

***Farmers' Markets in Low-Income Communities in
L.A. County: Assessing Needs, Benefits and
Barriers, with a Focus on the Shift to Electronic
Benefit Transfer Technology for Food Stamp
Recipients***

Anna Berzins
Senior Comprehensive Project

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Table of Contents

	Page
1) Farmers' Markets: Background Information.....	1-4
2) Study Objectives.....	5
3) Benefits of Farmers' Markets:	
• Producers and Consumers.....	6-9
• Communities.....	10-11
• The Environment.....	11-12
4) Food Insecurity in the United States and California.....	13-17
5) Obstacles Faced by Low-Income Shoppers.....	17-20
6) Combating Food Insecurity:	
• Federal Food Stamp Program.....	21-24
• Benefits and Barriers: Food Stamps at Farmers' Markets.....	24-25
• USDA Farmers' Market Nutrition Program Women, Infants and Children (WIC FMNP).....	25-31
7) Electronic Benefits Transfer (EBT):	
• Obstacles to Implementation.....	32-40
• Facilitating the Transition to EBT in California's Low-Income Farmers' Markets.....	40-50
8) Case Studies #1-4:	
• Adams and Vermont Farmers' Market.....	51-54
• Central Avenue, Hollywood, and Hollywood-Sears Markets.....	55-62
9) Survey Methodology.....	63-64

10) Interview Methodology.....	64
11) Survey Results.....	65-70
12) Discussion of the Data.....	71-82
13) Conclusion.....	82-84
14) Recommendations:	
• Increasing Food Security.....	84-85
• Increasing Producer Participation.....	85-86
• Encouraging Consumer Patronage.....	86-87
• Facilitation of the Implementation of EBT.....	87-88
• The Need for Further Research.....	89
15) Sources Consulted.....	90-95
15) Appendices A-G:	
• (A) Producer Survey (English)	
• (B) Producer Survey (Spanish)	
• (C) Informal Interview Questions for Market Managers	
• (D) EBT Promotional Flyer (Sears-Hollywood Market)	
• (E) Guidelines for Successful Low-Income Market Operation	
• (F) Farmers' Markets Participating in EBT in Los Angeles County as Of March 2004	
• (G) California Farmers' Markets Using Scrip and a Central POS device to Accept EBT Cards as of 3/25/04	

Background Information on Farmers' Markets in the United States and California

Over the past few decades the United States has experienced a renaissance of farmers' markets, and the popularity of grower-to-consumer markets is skyrocketing. The United States Department of Agriculture (USDA) reports that a little more than two decades ago there were fewer than 100 farmer's markets operating in the nation, and that the first farmer's market directory published in 1994 listed 1,744 markets. From 1994-2000 there was a 63% increase in the nation's farmers' markets (*Number of Farmers' Markets at Record High 2000*) and more recent data from the USDA shows that a record number of farmers' markets are now operating in the U.S.; the USDA reported there were more than 3,100 markets in operation in 2002. Although farmer's markets are admittedly a small part of the food sector in America they now represent a billion dollar per year industry, and approximately 19,000 farmers sell their produce exclusively at the nation's farmer's markets (*Farmers' Market Facts! 2003*).

This significant rise in the success of farmer's markets in America is a relatively new phenomenon, and historically peoples' interest in farmer's markets has waxed and waned over time. Farmers' markets have been described as one of the world's oldest institutions, and open air markets were common during Roman times (Ashman et. al.1993). Traditional farmer's markets are also deeply rooted in the history of United States, and in the 19th century direct grower-to-consumer markets were how the majority of people obtained their food. Many American cities were built up around these markets, for they provided a central place for people of all classes and incomes to both socialize and purchase food; it has even been recorded that President Thomas Jefferson bought meat, eggs and onions at a farmer's market in 1806 (*Farmers Markets' 1999*).

The practice of farmers selling their own goods to consumers was a major source of income to growers until the second World War (Gottlieb 2001), but farmer's markets rapidly lost

popularity with the new technology of refrigeration and the building of better roads; as a consequence, food could be transported for thousands of miles and still be edible (Abel et.al.1999). The post-war construction of irrigation infrastructure and the new highway system drastically altered the produce industry and ‘destroyed the market for local, seasonal produce’ (Brown et.al. 2001), and these as well as other land-use changes that happened during this era facilitated the deterioration of central business districts, thereby threatening the existence of central city markets. Wholesalers gradually took over many of the farmer’s markets in the United States, and these markets were replaced over time with grocery stores and supermarkets that became the nation’s main source of food (Jablow et.al. 1999).

The situation of farmer’s markets worsened in the 1950s and 1960s as state and nation-wide policies regarding the standardization of produce were implemented, essentially making it impossible for farmers to sell their produce directly to consumers (Gottlieb 2001). It was not until later in the 1960s and 1970s that a renewed interest in farmer’s markets was born along with the organics movement, and California played a major role in the modern revival of farmer’s markets in America. As information regarding the dangers of pesticides and other dangerous growing practices became more widely known, Californians were particularly concerned about food safety. In the mid-1970s farmers and consumers came together to protest regulations that limited grower-to-consumer sales, and this unified effort resulted in creation of the Certified Farmer’s Market Program of the California Department of Food and Agriculture; conventional distribution regulations were thus revised, which made it easier for small farmers to sell their produce locally (Jablow et.al. 1999)

