	—	—
Income \$10,000 or more ***	0.79	0.72	0.87
Income less than \$10,000 (Ref)	1.00	—	—
Born outside the U.S.*	0.79	0.64	0.96
Born in the U.S. (Ref)	1.00	—	—
No child in the household	1.04	0.84	1.28
Have children in the household (Ref)	1.00	—	—
Receives support from other nutrition programs	1.14	0.95	1.35
No support from other nutrition programs (Ref)	1.00	—	—
Aware of incentives for SNAP/EBT use ***	2.92	2.34	3.63
Not aware of incentives for SNAP/EBT use (Ref)	1.00	—	—

\*= $p$  value  $\leq 0.05$ ; \*\* = $p$  value  $\leq 0.01$ ; \*\*\*= $p$  value  $\leq 0.001$ ; Ref=reference category

Note: N = 3,160 survey respondents who received these questions.

### 3.4 Shopping Patterns at Specific Farmers Markets

This section examines the shopping patterns of SNAP participants at a target FM and their experiences associated with that market. To provide some context for the survey findings, this section begins with a review of focus group data.

In all three focus group study sites, the target market was well established. In San Francisco and San Diego, however, the market was described by frequent shoppers as part of the local social fabric, “*a fixture of the community*.” This may be due to the prevalence of FMs throughout these cities. Some focus group attendees had been shopping there for years. As a result, many attendees could not pinpoint how they first learned about the target market. Those who learned about the markets more recently tended to cite word of mouth as the primary mechanism. Those in San Diego also cited knowing someone who works or used to work at the market.

Some focus group attendees recalled receiving information mailers. Only a few cited signs or advertisements in the community or on buses, and only one cited seeing a sign at the local Department of Family and Child Services office. Unlike the other two locations, in San Diego, the second most commonly cited way that attendees learned about the market was through participation in WIC, which had promoted the local FM incentive program.<sup>44</sup> In contrast, few attendees in San Francisco or Atlanta mentioned participation in WIC, and only one attendee in San Francisco learned about the local FM by proactively searching out markets that accepted SNAP benefits.

Attendees in the nonfrequent shoppers group also tended to be aware of the target FM, and if they were not aware of the target market, they were aware of one or more other FMs in their area. This was especially true in San Francisco and San Diego, where all and 13 of 16 nonfrequent shoppers, respectively, were aware of the target market. In both of those locations, well over half of these nonfrequent shoppers reported that they had considered shopping there, although only a few of these stated that they actually did. Given the number of FMs in the focus group cities, combined with the fact that most attendees had shopped at one or more of these markets, it is conceivable that attendees may have had difficulty recalling shopping trips to specific markets. As one San Francisco attendee said, “*I think I did, a long time ago.*”

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<sup>44</sup> All but 3 of the 31 San Diego participants were female.

A small number of frequent shoppers in the focus groups claimed to have shopped at their respective markets for decades, but the typical response was much more recent. On average, focus group attendees stated “*within the last few years*,” or more specifically, within the last 2 to 3 years. However, half of the frequent shoppers in San Diego who provided a response to this question stated that they had been shopping at the target market between 5 and 7 years.

With respect to frequency of shopping, focus group attendees in the frequent shoppers group gave answers that ranged from weekly (which was common in San Diego) to “*only a few times per year*.” Focus group attendees were specifically asked how often they shopped at the target market during the last season. Their responses were fairly evenly distributed across three ranges (2-3 times, 4-6 times, and 7 or more), with the San Diego groups being slightly more frequent shoppers. Some of the variation in shopping frequency appeared to be related to how often the individual was in the neighborhood where the market was located, suggesting that for some shoppers, the market was not the primary destination. It is also important to note the overlap between frequent and nonfrequent shoppers in this regard. For example, in Atlanta, almost half of the 19 nonfrequent shoppers indicated that they had shopped at the target market “once or twice” in the past 12 months.

Table 3-24 presents the length of time that survey respondents had shopped at a specific FM. More than 35 percent of shoppers have been going to the same FM for at least 3 years. This indicates a certain level of satisfaction and customer loyalty, and is consistent with the community-building aspect of FMs in many neighborhoods around the country.

**Table 3-24. Length of Time Shopping at Specific Farmers Market Among Shoppers at a Specific Market**

	Weighted Percent (Std. Error)	Unweighted N
Less than 1 year	39.3 (4.6)	342
1 to 2 years	25.5 (2.9)	798
3 to 4 years	11.7 (2.0)	545
More than 4 years	23.5 (4.7)	631

Note: There were 2,443 survey respondents who received this question. Missing observations are excluded from the denominator for calculating percentages. Missing excludes valid skips.

Data Source: Shopping for Fresh Fruits and Vegetables Survey, Question C2.

**Frequency of Shopping at Targeted Farmers Market**

*I get to go at least three times a month. My brother lives right there, and I visit him quite a bit. [Atlanta]*

*I go every week because everything is always fresh, the seasonal fruits or the vegetables. That's why I like to go every eight days. [San Diego]*

Table 3-25 presents the frequency of shopping by season among shoppers, where the majority of the survey respondents shopped at FMs during the summer. Almost 70 percent of shoppers went to the FM during the summer, while 62 percent also shopped at the FM in the spring and/or fall. Only 42 percent of shoppers went to the FM in the winter. This is consistent with the fact that many FMs close in the winter months. Most shoppers indicated that they shopped once a month or less often at the specific FM. However, during the summer, more than one in ten shoppers shopped at FMs once a week or more often. This is consistent with expectations regarding the typically increased variety in fruits and vegetables during the summer months.

**Table 3-25. Shopping Frequency by Seasons Among Shoppers at a Specific Market**

Seasons	Once a week or more often	Every other week	Once a month or less often	Never
<b>Spring</b>				
Weighted percent (std. error)	7.1 (1.4)	9.4 (1.8)	45.5 (2.3)	38.0 (4.0)
Unweighted N	380	345	993	526
<b>Summer</b>				
Weighted percent (std. error)	12.1 (1.6)	15.4 (2.4)	42.3 (2.5)	30.2 (4.5)
Unweighted N	668	527	923	199
<b>Fall</b>				
Weighted percent (std. error)	8.0 (1.6)	9.9 (1.5)	44.3 (2.9)	37.8 (4.2)
Unweighted N	433	393	946	464
<b>Winter</b>				
Weighted percent (std. error)	5.8 (1.3)	4.7 (1.4)	31.0 (3.6)	58.5 (5.3)
Unweighted N	144	125	573	1,318

Note: There were 2,443 survey respondents who received this question. Missing observations are excluded from the denominator for calculating percentages. Missing excludes valid skips.

Data Source: Shopping for Fresh Fruits and Vegetables Survey, Questions C3.

Some focus group attendees also reported effects on their shopping patterns due to seasonality (i.e., shopping for items that are in season) given the relationship between seasonality and freshness, flavor, availability, and price. Shopping related to seasonality was mentioned in all cities, but was mentioned more often in the California sites than in Atlanta, perhaps because the California markets were open across more seasons than those in Atlanta. Still, some Atlanta focus group attendees said they would go to a particular FM for a specific product when they knew it was coming into season:

**Seasonality and Shopping at Farmers Markets**

*The drive would be out of my way, but sometimes especially in the summertime they have really good sweet corn. [Atlanta]*

*I went there when blueberry season came out. They had a real good price on blueberries when they first came out. I like to get summer fruits from there. [Atlanta]*

As indicated in Table 3-26, almost two-thirds of shoppers indicated that they used their car to get to the specific FM. One in five used public transportation. Similarly, one in five walked to the FM, which indicates how a specific FM can pull customers from the neighborhood around that area. While 6 percent used their bikes, only 2 percent took a taxi to get to the specific FM.

**Table 3-26. How Shoppers Get to the Specific Farmers Market**

Method	Weighted Percent (Std. Error)	Unweighted N
Car	64.8 (2.5)	1,620
Public transportation	21.8 (4.0)	389
Walk	21.6 (2.5)	667
Bike	5.5 (1.5)	253
Taxi	2.4 (0.9)	24
Some other way	6.9 (1.3)	115

Note: Categories are not mutually exclusive. There were 2,443 survey respondents who received this question. Missing observations are excluded from the denominator for calculating percentages. Missing excludes valid skips.

Data Source: Shopping for Fresh Fruits and Vegetables Survey, Question C4.

Focus group attendee responses paralleled the survey findings, with most using a personal car to get to their local market, although use of a personal car was mentioned the least in San Francisco. The second most common method was public transportation. Focus group attendees shared frustrations with both of these methods, typically citing too much traffic, especially during market hours in Atlanta, and inadequate public transportation options between their home and the market location. Smaller numbers of participants reported walking or riding their bike. No focus group attendees mentioned taking a taxi.

Table 3-27 shows the time required to go to the FM. The majority of shoppers live or work near the FM where they shop, requiring less than 20 minutes to travel to the FM. However, nearly one-fourth of shoppers travelled for more than 30 minutes to get to the FM.

Table 3-27. Travel Time to the Farmers Market Among Shoppers at Specific Markets

Travel Time	Weighted Percent (Std. Error)	Unweighted N
Less than 10 minutes	23.5 (2.8)	695
10 to 20 minutes	36.6 (2.5)	897
21 to 30 minutes	15.7 (2.3)	419
More than 30 minutes	24.3 (4.9)	300

Note: There were 2,443 survey respondents who received this question. Missing observations are excluded from the denominator for calculating percentages. Percentages may not add up to 100 percent due to rounding.

Data Source: Shopping for Fruits and Vegetable Survey, Question C5

In keeping with the survey results, frequent shoppers in the focus groups typically reported that it took less than 30 minutes to get to their local market. Those who reported being more than 30 minutes away by car, public transportation, bicycle, or on foot tended to report that the market was located too far away to shop at on a regular basis. This was especially true of the nonfrequent shoppers. As described above, several focus group attendees stated that they shopped at the market only if they were in the area, on another errand, or visiting a friend, essentially indicating that the FM was located too far away to justify a trip specifically to that market.

Table 3-28 presents the types of products that shoppers purchase at FMs. The results suggest that most shoppers shopped at FMs primarily for fruits and vegetables. More than 75 percent purchased fruits and vegetables frequently (almost every time, or some of the time) when shopping at FMs. Additionally, at least one-third reported purchasing meats or baked good frequently (almost every time, or some of the time). Shoppers also purchased other food items while shopping at FMs, although not as frequently.<sup>45</sup>

<sup>45</sup> Appendix G presents a summary of findings related to survey respondents purchase of plants and seeds.

Table 3-28. Types of Products Purchased at the Farmers Market Among Shoppers at Specific Farmers Market

Product	Almost Every Time	Some of the Time	Rarely	Never	Not Sold at This Farmers Market
Fruits					
Weighted percent (std. error)	57.7 (4.1)	22.9 (2.4)	3.8 (0.9)	14.4 (2.3)	1.3 (0.8)
Unweighted N	1,547	584	110	88	4
Vegetables					
Weighted percent (std. error)	55.4 (4.3)	23.8 (2.3)	4.1 (0.9)	15.4 (2.7)	1.3 (0.8)
Unweighted N	1,741	399	73	86	5
Meat like beef or chicken or fish					
Weighted percent (std. error)	20.0 (6.2)	13.4 (1.7)	10.8 (1.2)	50.9 (5.4)	4.9 (1.1)
Unweighted N	203	273	376	1,081	231
Eggs					
Weighted percent (std. error)	17.3 (2.5)	15.7 (1.8)	13.6 (1.9)	49.6 (2.5)	3.8 (1.2)
Unweighted N	196	335	352	1,142	156
Dairy products like milk, yogurt, cheese					
Weighted percent (std. error)	15.5 (3.2)	14.5 (2.3)	11.0 (2.2)	55.0 (2.9)	4.1 (1.0)
Unweighted N	138	294	387	1,129	226
Baked goods like bread, pie, or cake					
Weighted percent (std. error)	18.9 (1.9)	19.0 (2.0)	16.0 (1.8)	43.3 (2.1)	2.8 (0.8)
Unweighted N	270	547	531	766	86
Honey					
Weighted percent (std. error)	11.5 (1.3)	18.7 (1.7)	17.7 (1.8)	49.8 (2.3)	2.4 (0.9)
Unweighted N	165	504	477	1,005	47
Fruit juice or fruit drinks					
Weighted percent (std. error)	14.0 (1.8)	15.2 (2.3)	11.6 (2.5)	55.0 (2.2)	4.1 (1.1)
Unweighted N	127	198	293	1,351	182
Food in cans or jars like jam, jelly, pickles					
Weighted percent (std. error)	16.3 (1.7)	20.0 (1.8)	12.7 (1.8)	48.6 (2.5)	2.4 (0.8)
Unweighted N	119	343	460	1,171	86
Some other kind of food					
Weighted percent (std. error)	12.8 (4.2)	15.7 (2.7)	4.8 (1.3)	60.0 (3.7)	6.7 (1.7)
Unweighted N	118	189	77	485	48

Note: Products are not exclusive from each other since a participant could select more than one product. There were 2,443 survey respondents who received this question. Numbers of missing observations excluded in the denominator for calculating percentages are 110, 139, 279, 262, 269, 243, 245, 292, 264, 1,526 in the order of products listed in the table. Missing excludes valid skips.

Data Source: Shopping for Fruits and Vegetable Survey, Question C6.

The focus group attendees provided great detail with respect to the types of products they purchased at their respective FMs, and the purchases reflect the full assortment of items for sale at their market. Participants described a wide variety of fruits, vegetables, and other items.

*“Watermelon, honey and above all, the oranges...I also get a little bit of tomatoes, cucumbers, lemons that come [conveniently] in small packages...and you also have options to choose strawberries... I also [buy] popcorn...caramel and salty...that is like a craving...that is the craving that makes you go to the market.” [San Diego]*

Although focus group attendees referenced specific items when asked what they typically purchased, most indicated that their purchases tended to vary. Attendees mentioned making spontaneous decisions based on what looked good or, on occasion, the recommendation of a farmer or vendor. However, for the frequent shoppers, the reasons given for varying their purchases tended to fall into one or more of the following broad categories: what is available (due to season or what is offered that day), an interest in trying new foods, the needs of the family (what the children will eat), and price.

Table 3-29 suggests that the variety of products, and the freshness of fruits and vegetables, are important factors for shoppers. In terms of variety, 65 percent agreed that there are more kinds of fresh fruits and vegetables at the FM than in other stores. Similarly, more than 70 percent of shoppers agreed that the quality of fresh fruits and vegetables at FMs is better than other stores.

**Fruits and vegetables specifically mentioned in each focus group site**

**Atlanta:** Cherries, corn, vine-ripened tomatoes, okra, purple hull peas, blueberries, collard greens, meats, seafood, tea, honey, cheese, bread, pastries, and “a variety of seasonings.”

**San Francisco:** Eggs, bread, juices, strawberries, blueberries, bananas, apricots, nectarines, cherries, and honey, as well as snack items and flowers.

**San Diego:** Cucumbers, tomatoes, avocados, lettuces, oranges, lemons, grapes, watermelon, and honey, as well as prepared food such as pupusas,<sup>1</sup> chicharon,<sup>2</sup> and kettle corn.

<sup>1</sup> *Handmade tortilla usually filled with cheese and/or cooked ground meat.*

<sup>2</sup> *Fried meat (usually pork rind).*

Table 3-29. Perception of Variety and Quality of Fresh Fruits and Vegetables Among Shoppers at a Specific Market

Product	Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
There are more kinds of fresh fruits and vegetables at this FM than in other stores I shop at Weighted percent (std. error) Unweighted N	33.0 (3.1) 686	31.5 (2.6) 717	18.6 (1.8) 475	11.3 (1.9) 317	5.6 (1.1) 166
The quality of the fresh fruits and vegetables at this FM is better than in the other stores I shop at Weighted percent (std. error) Unweighted N	37.9 (1.5) 1,088	33.2 (2.2) 673	18.7 (1.7) 407	5.9 (1.0) 117	4.3 (1.3) 51

Note: There were 2,443 survey respondents who received these questions. Missing observations are excluded in the denominator for calculating percentages. Valid skips are excluded from missing.

Data Source: Shopping for Fruits and Vegetable Survey, Question C7.

Perception of relative prices is an important factor in any shopping decision. Among survey respondents who were shoppers, 34 percent stated that the prices of fresh fruits and vegetables were higher in FMs than in other stores, as shown in Table 3-30. More than one in four shoppers (27%) said that the prices are about the same. Finally, 39 percent of shoppers stated that the prices of fresh fruits and vegetables were lower in FMs than in other stores.

Table 3-30. Perception of the Prices of Fresh Fruit and Vegetables at Farmers Markets Relative to Other Stores or Markets Among Shoppers at Specific Markets

Perception	Weighted Percent (Std. Error)	Unweighted N
A lot higher in farmers markets	10.2 (2.0)	249
A little higher in farmers markets	24.3 (3.0)	730
About the same	26.5 (2.3)	579
A little lower in farmers markets	25.7 (3.4)	525
A lot lower in farmers markets	13.3 (2.8)	223

Note: There were 2,443 survey respondents who received this question. Missing observations are excluded in the denominator for calculating percentages.

Data Source: Shopping for Fruits and Vegetable Survey, Question C8.

Price alone tended not to be a driving factor for the shopping behaviors described by the focus group attendees, but the ability to find good deals related either to seasonality or time of day, did appear to influence purchases. For example, it was reported that vendors were more likely to mark down the cost of produce toward the end of the market day. As discussed in Chapter 4 (see Price and Value), SNAP participants engaged in calculated budgeting to maximize their benefits. For example, they may buy more vegetables one week because they are cheaper that week, but next week they will stock up on fruit. As one San Diego attendee put it, “*I buy only what is in*

*season. Sometimes I would like to buy other things, but if it is not available ... or it is too expensive I don't buy it.*" To this comment, another attendee added that if something is more expensive one week, she will wait to buy it the following week when the price may have come down.

Like most shoppers, SNAP participants also indicated that they use cash most often at FMs when purchasing fresh fruits and vegetables. However, as shown in Table 3-31, almost half of the survey respondents stated that they used their EBT card as a method of payment at FMs. The use of WIC Farmers Market Nutrition Program coupons, Senior Farmers Market Nutrition Program coupons, and a credit or debit card was less common (approximately 8% for each).

**Table 3-31. Method of Payment for Fresh Fruits and Vegetables in the Past Year Among Shoppers at Specific Markets**

Method of Payment	Weighted Percent (Std. Error)	Unweighted N
Cash	60.9 (2.3)	1,678
SNAP/EBT card	46.7 (5.3)	1,793
WIC FM Nutrition Program coupon	9.2 (1.8)	189
Senior FM Nutrition Program coupon	8.3 (2.2)	146
WIC cash value (fruit and vegetable) voucher	8.1 (1.8)	192
Credit card or debit card	7.6 (1.3)	207
Personal check	1.7 (0.5)	43
Some other way	6.5 (1.2)	71

Note: Methods of payments are not exclusive from each other since a participant could choose more than one method of payment.  
There were 2,443 survey respondents who received this question. Missing observations are excluded in the denominator for calculating percentages.

Data Source: Shopping for Fruits and Vegetable Survey, Question C71.

Table 3-32 shows that 28 percent of shoppers who used their EBT card to buy fresh fruits and vegetables at FMs used this method of payment almost every time. Although 38 percent of shoppers rarely or never used their EBT card, another 15 percent of shoppers stated that they did not know that FMs accepted the EBT card.

**Table 3-32. In the Past Year, How Many Times Did Shoppers at a Specific Market Use SNAP/EBT Card to Buy Fresh Fruits and Vegetables**

Frequency	Weighted Percent (Std. Error)	Unweighted N
Almost every time	28.4 (4.0)	1,149
Some of the time	19.0 (1.6)	625
Rarely	4.5 (0.9)	134
Never	33.1 (3.6)	331
Did not know market accepts SNAP/EBT card	15.0 (3.3)	117

Note: There were 2,443 survey respondents who received this question. Missing observations are excluded from the denominator for calculating percentages.

Data Source: Shopping for Fruits and Vegetable Survey, Question C72.

Table 3-33 shows that among survey respondents who did not use their EBT card almost every time while shopping at FMs, 38 percent stated that they did not know they could use their SNAP benefits at FMs. Among these shoppers, 24 percent stated that they used all their SNAP benefits while shopping at grocery stores. Almost one in four of these survey respondents (22%) indicated that they ran out of money on their EBT card. Finally, 8 percent of these respondents did not use their SNAP benefits at FMs because they did not want anyone to see them using SNAP benefits.

**Table 3-33. Reasons for Not Using SNAP/EBT Card More Often (Among Shoppers at Specific Farmers Markets Who Did Not Use Their SNAP/EBT Card “Almost Every Time”)**

Reason	Weighted Percent (Std. Error)	Unweighted N
I didn't know I could use my card here	37.9 (3.5)	197
I do all my SNAP/EBT shopping at the grocery store	24.4 (2.9)	243
I run out of money on my card	22.3 (2.9)	472
There are no signs posted that says this market takes SNAP/EBT	19.4 (2.6)	120
I don't want anyone to see me use my SNAP/EBT card	8.1 (2.1)	93
It takes long to process the card	2.3 (0.7)	62
Some other reason	16.7 (2.3)	270

Note: Reasons are not exclusive from each other since participants can select more than one option. There were 1,207 survey respondents who received this question. Missing observations are excluded from the denominator for calculating percentages.

Data Source: Shopping for Fruits and Vegetable Survey, Question C73.

Focus group attendees cited two main reasons for not using SNAP benefits while shopping at the market. As previously discussed, nonfrequent shoppers in the focus groups, and to a lesser extent some frequent shoppers, reported being unaware that the EBT card was accepted at FMs. Thus, the main reason was lack of awareness. Among those who knew that the EBT card was accepted, focus group attendees in both categories mentioned situations when they used cash instead. This

was typically due to a lack of remaining funds on their EBT card. Hence, focus group attendees tended to say that they used their EBT cards with greater frequency during the first half of the benefits month.

Focus group attendees were specifically asked if their purchases at FMs depended on when they received their SNAP benefits each month. In general, the answer was affirmative in San Francisco and San Diego, with most attendees tending to purchase more at the beginning of their benefit month, when more money was on their EBT card.

#### **Period in EBT Benefits Month and Shopping at Farmers Markets**

*If we are on the third week of the month, I buy less [at the farmers market]. For example, if I got five tomatoes before, now I get three because you need to pay attention that you have less benefits and you always need milk so you have to buy a little less. [San Diego]*

*I'm like her, it's like it lasts me the first few weeks. I go every week, I budget my money. Sometimes, occasionally, the last weekend I don't go. I'm out of money. [San Francisco]*

This tendency to maximize purchases toward the beginning of the benefits month also held among nonfrequent shoppers. This pattern was most prominent in San Diego, where most focus group attendees indicated that they often spend a considerable percentage of their SNAP benefits on the day they receive it. A few attendees tempered that by stating they will delay shopping until a preferred store has special offers; for example, one attendee cited a neighborhood store that has fruits on sale on Wednesdays.

#### **Period in EBT Benefits Month and Shopping at Farmers Markets Among Nonfrequent Shoppers**

*I buy on the 8th...that's the day when I receive [the SNAP benefits]...I'll spend 70 percent [on that day] [San Diego]*

*[I buy] on the day I receive my Food Stamps. On the card it's the 5th. That's the day we wait all month to go shopping. We buy most of the things and whatever money is left, we save it until mid-month [San Diego]*

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# Benefits and Barriers to Shopping at Farmers Markets

4

## 4.1 Introduction

The previous chapter described the general shopping patterns of SNAP participants to inform strategies to encourage shopping at farmers markets (FMs). This chapter furthers the discussion by examining perceived and/or potential benefits and barriers to shopping at FMs. This includes a review of the characteristics of FMs and how they may be related to shopping status and a discussion of the reasons supplemental nutrition assistance program (SNAP) participants do or do not shop at FMs.

Key findings reported in this chapter include the following:

- The most commonly reported reason for shopping at a specific FM is access to high-quality fruits and vegetables.
- Other key factors that influenced shopping at FMs include activities and services, community-related factors, environment, accessibility, and affordability.
- In addition, focus group attendees reported product variety and selection, promotion of local businesses/farmers, and the social experience as important reasons that they shop at a FM.
- Characteristics of the FM, including location and cleanliness, were also reported as important reasons for shopping at a specific FM.
- In general, nonfrequent shoppers tended to say they perceived prices at FMs to be higher than at the local grocery store. However, frequent shoppers tended to report that they perceived FM prices to be lower.
- Frequent shoppers at FMs valued quality and freshness more than lower prices.
- Nearly 60 percent of shoppers reported that there are reasons they do not shop at FMs as much as they want to. The most commonly reported reasons were related to convenience.
- Among those who do not shop at FMs, the most commonly reported reasons were related to inconvenience and perceived higher prices.
- Focus group attendees identified lack of awareness that the electronic benefit transfer (EBT) card was accepted at FMs as a major barrier for shopping at FMs.

## 4.2 Farmers Market Geographic Characteristics

This section describes some of the basic geographic attributes of the FMs in the survey and how these attributes vary between survey respondents who shopped at FMs (shoppers) and those who did not (nonshoppers). Table 4-1 shows the average number of retail services within a 2-mile radius of each FM, reported separately for shoppers and nonshoppers<sup>46</sup>. In general, nonshoppers have slightly more retail services near their FMs, compared with shoppers. This suggests that other nearby retail services represent competition to FMs, rather than a mechanism for drawing more shoppers to FMs.

**Table 4-1. Average Number of Retail Service Establishments Available in the FM Vicinity (2-mile radius) by Farmers Market Shoppers and Nonshoppers**

Food Retailers Within a 2-Mile Radius of a SNAP Participant	FM Shoppers (Std. Error)	FM Nonshoppers (Std. Error)
<b>Stores</b>		
Supermarket	5.8 (0.9)	6.2 (0.9)
Other grocery	30.0 (5.7)	32.3 (6.0)
Convenience	23.1 (4.4)	25.0 (4.7)
Dollar and variety	7.9 (0.9)	8.0 (1.0)
Drug and pharmacy	22.4 (4.8)	24.6 (5.2)
Specialty	35.5 (5.6)	37.5 (5.9)
<b>Restaurants</b>		
Full service	215.6 (54.2)	239.3 (58.5)
Franchised limited-service	51.2 (8.3)	55.4 (8.8)
Non-franchised limited service	30.6 (6.2)	33.5 (6.5)

Note: The number of full-service restaurants within 2 miles of the FMs varied from 0 to 964, with an average of 126 full-service restaurants within 2 miles of the FM. The FMs with hundreds of nearby restaurants were in dense urban areas. There were more SNAP participants residing in these areas, so they have more impact on the final weighted value.

Data Source: GIS analysis of Farmers Market addresses and NAVTEQ retail store data.

Table 4-2 shows the distribution of average distances between FMs and the nearest food retailer, presented separately for shoppers and nonshoppers, and for the nearest supermarket versus the nearest food retailer of any type (including convenience stores and restaurants). Both shoppers and nonshoppers had a supermarket within half a mile around their FMs (61% among shoppers, and 66% among nonshoppers). Similarly, all respondents had some type of food retailer within half a mile of their FMs (82% among shoppers and 80% among nonshoppers). Thus, FMs tend to have a substantial number of food retailers competing for the business of SNAP participants.

<sup>46</sup> The analyses were conducted at the survey respondent level, separately for shoppers and nonshoppers. While both shoppers and nonshoppers were associated with a given FM, these analyses compute average number of food retailers around the given FM weighted by shoppers and nonshoppers.

**Table 4-2. Distance Between FMs and the Nearest Food Retailer by Farmers Market Shoppers and Nonshoppers**

Distance Between FMs and the Nearest Food Retailer	FM Shoppers		FM Nonshoppers	
	Weighted Percent (Std. Error)	Unweighted N	Weighted Percent (Std. Error)	Unweighted N
Supermarket				
Less than ½ mile	61.0 (9.3)	1,205	65.7 (10.1)	642
½ to 1 mile	26.8 (8.2)	1,077	21.5 (8.0)	467
1 to 2 miles	9.6 (4.9)	610	11.2 (5.5)	262
More than 2 miles	2.5 (1.2)	355	1.6 (0.9)	128
Any food retailer				
Less than ½ mile	82.1 (8.7)	2,690	80.2 (9.8)	1,289
½ to 1 mile	17.4 (8.7)	408	19.5 (9.8)	163
1 to 2 miles	0.5 (0.4)	120	0.3 (0.3)	47
More than 2 miles	0.0 (0.0)	29	0.0 (0.0)	0

Data Source: GIS analysis of Farmers Market addresses and NAVTEQ retail store data.

#### **4.2.1 Importance of Certain Factors for Shopping at Farmers Markets Among Survey Participants**

One key objective of the study was to learn why SNAP participants shop at their respective FMs. Among those shoppers who indicated they shop at a specific FM, the survey asked about their reasons for shopping at that market. The survey listed reasons related to price, quality, and convenience. As a follow-up question, the survey asked respondents to indicate the importance of each reason.

Tables 4-3 presents the percentage of respondents who checked “yes” for each type of reason, and 4-4 presents the top five “very important” reasons. The most commonly reported reason for shopping at their specific FM was high-quality fruits and vegetables (82%). As Table 4-3 shows, additional common reasons (reported by 69% or more) were related to the variety and type of vegetables, characteristics of the market and the people there, and location convenience. On the other hand, the least common reasons (reported by less than 50%) were related to other resources available at the market, special health needs, and acceptance of Senior FM coupons. The high percentage of survey respondents (72%) describing FMs as a “fun place to be” is an important finding that also emerged during the focus groups. The dimensions of FMs that account for this are examined in detail in the section below on the social experience.

Table 4-3. Reasons for Shopping at a Specific Farmers Market Among Shoppers at a Specific Market

Reasons	Weighted Percent (Std. Error)	Unweighted N
High-quality fruits and vegetables	79.7 (2.1)	2,049
They sell fruits and vegetables that are locally grown	78.4 (1.5)	2,115
They sell many different kinds of fresh fruits and vegetables	75.0 (2.0)	1,913
It is a fun place to be	72.0 (1.7)	1,784
Farmers market staff and sellers are helpful	69.9 (2.1)	1,625
Close to where I live	69.0 (2.1)	1,486
Easy to get to	68.8 (2.3)	1,513
I can talk with people who grow the fruits and vegetables	68.2 (1.6)	1,736
Farmers market is clean	67.3 (2.3)	1,477
Good specials or deals	67.2 (3.3)	1,182
Accepts SNAP/EBT card	66.9 (3.0)	1,839
Low prices on fresh fruits and vegetables	66.3 (2.9)	1,288
Farmers market is in a safe area	66.1 (2.4)	1,466
I can meet people from my community there	60.4 (2.3)	1,296
There is parking nearby	59.0 (2.2)	1,225
They sell fruits and vegetables I can't find anywhere else	58.2 (2.7)	1,132
It sells plants and seeds	57.1 (2.3)	1,116
Open at convenient times	56.7 (2.2)	1,075
There is entertainment or cultural activities	56.5 (2.2)	1,159
It sells more than just food, like jewelry, art work, and clothes	56.2 (2.9)	1,017
I can use WIC FM coupons	51.8 (2.8)	786
I can get nutrition information	51.6 (3.0)	799
I can get prepared foods and meals there	49.5 (2.1)	750
I have special health and diet issues	47.2 (2.5)	765
I can use Senior FM coupons	46.7 (3.6)	577
I can get health information, screening tests or exams, or vaccines	46.6 (3.1)	572
There are cooking demonstrations	46.5 (2.6)	642
A social worker is there	44.9 (3.3)	535
Some other reason	47.1 (2.2)	872

Note: Reasons are not exclusive from each other since participants can select more than one option. There were 2,443 survey respondents who received this question. Missing observations are excluded from the denominator for calculating percentages.

Data Source: Shopping for Fruits and Vegetable Survey, Questions C9 through C65.

While Table 4-3 ranks all of the reasons for shopping at the specific market, Table 4-4 shows the top five reasons based on rating of reasons as “very important.” Analyses of these data indicate that the most commonly reported reasons (in general) were not necessarily the most important reasons. Three of the five reasons rated as very important were related to characteristics of the FM, specifically its cleanliness, safety, and staff/sellers. Nonetheless, “high-quality fruits and vegetables” was both the most commonly reported reason (79%) and the top reason in terms of importance (71%). Low prices on fruits and vegetables was also a Top 5 Reason, though it was not among the most commonly reported reason in the overall ranking.

**Table 4-4. Top 5 Reasons for Shopping at a Specific Farmers Market Among Shoppers at a Specific Market**

Reason	Yes, Reason for Shopping	“Very Important” Reason	
	Unweighted N	Weighted Percent (Std. Error)	Unweighted N
High-quality fruits and vegetables	2,049	71.3 (2.4)	1,661
Farmers market is clean	1,477	69.0 (2.9)	1,029
Farmers market is in a safe area	1,466	66.9 (2.0)	993
Staff and sellers that are helpful	1,625	63.2 (3.4)	966
Low prices on fresh fruits and vegetables	1,288	62.9 (3.0)	875

Note: Based on the reasons with the highest percentage indicated as “very important” reason. There were 2,443 survey respondents who received this question.

Data Source: Shopping for Fruits and Vegetable Survey, Questions C10 through C66.

The survey also sought to understand factors that may increase shopping at FMs among the shoppers. Nearly 60 percent of the shoppers indicated that there was something that kept them from shopping for fresh fruits and vegetables at their specific FM as often as they wanted. Table 4-5 summarizes the reasons reported among these shoppers. The two most common reasons were related to convenience (i.e., easier to shop at one store, and the market location was not close to their home). More than one-fourth reported that it was due to the higher prices. One-fifth reported that the day/hours of operation were not convenient. Approximately 15 percent reported they did not want to be seen using their EBT card at the market. Other reasons were related to convenience and the type and quality of fruits and vegetables.

**Table 4-5. Reasons that Keep Shoppers from Shopping for Fresh Fruits and Vegetables as Much as they Want to at Their Specific Farmers Market**

Reason	Weighted Percent (Std. Error)	Unweighted N
It's easier to buy all my groceries at one store	41.8 (3.3)	473
It's not close to where I live	35.3 (5.1)	384
The prices are too high	24.3 (2.2)	461
It's not open on days or times that are convenient to me	20.3 (3.4)	524
I don't want anyone to see me use my SNAP/EBT card	14.6 (2.4)	115
It's not easy to get to	14.4 (1.9)	133
There aren't enough kinds of fresh fruits and vegetables available	11.9 (2.4)	200
It is hard to park nearby	7.1 (1.7)	146
It is not in a safe area	6.8 (2.1)	44
It is not close to public transportation	6.7 (1.3)	47
The fresh fruits and vegetables look like they are in bad condition	6.2 (2.1)	68
The staff and sellers don't speak my language	5.2 (1.4)	46

Note: There were 1,377 survey respondents who received this question. Missing observations are excluded from the denominator for calculating percentages.

Data Source: Shopping for Fruits and Vegetable Survey, Questions C67 through C70.

#### **4.2.2 Importance of Certain Factors for Shopping at Farmers Markets Among Focus Group Attendees**

Focus group attendees expressed a wide array of reasons for shopping at FMs. Generally, these corresponded to several of the top reasons revealed by the survey, namely high-quality, locally grown, and diverse produce; helpful staff and sellers; the community-related nature of the shopping experience; and low prices. The focus group data also help to understand the complex picture revealed by the survey findings and factor analysis. Interestingly, focus group attendees made few comments about the markets' cleanliness or safe location and when they did, they tended to point out how a particular market lacked one of these qualities rather than how the market embodied the dimension.

The main reasons for shopping at FMs identified from the focus groups revolved around quality and freshness, organic and healthier options, wide selection of products and variety of vendors, interest in buying local foods, and the unique social experience offered by FMs. After an examination of these reasons in turn, this section closes with an examination of price and value as factors that can both promote and discourage shopping at FMs.

## Quality and Freshness

One of the most commonly mentioned benefits of shopping at a FM was the perceived quality of the items available, compared with local grocery stores. “Quality” was exemplified by such characteristics as freshness, taste, and appearance. Respondents in all three study sites made numerous comments about how the quality of produce at FMs stood in contrast to those found in traditional grocery stores. The following quotes are illustrative of the many comments about quality and freshness made by participants:

### Quality and Freshness

*It's gotten so bad now at some of the grocery stores that [the items]...they just don't look good. Then they want to charge you an arm and a leg for stuff that's just not good. Some of the fruits and stuff may be rotten, not ripening yet. [Atlanta]*

*Because when you go to supermarket, you don't know how long they've been holding it around before you see it. [San Francisco]*

*[Farmers market] fruit is harvested at the right time, when it's ripe and ready to eat. The fruit that one buys at the grocery stores has been harvested before they are ready and then refrigerated, so they do not have any flavor at all. The fruit at the FM is juicier and flavorful. [San Diego]*

*Like the coriander. It's long. It smells better. It's not like the ones sold at the supermarkets that don't smell like coriander. I don't know if it's because it's more natural...but the vegetables and fruits...the smell of the apples seemed like if it were from my town. I don't know if it's cut when it's time...I think the ones at the supermarkets are cut before time, and it loses the flavor. [San Diego]*

## Organic and Healthy

Along with quality and freshness, focus group attendees often discussed the benefits associated with purchasing organic food. Organic produce, which was perceived to be more readily available at FMs, was described as being healthier and more natural. Organic food was perceived to be free of pesticides, preservatives, and genetically modified crops. Respondents often referenced a desire to eat more healthy, and on occasion invoked their children or other family members for whom they were responsible. For example, when referencing the value of organic produce, one San Francisco respondent adamantly stated that not “*even rain, sleet or snow*” would stop her from shopping at the FM for her family.

As one San Diego respondent explained, she buys certain items at the FM because her children will eat fruits and vegetables only if they are fresh and organic. “*It is my obligation to buy from there so that they can eat,*” she emphasized. She stated her family can tell the difference, and this

is the only way she can ensure that they eat their fruits and vegetables. However, as with quality and freshness, better taste also was associated with organic produce. Below are a few quotes from focus group attendees highlighting this theme:

#### Organic Nature of Products

*Then of course, as someone else said that they can be organic, and I tasted the difference between organic fruit and regular farm-grown fruit. There is a very big difference. They're juicy, they're crunchy. They're more fresh tasting. [San Francisco]*

*I feel like the food at the farmers' market can be more nutritious, because it's grown organically versus produce at Safeway or another grocery store. [San Francisco]*

*They have good stuff. It's not hot-house tomatoes. It's actually vine-ripened tomatoes. It's not sprayed down with chemicals to supplement the growth or to speed up growth or whatever. It's not mass produced. It's regular, like the garden we grew up on, so I can go out get your fresh stuff out in the garden. [Atlanta]*

Nonfrequent shoppers also tended to reference the quality and organic nature of products available at FMs when asked to identify benefits of shopping at a FM:

#### Quality and Organic Nature of Products

*It's cheaper and better quality. [San Francisco]*

*I would say it's fresher and it's reliable and in season. [San Francisco]*

*I agree, and it's supporting local farmers. It's generally organic and healthier for you. [San Francisco]*

*When we say high-quality vegetables, those are organic and better for you. [San Diego]*

Independent of whether the produce is organic, most of the frequent shoppers in San Francisco and elsewhere felt that the products purchased from the FM were healthier. At least one contrarian harbored concerns that FMs were not as carefully regulated as traditional grocery stores, questioning how one knows with certainty that an item is truly organic. *"I have stigma for a long time where I thought like, OK, farmers markets, like there's no regulation. Anybody can just drive up there, and what they spray their plants with whatever, and there's no real way of checking them." [San Francisco]*

However, when asked, no other respondents shared this apprehension.

## Selection and Variety of Vendors

There was strong agreement within the groups on the benefit of variety, even among those who were less confident about quality. Of particular value to focus group attendees was the opportunity to be introduced to new or unique products not typically found in a traditional grocery store. Variety was highlighted both in terms of the variety of products available throughout the market, and in regard to a certain type of product, as illustrated in the quote below about different types of peaches.

### Selection and Variety

*Some [farmers] have very good variety and food samples, like you get samples to different kinds of peaches from one grower. That's interesting. You can find the one you really like. [San Francisco]*

*Yeah, in terms of the different things, especially like seasonings, spices. You can get some really cool things at farmers markets that you wouldn't be able to get in a Lucky or Safeway. [San Francisco]*

*I was just going to say that oftentimes you're exposed to things you wouldn't be able to see in a regular grocery store. You're being more likely to try something new. Then you can actually have a conversation with a person directly about, "How do you prepare this?" Or, "What is this?" It creates dialog and then you're inspired, and you feel like there's a story behind it. Then you can share that with other people. [San Francisco]*

Another commonly mentioned benefit included the variety and uniqueness of the products. Many respondents commented on the ability to purchase items at the FM that simply were not available at the big chain grocery.

### Uniqueness of Products

*One of the things I also like about the farmers market is there's a great variety of things, as opposed to Lucky or Safeway or Trader Joe's, or just they don't have as much. [San Francisco]*

*You may find that they have four different types of collards, or kales. There's also someone there that may be preparing them in a way that you never had before. You can only maybe get one variety in a grocery store, as opposed to there's several varieties of the same food at a farmers market. The variety is definitely a plus. [Atlanta]*

*When I go to the farmers market, it's like an experience. I don't know if anybody has been to the DeKalb one, but it's crazy. It's interesting because there are fruits and vegetables and everything from any part of the world. It tells you when you're looking at them whether they're organic or not, what region of the United States or the world they come from. You can educate yourself a little bit about food too, which I think is interesting. [Atlanta]*

## Buying Local and Supporting Local Growers

Although respondents commented on their preference to support local growers, respondents more frequently commented on how buying local offered a direct benefit to themselves. Advantages included the ability to interact directly with farmer vendors and obtain more information about one's food purchases:

### Locally Grown Products

*You can ask the questions of the person behind the counter, how was this grown? Where did this come from? You get real answers. [San Francisco]*

*I like it because I like to ask the people selling it where it was grown, to know that it was local, and to actually know where it came from. [San Francisco]*

*I like that they provide samples for people to taste, and my daughters love that. They have to be at the farmers market every Saturday tasting fruits. Sometimes I don't go to buy, but I end up buying some fruit for them. [San Diego]*

Another benefit of buying local produce is the ability to buy foods with maximum ripeness and freshness. Respondents appreciated their proximity to where the produce was grown.

### Locally Grown Products and Freshness

*You don't have to wait for it to come from California, or places like that. You're getting it right here, locally. [Atlanta]*

*At a farmers market, those are picked closer to their ripeness age. As opposed to if you're trucking something across the country, you're going to pick it five days early. It's not going to taste as fresh. It's not going to taste as good. [Atlanta]*

*If you go to a farmers market, you know what you're buying wasn't too long ago in the field. [Atlanta]*

Also along these lines, respondents commented on the benefit FMs offer to make connections with the growers themselves, and not just those selling the products. Such comments were made most frequently in San Diego, where the respondents seemed to express a cultural, familial, and sometimes personal empathy with those who make their living off the land. These connections promote feelings of trust, community, and good will, as these comments illuminate.

### Making Connections With Growers

*I really appreciate being able to buy foods from people that I know. I can trust the source. [Atlanta]*

*I don't care about the price. I work at a ranch and I go buy at so many farms, there are a lot of humble people cutting strawberries. It's a work they can't stand up. I say it is worthy to buy, to help them. [San Diego]*

*I also appreciate the interaction that I have at the farmers market, getting to see the same people, the farmers, who grow the fruits and vegetables. So that's a bonus. [San Francisco]*

### Supporting Local Farmers

Supporting local farmers for economic reasons was mentioned frequently in San Diego (even among the nonfrequent shoppers) but rarely came up spontaneously as a benefit elsewhere. In San Francisco, supporting farmers for economic reasons was mentioned only in response to a specific probe. Indeed, when asked directly about it through a prompt, nearly all of the frequent shoppers in all three sites were in favor of supporting local farmers by shopping at FMs. Though perhaps not always primarily interested in supporting farmers economically, shoppers often cited benefits from having access to local farmers and their products.

### Supporting Local Farmers

*It helps them because they are small farmers. They bring us delicious fruits and fresh vegetables and then they get the benefits instead of the big businesses. These are different, richer and more commercial, and here we cooperate with them and they also cooperate with us. [San Diego]*

*It's a good balance to support the farmers because most of the time the octopuses [referring to big businesses] take away the economy, leaving the farmers a little bit unprotected. It's good to support them. [San Diego]*

*If we weren't supporting them and if they weren't there, we wouldn't have fresh fruits and vegetables and eggs to choose from. We'd be stuck at Safeway or FoodCo, and having to get stuff that's coming from other states, and other cities, and it's not as fresh. [San Francisco]*

### The Social Experience

Discussion regarding the social experience of farmers markets was lively and infused with a sense of excitement. Shopping at a FM was described as a social event where there are opportunities for fun and learning. Many respondents commented that the environment makes it easy and enticing for them to consume fruits and vegetables (e.g., through sampling and testing the quality of the foods). Some focused on the family-friendly environment, while others

commented that the market was a unique destination and viewed the opportunity to walk to and around the FM as a welcome exercise. Overall, respondents tended to display genuine pleasure and a good feeling for the FM when they were telling their stories. These experiences distinguish shopping at FMs from shopping at grocery stores, and motivate shoppers to return.

#### Positive Social Experience

*Any chance I can get to a farmers market, it's like heaven. I just spend hours in there, shopping and browsing. I went to one, by Grady's there's a place called Municipal Market. They say that's a farmers market. They sell their vegetables, and people selling fish, and meat, and pastries. It was such a nice experience. [Atlanta]*

*Just the informality of it, going down there. ... There's something about the outdoors, out in the open. There are different people there you know. There's music usually. [San Francisco]*

*Vendors are nice, encourage patrons to try the food, and do not make them feel that they are obligated to buy. [San Diego].*

The social experience has several interrelated facets, and respondents tended to share more than one of these influential experiences. Many tried to describe the unique atmosphere that prevails at their local FM. For example, in the following exchange between respondents, the “*homey*” atmosphere of the market is contrasted with the “*antiseptic*” experience at a big chain grocery store.

#### “*Homey*” Atmosphere

**Man 3:** *Yeah, I think it's a homey type of atmosphere. I don't know, [at a chain grocery store] you just feel like you're being watched over. It's so antiseptic. You see the cameras all on you and all that stuff. I mean, it's just more family-oriented and homey, more welcoming. The hospitality, I think, farmers markets than a lot of these big supermarkets chains.*

**Woman 2:** *You're not just a number.*

**Man 3:** *You wouldn't just be hanging out at Kroger's. [Atlanta]*

In San Francisco, there was wide agreement that FMs are uniquely different and enjoyable. They stand apart from the anonymous routine of shopping at a supermarket and engage all members of the family, especially children, in ways that traditional grocery stores do not.

### Engaging and Inclusive

*It is just a very fun place to go, because I have two kids. They just love to hang around and run around at the market. I like to take pictures of things that I see and my kids. It's just a fun day and there's so many things that are different. It's for the whole family. It's like they are looking forward to that day, even if we don't buy anything, we just buy a little bit but it is a day that we always look forward to going. [San Francisco]*

*I was just immersed in the, I don't know, just the festive activity around. [San Francisco]*

*Yeah. I was going to say the diversity, the different ethnicities that frequent it is also special. It's a really great way to have your kid learn about and appreciate different cultures. So it's a little more immersive. [San Francisco]*

Participants also discussed the importance of shopping in an environment that was less anomie and isolating than large-chain grocery stores. FMs tend to be characterized as being more social and interactive. Specific comments pointing to the market as an alternative to otherwise alienating environments include the following about personalized interaction.

### Personalized Interaction

*If you make a good friend at the farmers market, you always get the best stuff because ... when you go to the farmers market, he knows you by name. "Hey, [name], I've got something for you. You're going to like this." [Atlanta]*

*I feel like I'm doing something special. That might be psychological again. I just feel like I'm doing something good for me. [Atlanta]*

Another major component of the homey non-alienating atmosphere appears to be associated with a deeper and seemingly more naturalistic commitment to customer service by vendors and farmers.

### Personalized Customer Service

*All vendors have a smile for you! ... They understand the value of customer service. [San Diego]*

*People [the farmers] are generous. They get what you're looking for. [Atlanta]*

*I think they've got good customer service. They ask me if I need help. [Atlanta]*

### Family-Friendly Activities and Connection With Kinfolk

Some respondents talked about the visit to the FM as an opportunity to have a family outing, especially with the children. They like to look at market items, even if they do not intend to buy them. In San Francisco, they referenced enjoyment of events: “*There is music, dance, and*

*contests for the children.*" Respondents talked about other activities as well, such as arts and crafts for the children, free-of-charge bicycle repairs, and music and singers. One San Diego respondent shared a story about a contest on cooking "*calabazitas*" (small squash). She entered the contest, did not win, but enjoyed great pleasure by just being involved in the activity.

#### Family-Friendly Activities

*That's what I was going to say, there are usually some fun activities. I like to go shopping with my daughter.... Some of them are really fun for kids. [San Francisco]*

*Sometimes they have activities. They have Zumba classes, they dance and put on music. They are other activities; occasionally, they have parties for kids. They do contests, they give them things. Kids like to go. [San Diego]*

*Sometimes they have free screenings, like for diabetes. Even the blood bank bus is sometimes there. [San Diego]*

A San Diego respondent described how FMs helped families connect with the culture back in the homeland. She said that the "*vendors tell the children stories that sometimes* [the parents] *forget to teach them.*" Respondents also talked about how the FM experience teaches their children about the "*value of community, life and harmony.*" Connecting with cultural heritage was a theme particularly prominent among the Hispanic attendees in San Diego, as illustrated in the following quote: "*Kids learn. I come from Mexico, and where I grew up, people cultivated and helped each other. Then, I feel like I'm in family; it's like remembering your childhood.... The kids see and ask questions to the farmers and they start learning another history that sometimes we forget to teach them.*" [San Diego]

Respondents enjoy running into people they know and spending time with the vendors. They feel that being at the FM "*takes you to back to your roots, your people*" [San Diego]. One San Diego respondent said that she used to do farm work in her country of birth; people in her hometown have a culture of helping each other. The atmosphere at the FM reminds her of her hometown and makes her feel like she is with her family. Another San Diego respondent who was herself a farmworker said, "*we feel like our 'raza'* [i.e., our race, our people] *we feel like we know them.*"

#### A Learning Experience and Positive Influence for Adults

The FM can have a positive effect on respondents' food choices and the awareness of the importance of including fruits and vegetables in their diet. As one San Diego respondent said, "*you see so much vegetable, you remember that you have to eat and cook healthy.*" Another

respondent from San Diego explained how the FM helped her change her eating habits, “*I would never have salads before.*” “*Sometimes there are people giving small notebooks with information on how you can cook without a lot of fat, healthy food.*” [San Diego]

The sampling of food is both fun and has practical advantages. It introduces shoppers to new and healthy food options. This makes the FM a fun place to be; children and adults alike look forward to trying old-time favorites or new foods. Sampling also encourages comparative shopping. Importantly, parents see this as an opportunity to expand their cultural horizons by learning about the ethnic cuisine of other cultures (Chinese, Ethiopian, etc.). They get to try these foods and learn how to prepare them.

#### **Sampling Food Products**

*Some [farmers] have like very good variety and food samples, like you get to sample different kinds of peaches from one grower. That's interesting. You can find the one you really like. [San Francisco]*

*They cut watermelon and they give you samples of watermelon and other things. They also have other things that you say that's rare and they explain it to you. [San Diego]*

*They always put samples so you can taste. That's what I like because sometimes you see and say “that is good,” but when you try it you know that is really good. And you notice the flavor compared with those at the stores. [San Diego]*

There is widespread agreement on what might be referred to as the general fun factor among those who have shopped at the FM, with one exception—that is, if the market is too crowded. “*It is absolutely not fun when it's super crowded. Again, it can be a complete drag if you've got children with you.*” [San Francisco]

#### **Price Considerations**

The perceived cost of items can serve as either as a benefit or a barrier to shopping at the FM among SNAP participants. Yet, as discussed in this section, price is not the primary factor driving the shopping decision for most respondents. Focus group attendees’ views varied considerably as to whether they believed fruits and vegetables were more or less expensive at FMs than at grocery stores and other shopping options. In general, nonfrequent shoppers tended to view the prices to be higher than at the local grocery store, but frequent shoppers said they perceived prices to be lower. This was especially true for respondents who lived in neighborhoods where their shopping alternatives were dominated by convenience stores.

**Perceived Price**

*Some neighborhoods might not have a traditional grocery store. You might have this corner store that might be twice what you pay in a normal grocery store. Those are pushing into the neighborhoods, and the big grocery stores are going out of the neighborhoods. So it's pricy for a lot of people. I pay twice for something. [Atlanta]*

*I find [Whole Foods] to be more expensive, and I also appreciate the interaction that I have at the Farmers Market. [San Francisco]*

*Alemany [Farmers] Market is toward the cheaper side. [San Francisco]*

However, with respect to relative cost, the most common reply across both groups was that “*it depends.*” Some things cost more and some things cost less, and variations in price depend on the item and the vendor, on sales and promotions, and what is in season. Hence, respondents underscored the need to do comparison shopping.

**Variation in Price**

*There are some places that do have higher prices, like some of the organic stuff will be higher than some of the regular stuff. But I find that the farmers markets that I visit usually the produce that I find is at a good price, for a dollar a bundle or maybe, two dollars a bundle. [San Francisco]*

*People automatically assume that the farmers grow it, so it's going to be more, anyway. People assume things like that. [Atlanta]*

*I try to vary different things or vegetables so my kids won't get bored of the same fruits. Sometimes one fruit is more expensive than others and if it's less expensive the following week, then I will get it. [San Diego]*

Respondents in San Diego expressed concerns with price more explicitly, but even for these respondents, price alone was not the driving determinant of their shopping behavior. In all study locations, respondents referenced calculated budgeting and comparison shopping to maximize their benefits. For example, they may buy more vegetables one week because they are cheaper that week, but next week they will stock up on fruit. Other respondents described buying fruits and vegetables at the FM, nonperishables at a different market where prices are discounted, and meat at a different market where, as one San Diego respondent put it, she knows that “*the meat is good.*”

Another aspect of shopping at the FMs that respondents said they liked was the opportunity to negotiate the price with the seller. Although the opportunity to negotiate price was mentioned as a benefit, not all respondents said they were aware that price negotiation was an option, or felt comfortable haggling with vendors if they did. Interestingly, none of the San Diego participants who were most concerned about price brought up price negotiations.

**Negotiating Price**

*The thing is, you can haggle. If they have a price and you're like, "Well, you know, I don't know. It's late in the day. Do you really want to bring this home?" They go down sometimes on the price. The best time to go is in the evening. [Atlanta]*

*I didn't know you could do that. [Atlanta]*

Respondents sometimes said that the rationale for item prices, either low or high, were more transparent at the FM since the produce was locally grown and the vagaries of the growing season were more known to area residents. This stood in contrast to prices at large grocery chains that import produce from far and wide. As one Atlanta respondent explained:

**Transparency of Farmers Market Prices**

*With a farmers market, when you see price increases, for me personally, I'm able to understand because I know exactly why when their prices are raised. I would have already seen that it was a bad crop coming. ... The peach [price] this year was higher than normal, because there was too much rain and the peaches were coming out and getting mealy and what have you. You just know that ... crops didn't come in, and that increases the price, whereas you don't know if that's just price gouging at [a local retailer] if they decide to make the price of produce sky high. With a farmers market you know why. It's directly to what happened out there, on how the crop comes out. [Atlanta]*

Others in the group echoed this perspective, with one participant adding, “*I don't resent giving [the farmers] more [money], even if it is more.*” [Atlanta]

**Price vs. Value**

The focus group respondents made an important distinction between unit price and overall value. In short, there was general consensus about the perceived value of the purchases. The prices at the markets were seen as reasonable because the quality of the product was perceived to be superior to what one typically finds at the local grocery store. The tendency for items purchased at FMs to last longer was often invoked as a critical factor with respect to value. In this regard, respondents differentiated between quality and quantity and commented on how it makes more financial sense to buy certain items at the FM than at the regular store, even when the unit price appears to be more expensive.

**Price vs. Value**

*You're getting your money's worth versus, like I said, a grocery store. Even [large retailers], I've done a comparison. [San Francisco]*

*One would rather buy one good mango that will get eaten than three mangoes that will get thrown away because they have no flavor. [San Diego]*

*That's why I'm driving so far, because it's worth it, because it's better quality and I want the best. [Atlanta]*

When asked if she thought the prices were uniformly higher than at the grocery stores, this latter respondent stated, “*I'm not saying that either.*” She wanted to point out that one cannot make purchasing decisions based on price alone. Quality and value must be taken into consideration on a case-by-case basis. Other participants offered similar comments, such as:

**Price and Value Determined on Case-by-Case Basis**

*Some [items] are more expensive, but then you pay for what you get. [Atlanta]*

*I don't cut corners on food ... quality, things like that. That's something I would spend more on. [Atlanta]*

Respondents in San Diego were especially adamant about their refusal to buy food that may be of lower quality just because it is there or it is cheap. As some respondents put it:

**Willingness to Pay More for Quality**

*We are intelligent, even if they [the grocery store] are running a special on something, we can still see that the tomatoes are of poor quality and we go elsewhere. [San Diego]*

*As a [SNAP] recipient, I am of low income, I would shop at stores where prices are cheaper, but they sell you food of such a low quality, that the food is useless. [The FM] is 1000 times better option to go to. In these stores you end up spending money that does not buy you quality food. [San Diego]*

In this way, frequent FM shoppers appeared to be rather sophisticated in their assessment that lower prices do not always equal higher value. Respondents clearly placed a financial and practical value on the freshness and quality of fruits and vegetables. One such comment was made by a respondent in San Diego, who described trying to educate a cousin who does not shop at FMs because of her impression that “*everything is more expensive there.*” The respondent argued that while the unit prices may be somewhat higher, the quality is better, and one saves money in the long run because the produce lasts longer. In this regard, several respondents referenced family and acquaintances who choose not to shop at FMs due to their presumably naive belief that “*everything is more expensive*” at the FM.

## Incentives

Financial incentives were not a top reason that emerged as to why a respondent shops at the FM. Only rarely did respondents spontaneously mention a SNAP-based incentive program (SBIP). In San Diego this happened only once, when a respondent mentioned “*a program through Food Stamps*” that she used at the target FM. However, she did not remember the name of the program nor use the program recently, since she was not sure if it was still running. How focus group attendees felt about financial incentive programs is discussed in Chapter 5.

## Acceptance of WIC and SNAP Benefits

WIC benefits were occasionally mentioned by attendees in relation to FMs, although this predominately occurred in San Diego, where most of the respondents in both groups reported that they are, or used to be, WIC clients. Although standard WIC benefits themselves cannot be used at FMs, WIC Farmers Market Nutrition Program (FMNP) and Cash Value Vouchers can be. Hence, many FM shoppers reported that it was through participation in WIC that they were introduced to the FM. Referring to her WIC FMNP benefits, a respondent talked about receiving \$20 each year in May, in addition to her WIC benefits, which was meant to be spent at a FM. To this, another respondent added that when her WIC benefits were adjusted, the WIC office made her aware of other benefits (i.e., a SBIP) that could be used at the FM. These comments about WIC were met by a general nodding of heads, demonstrating a common experience.

### Connection Between WIC and Farmers Markets

*[I learned about the farmers market] through the WIC Program. They encourage us to go more often to get fruits and vegetables that are fresh and organic. [San Diego]*

*I started going to the [farmers market] because of WIC. WIC gave me coupons worth \$20 in addition to the milk gallons. WIC gave me that check every year in May, and that's how I knew. [San Diego]*

Respondents did not specifically state that they go to the FM because it accepts SNAP benefits, except for one San Diego respondent who takes a long bus ride to the target FM because the market closest to her home does not accept EBT cards. Throughout the discussion, it was not uncommon for respondents to express a wish that more FMs accepted EBT cards.

Even though most of the San Diego focus group attendees who were nonshoppers (14/16) had not shopped at FMs, they expressed positive views about the benefits of buying at FMs. They mentioned benefits such as supporting local farmers, the local economy, and the community; access to a good learning environment for children; and the high quality of fruits and vegetables.

### 4.3 Reasons for Not Shopping at Farmers Markets

This section focuses on reasons some SNAP participants do not shop at FMs. Nearly 32 percent of the survey respondents indicated they did not shop at a FM. Table 4-6 presents a summary of their reasons. The seven most commonly reported reasons were related to convenience and prices, with an overwhelming majority (73%) citing the convenience of shopping for all groceries at one store. Though not most commonly reported, the type and quality of fruits and vegetables were reported as reasons for not shopping at a FM (10% and 8%, respectively). Parking and safety at the FM were reported as reasons, though at lower frequency (10% and 6%, respectively). One-fifth reported that they did not shop at FMs for some other reason.

Table 4-6. Reasons Reported for Not Shopping at Farmers Markets Among Nonshoppers

Reasons	Weighted Percent (Std. Error)	Unweighted N
It is easier to buy all my groceries at one store	73.1 (1.7)	1,039
It is not easy to get to	42.1 (1.9)	524
The prices are too high	33.1 (2.2)	412
It is hard to find deals or get a good value for my money	26.5 (2.5)	314
It is not open on days that are convenient to me	26.0 (1.0)	413
It is not open at times that are convenient to me	24.8 (1.2)	412
It is not close to public transportation	12.3 (1.2)	129
There aren't enough kinds of fresh fruits and vegetables available	10.1 (0.7)	165
It is hard to park nearby	9.6 (0.7)	157
The fresh fruits and vegetables look like they are in bad condition	8.2 (1.2)	134
The staff and sellers don't speak my language	7.5 (0.9)	80
It's not in a safe area	6.0 (0.8)	76
Some other reason	21.7 (1.3)	321

Note: There were 1,499 survey respondents who received this question. Missing observations are excluded from the denominator for calculating percentages.

Data Source: Shopping for Fruits and Vegetable Survey, Questions D1 through D3.

### 4.3.1 Reasons for Not Shopping at Farmers Markets Among Focus Group Attendees

The focus groups also collected data from frequent and nonfrequent shoppers on the factors that may inhibit them from shopping at FMs. The most commonly mentioned factors included inconvenience, a preference for one-stop shopping, and unawareness that their EBT card was accepted at their local FM.

#### Inconvenience

Respondents identified several dimensions of inconvenience. These included difficulty associated with getting to the FM due to its physical location or lack of accessibility. Respondents also referred to inconvenient days and times when the market was open for business as barriers to shopping there more often.

#### Accessibility to the Farmers Market

The physical location of the market was of greatest concern to the Atlanta groups. The Atlanta participants often indicated that most of the markets with which they are familiar, including the target market, are located on the “*outskirts of the city*.” There was a consensus that the locations, combined with the limited hours, were a major challenge. The San Diego respondents occasionally mentioned distance to the target market.

##### Inconvenient Location

*Look at the locations they're at, I know there's not one near me, and it sounds like at this table, there is not one near no one. So, low-income families again, gas, that's gas money, you've got to factor in everything. By the time you get done, you've spent cash. [Atlanta]*

*For me it depends on where it is. I'm way out in McDonough. I think everybody here is out here somewhere. I certainly would not drive an hour and a half just to go buy fruits and vegetables. [Atlanta]*

*It [the target market] is too far from my house. I go to buy fruits at the farmers market that is closer to my house. [San Diego]*

It is important to note that none of the frequent shoppers in Atlanta claimed to shop at their target FM because it is conveniently located to them. Instead, most reported that they pass other places to shop to get there (see Section 4-2 above for discussion of the geographic information systems

[GIS] data about nearby food retailers). These respondents shop at the FM despite the fact that it is not the most convenient. For them, there is value that trumps inconvenience, as this respondent stated. *“I’d rather just go the extra 15 minutes, spend the extra 30 minutes getting there, and buy something that once I take it home, the next day it isn’t wilted all to you know what and it looks terrible when you go to traditional supermarkets or some of those mom and pop stores.”*

*[Atlanta]*

Most San Diego and San Francisco frequent shoppers said that location or access to the FM was not a major issue. This was because most of the respondents live within walking distance or have access to a bus that takes them *“within a block of the farmers market.”* For example, in San Francisco, only a couple of the respondents indicated that complications related to *“getting there”* prevented them from going more often. Another explicitly claimed that she would shop at the target FM more often if it were more conveniently located. Most others indicated that location or difficulty due to distance or transportation was a minor inconvenience. Interestingly, in all three study sites, at least a couple of the respondents indicated that they shop at the target FM only when they are in the neighborhood for something else (e.g., visiting a friend). Some shoppers combine their FM shopping with other errands, suggesting that location may present a challenge to shopping more often at the market.

### **Inconvenient Days or Hours of Operation**

The second dimension of inconvenience was inconvenient days or hours of operation. At least several respondents in each study site critically commented that their target market was open for limited hours on inconvenient days. Even the frequent shoppers sometimes expressed displeasure that their FMs were not open more regularly. Indeed, a majority of the frequent shoppers in Atlanta agreed that their target market was not open at the most convenient times or days (Thursday), and hence shopped at other markets. Most expressed a preference for weekends. However, in San Francisco, where the target market was open on Saturdays, respondents commented that Saturdays were often hectic with family or other obligations, so a weekday would be preferable. Participants in Atlanta were the most outspoken in this regard, especially with respect to the limited hours. Respondents noted that many of the Atlanta markets are open only one day a week and not always at convenient times. The target market, for example, is only open from 4-8p.m. on Thursdays.

**Inconvenient Hours or Days of Operation**

*I think more people would do it if it were more convenient. They're only open certain times on certain days for a certain number of hours. It's convenient for them, because they probably all work daytime jobs and that's just a side thing for them. [Atlanta]*

*I went one time and it wasn't open, that was maddening. [Atlanta]*

*Better hours. I mean come on, one day a week? Please. And four to eight? Have you been in traffic in this town at five to eight? [Atlanta]*

Most San Diego respondents said that the day that their target FM was open (Saturday) was relatively convenient for them, with a few exceptions. For example, a couple of the respondents stated that “*Saturday is a time to spend with the family and friends. One would rather go to the beach instead of going to the market.*” Another agreed and added, “*it is the only time one has to sleep in a little bit.*”

However, none of the frequent shoppers stated that inconvenient days or times prevented them from shopping at the FM, but rather spoke of this as a minor inconvenience. Bad weather is the only factor that prevents them from shopping, either because the market remains closed or because people who walk or feel uncomfortable driving in the rain are discouraged from going to the FM. One respondent in San Diego commented, “*they [the FM] do not open on rainy days, and it is an inconvenience because one has planned the menu, has a list of things that one needs to get for the week, and the place is closed.*”

**Preference for One-Stop Shopping**

Despite the variety offered by FMs, and the fact that some of the largest FMs also offer meats, poultry, and spices, most FMs concentrate on selling fruits and vegetables. Therefore, FMs generally do not offer the convenience of completing one’s shopping in one location. Frequent shoppers in Atlanta understood this sentiment and tended to agree that one-stop shopping was easier. One respondent stated that they would do more shopping at the FM if the selection was broad enough to enable one-stop shopping. Many in San Francisco also appreciated the sentiment that it is easier to do one-stop shopping. For example, one respondent stated: “*I think that it makes sense that people would say that, because these days people are so busy working, and taking care of kids. There's usually no stay-at-home person in the house, so time is always a factor in a lot of people's families. It doesn't surprise me that that's one of the main reasons.*” *[San Francisco]*

At least two other respondents reported that one-stop shopping was their normal shopping behavior. Yet few frequent shoppers seemed to think that not being able to do one-stop shopping was a strong discouragement to FM shopping. A couple of San Francisco respondents said they could see that one-stop shopping is more convenient; one indicated that making special trips to the FM is usually worth it, but added: *“There are times when I’m just too busy. I will skip going on a weekend occasionally, because I have to be somewhere else. Because the farmers market I plan a certain time or else if I have too much work that weekend.”* [San Francisco]

San Diego respondents unanimously stated that “no,” they do not shop for all their groceries at one store. They feel that *“people [who] buy all their groceries in the same store … do not have time to shop around and do not care about the prices.”* For these respondents, comparison shopping for the best product is a priority. They look for the “specials” at grocery stores, but before they buy anything, they make sure it is of “good quality.” They will not buy food just because it is there or is cheap, and are aware that stores offer just one special to get the customer into the door, but the cost of other items remains pricey. However, one respondent did bring up the fact that sometimes *“one has to do all the grocery shopping at one store, if one is there to get the milk and other essentials and one needs vegetables and the FM is not open, such as in the middle of the week.”* To this comment another San Diego respondent added, *“sometimes I have to buy fruit that is not organic so that I can bring more food to my house.”* The overall theme appears to be that striking the right balance between quality and quantity requires shopping at a variety of locations.

### **Lack of Marketing that EBT Cards are Accepted at Farmers Markets**

As discussed above, nonfrequent shoppers often said they were unaware that EBT cards were accepted at FMs and this discourages SNAP participants to shop there. Several respondents attributed this unawareness to the perception that the FMs do not adequately advertise that they accept SNAP benefits. Indeed, several frequent shoppers expressed the same unawareness, as the following exchange and quotes illustrate:

**Unaware that EBT is Accepted**

*Man 2: Some folks don't know that markets accept EBT.*

*Woman 4: That's a very good point.*

*Man 3: That's not widely known.*

*Woman 4: I think that more people, if they expressed that they do accept it, more people would go. [Atlanta]*

*I knew about the WIC vouchers, but [didn't know] about the EBT card. With the WIC voucher, if you spent \$20 they give \$40, but didn't know about the EBT card. [San Diego]*

*I thought [farmers markets] didn't take [EBT cards]. That's why I have never tried to buy because I thought it was with cash. [San Diego]*

*They did not put a sign. A lot of people don't know. [San Diego]*

*If they would advertise more ... I didn't think they accepted EBT ... that's a novelty. [San Diego]*

The lack of marketing and advertising with respect to accepting EBT cards was a common concern raised by focus group attendees. They indicated that this sometimes discouraged them from shopping at a FM (or at the most convenient FM), and were quite sure that this had a similar effect on other SNAP participants. Only a few respondents reported seeing a sign stating “EBT card accepted here” as they have seen in other stores.

**Need for Signage and Advertising**

*I would not have thought that many people had [favorable views] about the farmers markets. ... A lot of people don't know how to read, so the information is word of mouth ... since they [farmers markets] don't advertise, it's not very common people know. [San Diego]*

*It would be ideal that they make flyers with information and the events they have every week. [San Diego]*

*They should put a sign outside that says we accept EBT. [San Diego]*

**Reasons for Not Shopping at Farmers Markets Among Nonshoppers**

As mentioned previously, the focus groups were comprised predominately of those who shopped, at least in-frequently, at FMs. Respondents may not have shopped at the target market, but they commonly had shopped at one or more FMs in their community. However, a small number of respondents had never been to a FM at all (nonshoppers). When the focus group moderators probed these individuals, far and away the most common reason revolved around convenience, specifically location, transportation, or other difficulties in getting there.

**Inconvenience Is a Barrier**

*I think it's probably a little bit inaccessible to a large percentage of people. Just getting there, the transit, that can be kind of a barrier. [San Francisco]*

*I never shop at a farmers market just because it's not convenient for me. [San Francisco]*

Among the nonfrequent shoppers, a few self-identified themselves as not having returned to a FM for an extended period. These individuals were asked why they did not return. These respondents tended to refer to a negative aspect of the experience. In contrast to the positive attribution most respondents placed on the social experience, a few respondents reported that they found the FM to be too crowded, too high energy, or a place with “*too much commotion.*”

Poor customer service was rarely mentioned, but two nonfrequent shoppers in San Francisco did mention that it caused them to not return. Their comments reflected a sense that SNAP participants do not receive the same attention from vendors or staff. To explore this possibility, all respondents were asked if they ever felt unwelcome at the FM because of their status as SNAP participants or their EBT card use. In San Diego, no respondents reported anything about feeling unwelcome or out of place. Indeed, as described previously, they often commented on the social bond they felt with farmers and those working at the market.

In the other study sites, the general consensus was that it was rare to experience a sense of feeling unwelcome or being treated inequitably, and for those who were veteran shoppers, this occurred perceptibly less frequently than in the past. For example, in one Atlanta frequent shoppers group, virtually all agreed with the man who stated: “*That used to happen, but that's not anymore. Now, they are welcoming you with open arms.*” Others commented on the changing demographics of SNAP participants, and virtually all agreed that the move from paper Food Stamps to the EBT card had a very positive effect.

**Sense of Feeling Unwelcome**

*It used to be a stigma, but with this recession you have white people that are getting SNAP benefits, families, white families, black, Asian, whatever, Slavic.. It's just not a stigma. I think that in this economy we're all in it together, and retailers realize that. [Atlanta]*

*There were retailers that used to decline being able to accept SNAP benefits when the government gave them the application to receive SNAP customers. That's gone away now because not only is it bad business because it's saying no to money, but the stigma is gone. Everyone is feeling the pinch so to speak. [Atlanta]*

*I think that it's changed a lot. I was just having this conversation with somebody the other day, about how different it is now that you have the EBT card. When you're standing in line it looks like you're just using your ATM. Remember how it used to be so different, where you'd have the coupons. [San Francisco]*

Some San Francisco respondents admitted to a residual sense of shame associated with using the EBT card, although most reported that the card is better than the old paper Food Stamps. Others stated that most FM cashiers “*have been cool about it*” and suspected that most of the cashiers themselves are probably on SNAP. Still, as one mother explained, “*my daughter doesn’t want everybody knowing.*”

Among the few who expressed concerns related to shame or self-consciousness about using the EBT card at FMs, it was interesting to hear respondents indicate that these feelings emanated not only from the vendors but also fellow customers. In fact, some feel the sense of shame is greater among fellow shoppers, since the vendors are just doing their job. Again, this was never raised as an issue among the San Diego respondents.

#### Sense of Shame When Using EBT Cards

*The vendors are just there to do their job. It’s the people around. They might look at it different. The vendors don’t say nothing. But the people are nosy and they want to see what you’re doing or see if you’ve got cash or if you’re using a credit card or anything. I think it’s just better with the vendors. [San Francisco]*

*I think to the vendor, cash is cash. They don’t care how they get it just as long as they get it. [San Francisco]*

*[Others agree, and one woman comments on the double-edged sword of EBT use in public:] I’m opposed to somebody behind me who’s possibly judging me like, “Oh, OK, so you’re on Food Stamps or you’ve got the EBT card. But you don’t look like you’re poor or you don’t fit my perceived demographic that’s someone who’s on Food Stamps.” On the other hand, if you do fit that stereotype of Food Stamps they’re like, “There you go.” [San Francisco]*

Finally, a couple of the respondents in Atlanta went on to observe that in general, vendors at FMs tend to prefer cash. Although this preference probably applies to all socio-economic strata of shoppers, it may be perceived differentially among those using their EBT card. “*But they are more grateful for cash. I pay them with cash for some stuff, and they are more grateful for cash, trust me. I get the better handshake, the better smile, the better eye contact, because that’s completely cash.*” [Atlanta]

## 4.4 Proximity of Farmers Markets and Other Retailers to SNAP Participant's Residence

To supplement the survey and focus group results, we evaluated the distance from each of the survey participant's residence location to their local FM, as well as the distance from the residence to other food retailers. Table 4-7 presents the average distance among shoppers and nonshoppers. There do not appear to be differences between these two groups. Most of the participants live more than 2 miles from the FM (78% for shoppers and 77% for nonshoppers). There are slightly more shoppers within 1 mile of the FM, and slightly more nonshoppers between 1 and 2 miles. Overall, the distance to the market does not seem to be a significant predictor of shopper status.

**Table 4-7. Distance Between the SNAP Participant and the FM by Farmers Market Shoppers and Nonshoppers**

Distance Between the SNAP Participant and the FM	FM Shoppers		FM Nonshoppers	
	Weighted Percent (Std. Error)	Unweighted N	Weighted Percent (Std. Error)	Unweighted N
Less than 1 mile	10.1 (2.1)	710	8.9 (1.1)	181
1 to 2 miles	12.1 (1.2)	508	14.9 (1.7)	220
2 to 5 miles	29.6 (2.7)	859	31.5 (2.4)	454
More than 5 miles	48.2 (3.9)	1,170	44.6 (3.1)	644

Data Source: GIS analysis of Shopping for Fruits and Vegetable Survey respondent addresses.

Focus group comments about distance to the FM were made more frequently in terms of the time it took to get there. Frequent shoppers tended to say that it took 30 minutes or less to get there. Respondents gave the impression that a conveniently located market was 30 minutes or less away from their house. If it took longer than that, they would shop there less frequently or only go for specialty items, or when they were in the vicinity while on another errand.

Table 4-8 presents the average number of food retailers within 2 miles of the survey participant's residence location. For both shoppers and nonshoppers, there are many other food retailers nearby, including multiple supermarkets and an abundance of convenience stores and other grocery stores. The results show that, in general, nonshoppers have more food options within 2 miles of their home than do shoppers.

**Table 4-8. Average Number of Other Food Retailers Within a Two-Mile Radius of a SNAP Participant by Farmers Market Shoppers and Nonshoppers**

Average Number of Food Retailers Within a 2-Mile Radius of a SNAP Participant	FM Shoppers (Std. Error)	FM Nonshoppers (Std. Error)
Supermarket	4.1 (0.4)	4.9 (0.5)
Other grocery	19.1 (3.1)	21.9 (3.8)
Convenience store	14.1 (1.5)	16.9 (2.3)

Data Source: GIS analysis of Shopping for Fruits and Vegetable Survey respondent addresses and NAVTEQ retail store data.

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This chapter examines the impact of financial and nonfinancial incentives on the shopping patterns of supplemental nutrition assistance program (SNAP) participants. First, SNAP participants' awareness of incentives for shopping at farmers markets (FMs) is presented. Next, the impact of this knowledge on their shopping behaviors is reviewed. Finally, the potential impact of incentives (and other offerings) among nonshoppers on their future shopping behaviors are examined.

In general, incentives provide SNAP participants with an inducement to shop at FMs, try a new product, and/or change their shopping behavior. Earlier studies on incentives suggest that a repetitive action-reward combination can cause an action such as FM shopping to become a habit.<sup>47</sup> Incentives at FMs can be financial (increasing purchasing power by providing additional funds for use only at FMs) or nonfinancial (providing health and nutrition information, or free entertainment and cultural activities).

A nationwide cluster evaluation study commissioned by four nonprofit organizations<sup>48</sup> concluded that programs designed to incentivize the use of SNAP benefits at FMs significantly boost purchases and consumption of fruits and vegetables in underserved communities.<sup>49</sup> From the farmers' point of view, such incentives offer the potential for access to new customers, increased customer loyalty, and the ability to provide value to the community. Indeed, a recent evaluation of incentives at FMs in Michigan found that financial incentives brought to the market a more diversified customer base, including younger families and lower-income individuals.<sup>50</sup> Similarly, from a customers' point of view, incentives can increase purchasing power, create a sense of community participation, and promote closer relationships with producers.

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<sup>47</sup> Charness G. and Gneezy U. (2009). Incentives to Exercise. *Econometrica*, 77(3):909-931. Becker G.S., Murphy K.M. 1988. A Theory of Rational Addiction. *Journal of Political Economy*. V. 96:4;675-700.

<sup>48</sup> Fair Food Network, Market Umbrella, Roots of Change, and Wholesome Wave.

<sup>49</sup> Community Science. (2013). SNAP Healthy Food Incentives Cluster Evaluation. Gaithersburg, MD.

<sup>50</sup> Fair Food Network. (2012). Double Up Food Bucks 2012 Evaluation Report. Ann Arbor, MI.

This study provided a unique opportunity to further examine the role of incentives on shoppers' behaviors. The key findings in this chapter include the following:

- There is a strong association between shopping status and awareness of incentives at FMs. Specifically, shoppers at a specific market are very much aware of the incentives, while nonshoppers are overwhelmingly unaware of financial incentives at FMs.
- Among shoppers at a specific market, financial incentives are very important for getting them to shop at the FM, and they shop more at FMs because of these incentives.
- Although they shop more at FMs because of incentives, only half of shoppers reported that they use their electronic benefit transfer (EBT) cards more because of the same incentives.
- Among shoppers at a specific market, the incentives to shop at FMs result in their household eating more fresh fruits and vegetables.
- Among nonshoppers, it seems that providing financial incentives or promoting awareness of financial incentives would increase their likelihood of shopping at FMs.
- Among nonshoppers, the availability of nutrition information at the FM is the nonfinancial incentive most likely to encourage them to shop at FMs.

## 5.1 Incentives at Farmers Markets

In the client survey, shoppers were asked about incentives for using their EBT card at their specific (local) FM (see Table 5-1 and Figure 5-1). Nearly 77 percent of shoppers reported that their local FM offers incentives of some type in the form of deals, coupons, or other promotions to use their EBT card.<sup>51</sup>

Among shoppers who reported that their market offers incentives, 60 percent indicated that these incentives were "very important" in getting them to shop at the FM. Along the same lines, nearly 57 percent of shoppers who were aware of incentives reported that they did more shopping at FMs because of the incentives. However, nearly 20 percent reported that these incentives were not important in getting them to shop at the FM, and another 20 percent reported it was only "a little important."

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<sup>51</sup> The official status of incentives at these FMs at the time of survey completion was not verified.

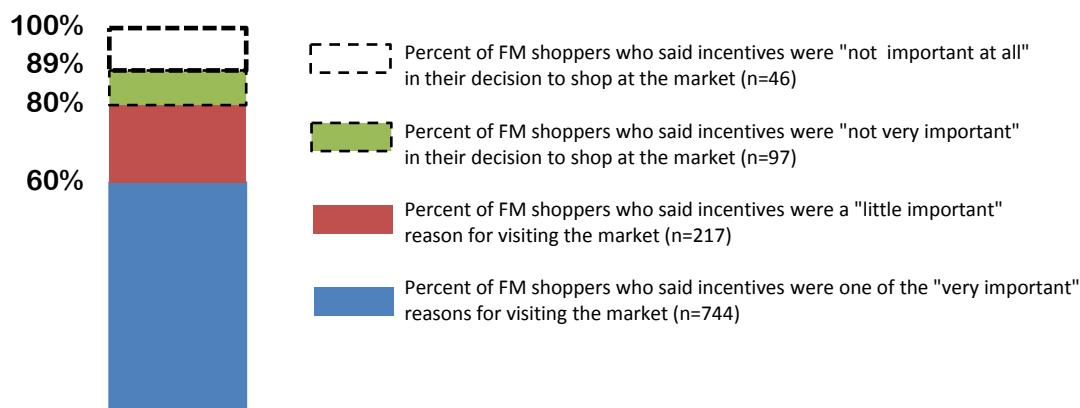
**Table 5-1. Knowledge of Incentives at the Farmers Market Among Shoppers at Specific Markets**

Incentive Knowledge	Weighted Percent (Std. Error)	Unweighted N
Farmers market offers incentives (e.g., deals, coupons, promotions) to use SNAP/EBT card	76.9 (3.3)	1,135
Importance of incentives for shopping at farmers market?		
Very important	60.1 (3.2)	744
A little important	20.1 (2.7)	217
Not very important	9.0 (2.0)	97
Not important at all	10.8 (1.5)	46

Note: There were 2,381 survey respondents who received this question. There are 629 missing observations for knowledge of incentive out of 2,381 shoppers at a specific market. Missing observations are excluded in the denominator for calculating percentages.

Data Source: Shopping for Fruits and Vegetable Survey, Questions C75 and C77.

**Figure 5-1. Importance of Incentives at the Farmers Market Among Shoppers at Specific Markets**



Note: There were 2,381 1,104 survey respondents who received this question.

Survey respondents who reported that their FM offered incentives were asked if the incentives encouraged them to use more of their SNAP benefits and/or eat more fruits and vegetables. As demonstrated in Table 5-2, slightly more than 50 percent indicated that the incentives did not influence their use of SNAP benefits at the FM. However, 58 percent reported that their household ate more fresh fruits and vegetables than if they did not get deals for using SNAP benefits at their local FM.

Table 5-2. Impact of Incentives at Specific Farmers Markets Among Shoppers at Specific Markets That Offer Incentives

Impact of Incentive	Yes		No	
	Weighted Percent (Std. Error)	Unweighted N	Weighted Percent (Std. Error)	Unweighted N
I shop more at farmers markets because of the incentives.	56.6 (2.5)	673	43.4 (2.5)	418
I use more of my SNAP/EBT benefits at farmers markets because of the incentives.	46.7 (4.6)	676	53.3 (4.6)	410
We eat more fresh fruits and vegetables because of the incentives at farmers markets.	58.0 (4.3)	731	42.0 (4.3)	358

Note: There were 1,135 survey respondents who received this question. Missing observations are excluded in the denominator for calculating percentages. Numbers of missing observations excluded in the denominator for calculating percentages are 44, 49, 46 in the order of statements listed in the table.

Data Source: Shopping for Fruits and Vegetable Survey, Questions C78 through C80.

Unlike the client surveys, which asked about awareness of incentives in general, the focus group attendees were asked about their awareness of a specific financial incentive program available to SNAP participants at their target market.<sup>52</sup> Focus group attendees who self-identified as frequent shoppers expressed greater awareness of their local incentive program. When interpreting these findings in relationship to the survey findings, there are two important caveats. First, focus group attendees were asked about a specific incentive program, and second, many focus group attendees patronized FMs in their communities other than and/or in addition to the target FM. It is unknown if these markets offered incentive programs.

Awareness also varied considerably by focus group city. San Francisco attendees expressed the broadest level of awareness of the Bonus Bucks incentive program. Among the frequent shoppers, all but two were aware of the incentive program, and almost all of them participated in it at the target FM. In addition, most also took advantage of the Bonus Bucks program that was offered at another FM. At least one attendee spontaneously referenced the program early in the session while discussing location and transportation barriers in response to the question about where they tend to shop: *“Like CalFresh EBT, they’ll give out the coupons for promotions, and I always thought that sounded so great. Then actually making it there just never happened. That*

<sup>52</sup> For each study site, the moderator’s guide was customized to reference the local incentive program that was currently in operation at the target market, namely Bonus Bucks in San Francisco, Double Your Dollars in Atlanta, and Fresh Fund in San Diego.

*seemed like an incentive, but I think it's probably a little bit inaccessible to a large percentage of people. Just getting there, the transit, that can be kind of a barrier. " [San Francisco]*

Among nonfrequent shoppers in San Francisco, the picture was quite different. Less than half (8 out of 19) were aware of the Bonus Bucks incentive program.

Awareness of the Double Your Dollars incentive program in Atlanta was quite limited, with only seven of the total 39 Atlanta participants indicating they had heard about the program. Six of these seven attendees were frequent shoppers, but further probing revealed that not all seven had actually taken advantage of the incentive program.

In San Diego, awareness of the Fresh Fund incentive program was ascertained in the two nonfrequent shopper groups. In one group, none of the attendees were aware of the Fresh Fund incentive program. In the other, less than half of the attendees (three out of seven) expressed awareness of the Fresh Fund program being offered at their target FM. Of these three, two attendees had used it in prior seasons but thought the program was no longer in effect. One respondent reported not using it at all. In fact, the Fresh Fund program had been scaled back, cutting enrollment by nearly 75 percent in the summer months preceding the focus groups.<sup>53</sup>

The focus groups also explored how attendees became aware of their respective incentive program. Responses varied widely, although the most common mechanism was by word of mouth, typically from friends but sometimes from social workers. Word of mouth also included an instance involving an Atlanta participant, who observed a fellow shopper ahead of him using a voucher and used this as an opportunity to ask and learn about it. Similarly, a San Francisco participant was informed by a vendor when she was using her EBT card to make a purchase. Interestingly, an Atlanta participant stated that "*It's not something that the vendors will readily tell you.*" Another added, "*No one's ever told me.*" Comments such as these may help shed light on the lower level of awareness observed in Atlanta.

Other mechanisms included advertising, signs at the EBT office, direct mailers, pamphlets from the market itself, and stories about the program in the media. A large proportion of Atlanta

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<sup>53</sup> This resulted in noticeable uncertainty among these respondents as to the details of how Fresh Fund works or if it works at all. Another respondent talked about an incentive program that was offered for two years. She did not remember its name, but described it as a dollar-for-dollar match up to \$40 in which they would receive wooden tokens that worked as currency. She might have been referencing the Fresh Fund, though that program matched up to \$20 a month. The special supplemental nutrition program for women, infants, and children (WIC) Program was a more frequently referenced financial incentive program mentioned in San Diego.

attendees and some in San Francisco learned about their local program from a television news story. One of the most knowledgeable individuals in Atlanta had seen a news story about Double Your Dollars on a local television station and had followed up by going online for more information.

#### Awareness Through Media

*I knew to already get the tokens, because I watched the news and they were ringing up the tokens. At first I thought it was at this one particular farmers market. When I went there they said, "No, we have these tokens for here. You [can] go there to get them. [San Francisco]*

*A couple years ago I remember hearing on the news that's what they do with most Food Stamp cards. They give the tokens out at most of the Farmers Market. [San Francisco]*

There was considerable disagreement regarding how well the programs were advertised, with slightly more commenting that they had never seen any signs advertising the incentive. In San Francisco, however, many individuals reported learning about the incentive program through advertising, often on public buses but also through mailers. These individuals also claimed to have seen “*signs everywhere*.” Others reported seeing signs about the incentive program at the SNAP office (known as CalFresh in California) when they initially signed up for benefits.

#### Awareness Through SNAP Office

*My social worker gave them to me when I first signed up, and then there are signs up at the CalFresh location where you go if you have to go in. [San Francisco]*

*Same thing. When I signed up, I saw the posters all over on the wall. [San Francisco]*

These statements were countered by individuals who claimed to have never seen any public advertisement. Of particular concern was the lack of signage at the FM itself. Disagreement about signage was greatest in San Francisco, with many saying they never saw signs and others saying they had. This discrepancy may be explained by the fact that the signs that were up appear to have been removed, perhaps to downplay participation in Bonus Bucks. Moreover, shoppers were frustrated that their FM often lacked an obvious centralized location where one can go for information.

### Inadequate Signage at the Farmers Market

*It [the sign] has been at the info booth at the entrance and they will have matching, but eventually they took it down, so you have to actually ask questions. [San Francisco]*

*I don't even know where the information is. And if there was an information booth, I don't necessarily know. I probably have passed it because it says information or something on it. But I've never seen "Here's EBT" and "Here's the incentive program" or that sort of thing. [San Francisco]*

Focus group attendees were asked how important financial incentive programs were in their decision to purchase fruits and vegetables from their respective FMs. Responses to this question were mixed. As in the survey, there was a general consensus that the incentives were important, and in many cases very important, yet many frequent shoppers said that they will continue to shop at their FM with or without the incentive. As reported in an earlier study,<sup>54</sup> it may be that once a person forms the habit of shopping at FMs, the value of the incentive becomes less critical. On the other hand, as discussed in the following section, nonfrequent shoppers appeared to be much more interested in shopping at FMs after becoming aware of the incentive.

Among frequent shoppers in San Francisco, where the cost of living may be especially high, the general consensus was that the financial incentive was very important, as the following quotes illustrate:

### Importance of the Financial Incentive

*It's decisive for me because I tend to spend a lot of money when it comes to farmers market. I buy and overbuy. But when I had that little benefit, I had to really be careful with my money. I've got some extra money, I'm going to spend it wise, but somehow it's an incentive to spend carefully. [San Francisco]*

*It's very important because it extended my budget for the food, because I always buy vegetables and fruits. I want my money to be worth it. I really extend my budget on that one. [San Francisco]*

*Especially when you're depending on that EBT card to survive with the kids. You have to limit everything. I shop by the week every Saturday. [San Francisco]*

Others concurred, stating that “*it is very important*,” “*it helps, definitely*,” and that it increases their motivation to shop at FMs versus other venues. However, alternative opinions were voiced. At least two frequent shoppers candidly stated that the incentive is not important to them and that they would shop at the market anyway because of the other benefits of shopping there. Both admitted, however, that the incentive helps. Nonfrequent shoppers who were aware of the incentive tended to claim that the incentives had a marginal effect that had to be tempered by other considerations, namely convenience: “*For me it's an incentive, but it's not a huge one*,

<sup>54</sup> Charness G. and Gneezy U. 2009. Incentives to Exercise. *Econometrica*, 77(3):909-931.

*because it takes time to go there and to walk around. It ends up being a half-day thing. On my weekends I like to have quality time with my child and do fun activities. It can be fun to go to the farmers market. But I like to keep my shopping time shorter than it would take me to drive there, and spend the day there, and drive home. It's an incentive to save money, but it's not a huge incentive because of the time.” [San Francisco]*

The frequent Atlanta shoppers who used the incentive described it as “*pretty important*.” Among those who learned about the incentive during the focus group, there was an increased interest in shopping at the target market more often in the future. Still, most indicated a willingness to shop there without the incentive, citing the many nonfinancial incentives discussed in Section 5-2. As the discussion in the next section reveals, the nonfrequent shopper group appeared to be especially interested in shopping at the FM more often after learning about the incentive program.

Knowledge about the Fresh Fund program in San Diego was comparatively limited among the nonfrequent shoppers, and clarity about how the program worked or if it even was still available was compromised by the recent contraction of the Fresh Fund program. When the question concerning the importance of having access to the incentive was posed in San Diego, it generated an almost universal response from attendees who formerly had received some form of benefit that yes, the incentive did encourage them to go more often and/or buy more products at the FM:

#### **Effect of Losing Access to Incentive**

*When the incentive was available I would go every week, now I have to think twice before going because the prices are high and \$20 does not get you much. [San Diego]*

*When the incentive started, I was going [to the farmers market] every week, but when they took Fresh Funds away I went every two weeks. Since the prices vary, you don't have enough to spend. [San Diego]*

*I think it is important because we buy things and we know they are good and sometimes we don't have the money, but still we try to buy a little bit. With this program, it makes you to go. If you have \$20 you know they will give you \$40. [San Diego]*

In San Diego, there was a prevailing sense of regret that the benefits were no longer offered; participants stated that “*it was a great help to families to purchase more fruits and vegetables*.” Attendees commented on the increase of patrons at the FM when the incentive was offered: “*whenever this incentive is offered, I saw more people in the farmers market because information is passed through word of mouth between families*.” Yet, although having access to

an incentive was important for these attendees, its absence is not a complete deterrent to shopping at the FM among the frequent shoppers.

Table 5-3 presents a summary of knowledge of FM incentives among nonshopper survey respondents. The majority (97%) were not aware that some FMs offer incentives for using EBT cards.

**Table 5-3. Knowledge of Farmers Market Incentives Among Nonshoppers**

	<b>Weighted Percent (Std. Error)</b>	<b>Unweighted N</b>
Aware that some farmers markets offer incentives to use SNAP/EBT card	2.8 (0.7)	101
Not aware that some farmers markets offer incentives to use SNAP/EBT card	97.2 (0.7)	1,347

Note: There were 1,499 survey respondents who received this question. Missing observations are excluded in the denominator for calculating percentages.

Nonshoppers were also asked about their tendency to shop at FMs under three different incentive scenarios. Each nonshopper was asked one of three questions that included a different incentive scheme, as shown in Table 5-4. In all three incentive schemes, 40 to 50 percent of nonshoppers said that they were very likely to shop at a FM if offered the incentive scheme. Only one in five nonshoppers reported being “not very likely” or “not at all likely” to shop at a FM for a given incentive scheme (between 19% to 23%). In short, the financial incentives would increase the likelihood of shopping at a FM, regardless of the incentive scheme. Specifically, the structure of the incentive scheme did not appear to affect the likelihood of shopping at a FM.

Table 5-4. Likelihood to Shop at a Farmers Market for Various Incentive Schemes Among Nonshoppers

	Weighted Percent (Std. Error)	Unweighted N
Likelihood to shop at a farmers market that gives you a \$1 coupon for every \$1 you spend with your SNAP/EBT card up to \$5		
Very likely	50.6 (2.8)	220
Somewhat likely	30.9 (2.3)	154
Not very likely	10.1 (1.7)	44
Not at all likely	8.4 (1.2)	42
Likelihood to shop at a farmers market that gives you a \$1 coupon for every \$1 you spend with your SNAP/EBT card up to \$10		
Very likely	45.7 (2.0)	222
Somewhat likely	33.4 (2.4)	147
Not very likely	9.4 (2.0)	57
Not at all likely	11.6 (1.3)	59
Likelihood to shop at a farmers market that gives you a \$2 coupon for every \$5 you spend with your SNAP/EBT		
Very likely	43.4 (2.0)	210
Somewhat likely	33.5 (2.6)	173
Not very likely	12.6 (1.4)	49
Not at all likely	10.5 (1.5)	53

Note: There were 1,499 survey respondents who received this question. Missing observations are excluded in the denominator for calculating percentages. Survey participants were randomly assigned to one of the three versions of the likelihood questions. Percentages may not add up to 100 percent due to rounding.

Data Source: Shopping for Fruits and Vegetable Survey, Questions D6 and D7.

The focus groups did not invite participants to reflect on varying incentive schemes but did gather reflections from participants who learned about their respective local incentive programs for the first time while participating in the focus groups. Thus, the focus group data provides a window into the degree to which SNAP participants respond to the incentive scheme that pertains to their target FM and how it would influence future purchasing at the FM. Since reactions varied considerably by study site, these are discussed in turn below.

Only two frequent shoppers in San Francisco learned about the program as a result of the focus group. Both stated that the incentive would encourage them to shop at the FM:

Reaction to Incentive – San Francisco
<i>I'm definitely going to get back there. I was already planning for October. I'm definitely going to check it out. [San Francisco]</i>
<i>I think mine will go up. I think I need to make it a point to get there more often. [San Francisco]</i>

Nonfrequent San Francisco shoppers were much less consistent in their reactions, with approximately equal numbers indicating that it would and would not increase their likelihood of shopping at the FM. Those in the second category tended to offer a rational explanation as to why the incentive would not serve as a motivating factor, and that explanation was almost always related to the inconvenience associated with getting to that market. In short, distance is hard to overcome even with money:

#### Nonfrequent Shopper Reaction to Incentive and Distance to Farmers Market – San Francisco

*That place is really far. I'm talking about maybe 30 minutes of bus. I wouldn't go there even there's an incentive, yeah, because it's not really worth that time. [San Francisco]*

*If I was doing something in that area or in that vicinity and I was already there, I would do it. But just going there, I think it would ... between getting there, the hassle, transportation cost getting there, it might not be worth it. [San Francisco]*

With respect to how often they would shop at the FM given hypothetical access to this new incentive, estimates range from two to three times a month. “*It would go way up*” exclaimed one nonfrequent shopper who stated that toward the end of the benefits month, his family is down to eating “*peanut butter and jelly*.” The incentive would allow him to “*purchase better food for the family*.” Other attendees took this opportunity to reiterate the challenge of distance and the inconvenience of the market only being open on Saturday. “*It takes planning*,” as one respondent succinctly put it. In contrast to San Francisco, virtually all of the Atlanta participants said they were more likely to shop at FMs – even those located further away from their homes – now that they were aware of the incentive program. After they learned about the incentive, there was almost universal agreement that they were “*more likely to get over there to go more often*.”

#### Reaction to Incentive – Atlanta

*I would probably try to make my way over there more often, because I think that is a great deal. [Atlanta]*

*I would definitely go back. I had no idea about that at all. [Atlanta]*

In another contrast to San Francisco, the Atlanta attendees saw the financial incentive, which doubled their dollars, as sufficient for them to make an extra effort to visit that specific target market despite the distance:

**Reaction to Incentive and Distance to Farmers Market – Atlanta**

*If I'm going to save on my grocery bill, I will go ahead and break down and pay somebody to take me out of the way to get that extra, definitely. [Atlanta]*

*I'm thinking if you've got a voucher for \$10, and you make a trip special to go there, even though one or two things might be a little bit higher in price, you just saved your gas money. [Atlanta]*

A significant portion of the San Diego nonfrequent shoppers (13 out of 16) indicated that they were unaware of the Fresh Fund incentive program prior to the focus group. Most of these shoppers indicated that they would be very likely to shop at the target FM if they had access to the incentive, with some participants stating that they would visit or shop at the market at least twice a month. Included in this group was one respondent who claimed she would be motivated to drive the 40 miles between her house and the location of the target market, splitting her purchases between the target and her local FM. As in Atlanta, the perceived value of the incentive appeared to overcome the perceived additional inconvenience and cost of getting there:

**Reaction to Incentive – San Diego**

*That [incentive amount] could be the gas I'd spent driving to City Height. [San Diego]*

*If they would offer that incentive again, I would be more motivated to go. [San Diego]*

However, several attendees in San Diego candidly expressed that they did not know with certainty if the incentive program would influence their decision to shop at the FM. Such statements were discussed above, following Table 5-2. As one respondent put it, “*whether or not this incentive program exists, I will go.*” Another respondent shared: “*In certain ways, it is important, but in certain ways no, because we still go there because we know that the items are good. So even if we cannot afford a lot we try to buy some.*” [San Diego]

The discussion about incentive use raised related issues with respect to whether the incentive would increase fruit and vegetable consumption or simply be a cost saver for the same amount of consumption. Also, those who live by themselves and shop only for themselves commented that they would not likely buy more, for fear of produce spoiling and going to waste:

**Concerns About Spoilage and Waste**

*I would definitely be more apt to go there for that [incentive], but what I've found also is, not necessarily a drawback, but ... because I am a single family household, I wouldn't be able to use it all. So I think just learning how to balance that a little bit more because it seems like you're getting more. You are, but not being wasteful with it. [San Francisco]*

*I like to buy on a weekly basis in small quantities but fresh. [San Francisco]*

Attendees in San Diego reported that if they had access to the Fresh Fund program, they would buy and consume more fruits and vegetables. In addition, three nonfrequent shoppers who reported personally experiencing health conditions or having a relative with health conditions (e.g., diabetes and cancer) felt that the incentive would help them eat healthier.

**Effect on Eating More Healthy Food**

*For example, my husband was told he's on the early stages of diabetes ... he can't eat [tortilla] or bread ... instead of [tortillas], I make salad. My daughter likes it a lot. I'd buy more vegetables and fruits. [San Diego]*

*Since I'm diabetic, I need to eat more vegetables and fruits. I need lots of green smoothies. I know that I will get a lot of nopales [cactuses] ... a lot of things that will benefit me ... that [the incentive] will duplicate [the amount of] vegetables. Another thing, I have five relatives who have EBT and will tell them to go [to the farmers market to inquire about the incentive]. [San Diego]*

When the Atlanta frequent shoppers group were asked if the incentive program was likely to increase the proportion of their SNAP benefits that they would spend at a FM, most said yes, but one woman did a quick calculation and indicated it would not: *"I'm extremely frugal, so I think about dollars. Why would I spend [more], if I'm already spending, let's say I get \$150 in benefits and I spent \$75 there. Then, why would I spend an extra \$100 or \$110 when I'm already doubling my dollar? That's a waste of money." [Atlanta]*

In short, according to her calculation, the incentive program would allow her to spend half as much in benefits to get the same amount of produce. The extent to which the incentive programs allow SNAP participants to “splurge” on items they might not otherwise purchase (as some Atlanta participants said they would) – or, conversely, save and redirect their benefits elsewhere – is a question that merits further research.

## 5.2 Nonfinancial Incentives

In addition to financial incentives, nonshoppers were asked in the survey about the potential impact of nonfinancial incentives/offerings at FMs on their shopping behavior. These offerings were related to information, activities, and resources that may be desirable for some shoppers. The findings are reported in Table 5-5. The availability of nutrition information at the FM was the most commonly reported resource that would “very likely” increase the likelihood of shopping at FMs (28%). For each of the other items, less than 25 percent reported they would be “very likely” to shop at FMs if the items were offered.

However, 41 percent of nonshoppers reported that something else (not listed among the response options) would “very likely” result in their shopping at FMs. Although the other factors varied on an individual level, a common theme was the personal atmosphere and sense of community at the FM, such as how the shoppers were treated in general, and as SNAP participants. Other dominant themes were related to the hours/days of operation; location, transportation, and parking; pricing; free samples; and the physical environment/condition. One additional common theme was related information on how to navigate and/or shop at a FM.

Virtually all of these themes emerged from the focus group discussions as well. For example, the sense of how SNAP participants were treated by vendors (e.g., receiving a warm welcome) was cited as an encouraging reason to shop. Alternatively, when the perceived treatment was negative, it was cited as a discouragement. Likewise, limited hours and days of operation were interpreted as a factor discouraging shopping at FMs. The focus groups revealed that the festive atmosphere and sense of community that FMs engender was a clearly dominant factor that encouraged shopping.

The availability of jewelry, artwork, or clothing (43%); a social worker (32%); and entertainment and cultural activities (29%) were among the offerings reported the most as “not at all likely” to encourage shopping at FMs. In short, nonfinancial incentives seem to influence less than 25 percent of the nonshoppers to shop more at FMs.

As discussed earlier, focus group attendees valued entertainment and cultural activities. Moreover, embedding health and nutrition education within entertaining social activities was offered as a recommendation to encourage more SNAP participants to shop at FMs. These data suggest that the social and interpersonal dimensions of FMs, when properly constructed, offer

nonfinancial incentives for visiting and shopping. Unlike the survey data, however, the focus group data cannot be used to quantify the degree of influence of each of these dimensions.

**Table 5-5. Likelihood of Shopping at Farmers Markets if Certain Things Were Offered Among Nonshoppers**

How Likely Are You To Shop at a Farmers Market If...	Very Likely	Somewhat Likely	Only a Little Likely	Not At All Likely	Not Sure
Nutrition information was available					
Weighted percent (std. error)	27.5 (1.3)	24.8 (1.2)	18.1 (1.4)	19.6 (2.2)	9.9 (0.6)
Unweighted N	351	321	255	341	145
There were activities for children					
Weighted percent (std. error)	24.8 (1.8)	21.3 (1.1)	14.4 (2.0)	26.8 (2.0)	12.8 (1.0)
Unweighted N	360	295	165	429	161
Health information, screening tests or exams, or vaccinations were available					
Weighted percent (std. error)	23.6 (1.2)	21.5 (1.5)	15.7 (0.7)	27.4 (2.3)	11.7 (1.0)
Unweighted N	291	280	211	455	170
There were cooking demonstrations					
Weighted percent (std. error)	22.4 (1.5)	19.9 (0.9)	17.9 (1.0)	22.3 (2.0)	17.5 (1.4)
Unweighted N	265	291	258	394	215
There was entertainment or cultural activities like live music or other events					
Weighted percent (std. error)	20.2 (1.3)	19.0 (1.5)	17.9 (1.1)	29.1 (1.9)	13.9 (0.7)
Unweighted N	268	327	216	425	176
They sold prepared foods or meals					
Weighted percent (std. error)	19.2 (1.3)	23.6 (1.2)	18.4 (0.9)	25.7 (2.2)	13.1 (1.0)
Unweighted N	234	325	251	429	176
They sold plants and seeds					
Weighted percent (std. error)	18.4 (1.1)	23.1 (0.8)	18.5 (0.7)	27.6 (1.3)	12.4 (0.8)
Unweighted N	274	350	254	378	152
A social worker was available					
Weighted percent (std. error)	17.3 (1.5)	16.7(1.2)	16.6 (1.2)	32.4 (2.6)	16.9 (0.7)
Unweighted N	199	201	230	539	231
They sold jewelry, art work, or clothes					
Weighted percent (std. error)	8.2 (1.1)	14.4 (0.9)	17.5 (0.9)	42.7 (1.5)	17.2 (1.3)
Unweighted N	116	220	234	625	205
Something else					
Weighted percent (std. error)	40.5 (2.7)	5.6 (1.7)	4.6 (0.8)	13.2 (2.4)	36.2 (2.4)
Unweighted N	148	32	12	60	135

Note: There were 1,499 survey respondents who received this question. Missing observations are excluded in the denominator for calculating percentages. Percentages may not add up to 100 percent due to rounding.

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Farmers markets (FMs) across the country can play an important role in promoting healthy eating in their communities by offering local residents, including many supplemental nutrition assistance program (SNAP) participants, access to locally grown fruits and vegetables, as well as education about nutrition, obesity, and diabetes. The Food and Nutrition Service (FNS) has supported and encouraged this type of community action during the past five years by simplifying the SNAP authorization process for FMs, and providing informational support on how to process Electronic Benefits Transaction (EBT) cards, and making EBT equipment available – free of charge – to farmers’ markets that become SNAP-authorized.<sup>55</sup> Increasing SNAP participants’ patronage at FMs promises not only to promote access to fresh fruits and vegetables in low-income households, but also to help create a stronger community and support local farmers and the local economy.

This chapter summarizes the key findings of the study with regard to the overarching research objectives posed in Chapter 1. For each of the three research objectives, the findings are organized by specific research questions that were addressed through the preceding analyses. The chapter also outlines the important strengths and limitations of this study, and presents some conclusions.

## 6.1 Research Questions and Key Evaluation Findings

### 6.1.1 Describe the Shopping Patterns of SNAP Participants

#### **Question 1: Where do SNAP participants shop for groceries? Where do they redeem most of their benefits, and why?**

SNAP participants most often shop at large grocery stores for all their groceries, and they are most likely to use their SNAP benefits at these stores. Indeed, all but 3 percent of the sample indicated that they shop at large grocery stores. Small grocery stores are listed as the second most common place for groceries. More than one-third of survey respondents selected natural

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<sup>55</sup> USDA, Food and Nutrition Service. EBT: Learn About SNAP Benefits at Farmers’ Markets. Available at: <http://www.fns.usda.gov/snap/ebt/fm.htm>.

organic stores and other kinds of stores, but less than one-third selected convenience stores and ethnic markets for grocery shopping. When shopping for fresh fruits and vegetables, SNAP participants most often preferred fresh products, and they shopped for such products more often than they shop for frozen/canned fruits and vegetables. Survey respondents reported that they look for good specials and deals, low prices and high quality, and acceptance of the EBT card as the top reasons for shopping at a particular market. Focus group respondents also commented that they tended to spend most of their benefits at the grocery store that was most conveniently located to them, and by extension, where they tended to shop most regularly. In many cases, these tended to be large or discount grocery chains.

### Question 2: What are the top reasons SNAP participants shop at farmers markets?

The most commonly reported reason for shopping at a specific FM was access to high-quality fruits and vegetables. Additional commonly reported reasons were related to the quality and variety of vegetables, characteristics of the market and the people there, and location convenience. Focus group attendees reported selection, variety, and promoting local businesses and farmers as important reasons they shop at a FM.

Characteristics of the FM, including location and cleanliness, were also commonly reported reasons for shopping at a specific FM. Noteably, both the survey and the focus groups revealed that positive social experiences offered through FMs serve as important reasons that SNAP participants shop there. In the focus group discussions especially, shopping at a FM was described as a social event with opportunities for fun as well as learning. Shopping at FMs was further described as a family-friendly experience with activities and interactions unavailable through ordinary grocery shopping. For many, the FM represented a unique destination. These experiences distinguish shopping at FMs from shopping at traditional grocery stores and motivate shoppers to return.

#### Top reasons SNAP participants shop at FMs

- High-quality fruits and vegetables
- Locally grown fruits and vegetables
- Variety in fresh fruits and vegetables
- Fun place to be
- Farmers market staff are helpful

**Question 3: How do the characteristics of households who shop at FMs compare with households who do not shop there?**

Among survey respondents, females, households with no children, households who receive support from other nutrition programs, and those who are aware of incentives for EBT use are more likely to shop at FMs. In addition, African Americans and other non-White race categories, participants who are unemployed, homemaker/student, or those who report that they cannot work, and households with income below \$10,000 per year are all less likely to report shopping at FMs.

**Question 4: What types of foods do SNAP participants purchase, with what frequency, and when in the farmers market season?**

Almost 70 percent of survey respondents who reported shopping at a FM in the past 12 months do so during summer, and 62 percent shop at a FM in spring and/or fall as well. Only 42 percent of shoppers go to the FM in winter, which is consistent with the fact that many FMs close in winter months. Most shoppers indicate that they shop once a month or less often at a specific FM. However, when considering the summer months alone, more than one in ten shoppers go to the FM once a week or more often. Most shoppers purchase fruits and vegetables at the FMs. While it is clear that there is interest in other products, more than 75 percent of shoppers purchase fruits and vegetables almost every time or some of the time that they go to the FM. Nearly half of shoppers reported shopping for meat, eggs, honey, and food in cans; more than half buy baked foods such as bread, pie, or cake.

**Characteristics Associated with Shopping at FMs**

- Females
- Households with no children
- Households who receive supports from other nutrition support programs
- Participants who are aware of incentives for SNAP/EBT use at FMs
- Whites
- Participants who are employed (relative to unemployed, student/homemaker, and those who cannot work)
- Household income greater than \$10,000 per year

**Question 5: What would it take to increase SNAP participants' patronage of farmers markets?**

In addition to incentives (discussed in Question 12), convenience-related concerns were the most-often-cited barriers to increasing patronage of FMs among SNAP participants. The two most common reasons that kept participants from shopping at FMs as much as they would like

were that it was easier to shop at one store, and the location of the market was not close to their home. Nearly one-fourth of respondents raised concerns about higher prices. In addition, one out of five survey respondents reported that the day/hours of operation were not convenient. It is important to note that social stigma-related concern was one of the important factors affecting patronage of SNAP participants at FMs; approximately 15 percent reported they didn't want to be seen using their EBT card at the market.

#### **Question 6: What proportion of their benefits is redeemed at farmers markets?**

In regards to using SNAP benefits on fresh fruits and vegetables, 52 percent of shoppers indicate using “a little” or “some” of their SNAP benefits on purchasing fruits and vegetables at FMs. Almost 9 percent of shoppers use “most” or “all” of their SNAP benefits on purchasing fruits and vegetables at FMs. This shows that acceptance of the EBT card is vital for shopping at FMs for many SNAP participants. Focus group attendees were asked where they redeemed most of their SNAP benefits, and to estimate the proportion of their benefits that are redeemed at FMs. The proportion of SNAP benefits that focus group attendees estimated they spend at the FMs varied from 10 percent up to 80 percent, with the majority of those providing an estimate saying that they spend 30 percent or less of their benefits at FMs.

#### **Question 7: What factors are correlated with using SNAP benefits at farmers markets?**

The findings indicate that Black or African Americans are 1.6 times more likely than Whites to use SNAP benefits at a FM. Unemployed participants and those who cannot work are significantly more likely to use SNAP benefits at FMs, compared with FM shoppers who are employed. Consistent with the unemployment finding, participants with household incomes less than \$10,000 are more likely to use SNAP benefits while shopping at FMs. The results also suggest that awareness of incentives for EBT use is a very strong predictor. Survey respondents who are aware of such incentives are 2.9 times more likely to use SNAP benefits when shopping at FMs.

#### **Question 8: How do perceptions of price, variety, and freshness of fruits and vegetables sold at farmers markets compare with the characteristics of similar foods at other food retailers among SNAP participants?**

Among survey respondents who were shoppers, more than one in three report that the prices of fresh fruits and vegetables are higher in FMs than in other stores. More than one in four shoppers

(27%) believe that the prices are about the same. Yet 39 percent of shoppers state that the prices of fresh fruits and vegetables are lower in FMs relative to other stores.

Almost two-thirds of shoppers state that they find more variety in fruits and vegetables at FMs than in other stores, and they are able to purchase different fruits and vegetables at FMs. Focus group attendees often underscored how the wide variety of items for sale at FMs influenced their shopping decisions. Focus group attendees in all three study sites commented both on the diversity of items overall, as well as the variety within a certain food category. Such variety often encouraged shoppers to purchase different items during different trips to the market.

Regarding the freshness of fruits and vegetables, almost two-thirds of FM shoppers believe that the fruits and vegetables at FMs are more fresh than in other stores. While 31 percent report that the freshness at FMs is the same as in other stores, only 4 percent of participants believe that FMs have fruits and vegetables that are less fresh than in other stores.

**Question 9: What do SNAP participants who shop at farmers markets think about the incentives for EBT use at farmers markets?**

More than two-thirds of shoppers reported that their local FM offers incentives of some type in the form of deals, coupons, or other promotions to use their EBT card. Among these, 60 percent indicated that these incentives were “very important” in getting them to shop at the FM. Along the same lines, nearly 57 percent of shoppers who were aware of incentives reported that they shop more at FMs because of the incentives. However, nearly 20 percent reported that these incentives were not important in getting them to shop at the FM. Nearly 60 percent of respondents who were aware of incentives at FMs reported that their household ate more fresh fruits and vegetables than if they did not get deals for using SNAP benefits at their local FM. Focus group respondents were asked how important FM financial incentive programs were in their decision to purchase fruits and vegetables from their respective FMs. Responses to this question were mixed. As in the survey, there was a general consensus that the incentives were important, and in many cases very important, yet many focus group attendees who were frequent shoppers expressed the opinion that they will continue to shop at their FM with or without the incentive. It may be that once a person forms the habit of shopping at FMs, the value of the incentive becomes less critical. On the other hand, as discussed in the following section, nonfrequent shoppers appear to be much more interested in shopping at FMs once becoming aware of the incentive.

## 6.1.2 Describe Why SNAP Households Do Not Shop at Farmers Markets

### Question 10: What are the perceived barriers to shopping among SNAP participants who do not shop at farmers markets?

The top seven factors noted as barriers to shopping among SNAP participants who do not shop at FMs were related to convenience and prices. The convenience of shopping for all groceries at one store was the most important reason. Parking and safety at FMs were reported as reasons, though at a lower frequency. Among focus group attendees, inconvenient days or hours of operation were cited as barriers to shopping. At least several respondents in each study site critically commented that their target market was open for limited hours on inconvenient days.

### Question 11: Are the SNAP participants who do not shop at farmers markets aware of incentives for EBT use?

The overwhelming majority of survey respondents who do not shop at FMs (97%) were not aware that some FMs offer incentives for using EBT cards. Overall, focus group attendees appeared to be less knowledgeable about specific incentive programs at their local FMs. However, those who self-identified as a frequent shopper expressed greater awareness of their local incentive program than did nonfrequent shoppers.

### Question 12: How would financial and nonfinancial incentives affect shopping decisions among SNAP participants who do not shop at FMs?

Nonshoppers were asked their tendency to shop at FMs under three different incentive scenarios. When asked about their tendency to shop, 40 to 50 percent of nonshoppers said that they were very likely to shop at FMs if offered a financial incentive scheme. Only one in five nonshoppers reported being “not very likely” or “not at all likely” to shop at a FM for a given incentive scheme. The financial incentives increase the likelihood of shopping at a FM, regardless of the incentive scheme/amount. In addition to financial incentives, nonshoppers were asked in the survey about the potential impact of nonfinancial incentives/offerings at FMs on their shopping behavior. The availability of nutrition information at the FM was the listed resource with the highest percentage of survey respondents indicating it is “very likely” they would shop at a FM if this were available. Among focus group attendees, embedding education about health and food, and nutrition education within entertaining social activities was offered as a recommendation to encourage more SNAP participants to shop at FMs.

### 6.1.3 Describe the Characteristics of Farmers Markets Serving the Participants Surveyed With Regard to Shopping Behavior

#### Question 13: What services are offered/available in the vicinity of farmers markets? What is the distance between the farmers market and the nearest retailer?

In general, nonshoppers have slightly more nearby retail services around their FMs, suggesting that other nearby retail services might act as a competing factor than as an attracting factor. Most respondents had a supermarket within half a mile of their FMs (61% among shoppers and 66% for among nonshoppers). Similarly, most respondents had some type of food retailer within half a mile of their FMs (82% among shoppers and 80% among nonshoppers).

#### Question 14: Are there differences in the distance from each of the survey participant's residence location to their local farmers market, or in the distance from the residence to other food retailers, by farmers market shopping status? What food retailers are within a two-mile radius of the market?

In terms of average distance to the local FM among shoppers and nonshoppers, there do not appear to be significant differences between these two groups. Most of the participants live more than two miles from the FM (78% for shoppers and 77% for nonshoppers). There are slightly more shoppers within one mile of the FM, and slightly more nonshoppers between one and two miles. Overall, the distance to the market does not seem to be a significant predictor of shopper status. For both shoppers and nonshoppers, there are many other food retailers nearby, including multiple supermarkets and an abundance of convenience stores and other groceries. The results show that, in general, nonshoppers have more food options within two miles of their home than do shoppers.

## 6.2 Study Strengths and Limitation

This is the first nationwide study to examine the FM shopping patterns of SNAP participants. The sample size allowed for sufficient analytic power to implement analysis by several subgroups, including FM shoppers vs. nonshoppers and EBT users vs. EBT nonusers. The study strengths include a mixed-method research design comprised of using a household survey, focus group interviews, and a geographic information systems (GIS) data analysis to address the FNS goals of understanding SNAP participants' shopping decisions at FMs. A mixed-method research design also enabled the researchers to confirm and explain the results obtained from one method

with the results coming from a different method of data collection. Thus, not only did the focus group interviews provide additional contextual information in addressing the research questions, but they tended to confirm some of the information reported by SNAP participants in the household survey.

Other strengths of this study include the ability to document the demographic profiles of a nationwide representative sample of SNAP participants who are shoppers and nonshoppers at FMs. In addition, the study was able to assess the effect of incentives (SNAP-based incentive programs [SBIP] offered at FMs) on shopping behavior among SNAP participant, as well as their perceptions about the price, quality, variety, and freshness of fruits and vegetables at FMs.

In terms of study limitations, first, while the sample size is representative of SNAP participants within the catchment areas of selected FMs, the sample size was a small percent of the 22 million households that received SNAP benefits in 2012. Second, the demographics of the sample was limited to SNAP participants within the catchment area of specific FMs. Further, it is important to note that the sample was selected from an anti-fraud location using EBT retailer transactions (ALERT) dataset that includes pertinent information for a 1-year period ending 12 months prior to the start of data collection. Although it is known that all the survey respondents were SNAP participants at the time of sampling, the survey did not ask respondents whether they were still receiving SNAP benefits. Thus, some of the survey respondents may not have been SNAP participants at the time of survey completion. In addition, focus group respondents were identified as frequent and infrequent shoppers based on their shopping frequency at a target FM. A focus group attendee who is identified as an infrequent shopper at the target FM could be a frequent shopper at one or more other FMs. However, this sampling method ensured that the focus groups provided data about shopping behaviors at a FM that offered a known incentive program, and about the effects that such incentives have on shoppers.

### 6.3 Conclusions

This study provided descriptive findings about SNAP participants' shopping behavior at FMs. In general, findings indicate that SNAP participants use information on the quality, freshness, price, and variety of fruits and vegetables available at FMs in making food shopping decisions. When deciding whether to shop at FMs, SNAP participants also take into consideration the convenience of shopping, and examine whether they can shop within their budget. Just like any

other consumer, SNAP participants look for the right balance between quality and quantity, while shopping at a variety of locations. Price alone tends not to be the sole driving factor for the shopping behaviors. However, the ability to find good deals did appear to influence shopping decisions, and SNAP participants appear to engage in calculated budgeting to maximize their benefits. The focus groups revealed an important distinction that attendees made between unit price and overall value. In short, there was a general consensus about the perceived value of the purchases: Prices at FMs were seen as reasonable because the quality was perceived to be superior to what one might find at the local grocery store. The tendency for items purchased at FMs to last longer was often invoked as a critical factor with respect to value. In this regard, respondents differentiated between quality and quantity, and commented on how it makes more financial sense to buy certain items at the FM than at the regular store, even when the unit price appears to be higher.

Those who do not shop at FMs generally stress the convenience of completing all shopping under one roof, such as in supermarkets. In addition, nonshoppers were most often unaware that FMs accepted the EBT card. Among those who were aware, the lack of funds available on their EBT card and the perceived social stigma associated with EBT use were the main reasons not to use SNAP benefits at FMs.

The most frequently cited recommendation from focus group attendees was to do a better job informing the community (and especially SNAP participants) about FMs, including what FMs have to offer, the ability to use the EBT card if it is accepted, and any incentive programs that are offered. Multiple mechanisms and venues can be used for advertising, marketing, and community outreach, including direct mailings, billboards, signs on mass transit, schools, and the SNAP office itself. Finally, FMs can be used to disseminate information about healthy eating and nutrition. To draw more members from the community to FMs, especially those receiving SNAP benefits, participants suggested embedding such educational information in fun, family-friendly activities, such as cooking demonstrations and food tastings where farmers have the opportunity to explain the product and how to prepare it.

These findings provide valuable insights that the FNS can use to guide ongoing initiatives to improve access to healthy foods for SNAP participants, particularly the effort to work with FMs and direct marketing farmers to improve participants' access to locally grown produce. SNAP participants value high quality fruits and vegetables, and most recognize the need to eat healthy foods. They tend to believe that FMs offer high quality produce in addition to other advantages not offered by traditional grocery stores. Many are inclined to pay more to purchase high quality

food for themselves and their families perceiving that the value for such quality justifies the cost and often the inconvenience of shopping at a FM.. SNAP participants report that greater awareness that EBT is accepted at FMs combined with financial incentives would encourage many more participants to do so. There is some evidence in this report to suggest that those who develop habits of shopping at FMs are inclined to continue shopping at FMs with or without the benefit of financial incentives.