At this point in time an interest in direct marketing was growing not only in California but throughout the nation, and this desire for the USDA to support direct marketing practices

culminated in the passage of the 1976 the Farmer-to-Consumer Direct Marketing Act. This Act was crucial to the proliferation of farmers markets in the United States, for it exemplified a revival of ‘alternative, locally based urban food approaches’ (Gottlieb 2001). California’s governor in 1976, Jerry Brown, also did much to promote the growth and prosperity of farmers’ markets within the state as he strove to make farming more economical for small producers. During his time in office, the California Department of Food and Agriculture began a program to coordinate all direct marketing activities in California. Among other major achievements the program helped to change state regulations that had previously made it illegal for a farmer to sell his or her products or produce at a farmers’ market, thereby resulting in the establishment of more farmers’ markets in California (Ashman et.al.1993).

After the 1976 legislation, farmers’ markets then spread throughout the nation and its urban areas, and by the late 1970s organizations concerned with the issue of fresh food access for low-income communities sought to create markets in areas that would serve middle and low-income consumers (Gottlieb. 2001). In the 1980s in Los Angeles attempts began to be made to establish farmers’ markets in the inner city, and a sum of \$100,000 per year for a 2-3 year span was provided by the California Department of Food and Agriculture in order to start up markets in L.A. (Ashman et.al.1993). The Adams and Vermont Farmers’ Market, one of the four markets examined in this particular study, was one of the markets that was created from that funding source.

Attempts to create and sustain farmer’s markets in areas that served poorer residents at times have proved to be successful, and other times have resulted in failures (Fisher 1999). Although the great successes of certain markets created during this era should point to the fact that farmer’s markets can indeed be a viable option in low-income communities, over the past couple

of decades farmer's markets have significantly shifted toward locations in middle-income communities. The many obstacles that prevent markets in low-income areas from flourishing or even surviving have resulted in a dearth of support for these markets, and this reluctance to support farmer's markets efforts in low-income communities has caused those who are most in need of the many benefits offered by a farmer's market to suffer the consequences of this lack of access.

As the rise of farmer's markets continues in the United States it will be increasingly important that markets in low income neighborhoods and areas gain support, thereby helping to make fresh food access a reality for people of all incomes in this country. Evidently, initiating markets in low-income communities and maintaining their operation is a difficult task; learning how to balance the disparate needs of particular markets, farmers, consumers, and communities will undoubtedly be critical to their success.

By exploring the various obstacles and barriers that typically plague the success of farmer's markets in Los Angeles as well as the immense potential benefits that exist through case studies of four low-income farmer's markets, this study seeks to identify for policymakers why it is crucial to support and sustain these markets. Additionally, this study analyze how farmer's markets can both bolster a stronger sense of community while addressing food access problems for the city of Los Angeles' low-income residents.

Study Objectives

Through background research, surveys of producers and interviews with market managers and other relevant parties, the main objectives of this study are as follows:

- To identify the various barriers and benefits experienced by market managers in charge of market operation of farmers' markets in low-income communities, and also to identify the benefits and barriers faced by producers who want to sell their produce/products at these markets
- To determine the success of the federal Food Stamp Program and Woman Infant and Children Farmers' Market Nutrition Program (WIC FMNP) in four specific farmers' markets in Los Angeles County, and to explore whether the use of these federal nutrition benefits could be increased
- To explore the benefits, barriers, and potential use of the Electronic Benefits Transfer (EBT) technology in farmers' markets
- To propose recommendations that will ideally result in the increased funding and support of farmers' markets in low-income communities in Los Angeles County; ultimately, these new policies can be used as a model for other states that want to bolster farmers' markets in their own low-income communities

Benefits of Farmers' Markets for Producers and Consumers

Farmers' markets offer multiple benefits, including for the producers who sell their products and also for consumers who purchase these goods sold at markets. For consumers, the

advantages of shopping at a farmers' market are most obvious: first and foremost, farmers' markets offer consumers food and produce that is of superior quality and freshness. Survey results have shown that consumers who shop at farmers' markets expect higher quality produce from farmers' markets in comparison to other retail facilities, and that quality and freshness are valued more by the consumer than both convenience and price (Govindasamy et. al. 2002).

Along with quality and freshness, the taste of produce sold at farmers' markets is often cited as major factor for consumers who chose to shop at farmers' markets; once people taste what's available to them at the farmers' market, they are reluctant to go back to the taste they get from produce bought at a supermarket (Corum et.al. 2001). The superior taste of produce sold at farmers' markets can largely be attributed to the fact that it is both in-season and picked fresh; fruits and vegetables that are picked when they are unripe and then left to sit in a grocery store significantly lose their flavor. This difference in flavor is evident to the consumer, and taste test studies have in fact indicated that consumers mostly prefer produce sold at farmers' markets to produce from other sources (Hughes et.al.1995).

Hand-in-hand with freshness and taste is the health and nutrient value of produce sold at farmers' markets. As public awareness about the importance of fresh fruits and vegetables has grown over the past few decades, so has the desire to buy and consume more fresh fruits and vegetables (Atkinson et.al. 1994), and the growth in farmers' markets over the past few decades is fueled by public awareness of the necessity of creating better eating habits (Corum et.al.2001). It is therefore critical that consumers learn that the fresh fruit and vegetables sold at farmers' markets not only look more nutritious than the food that is commonly found at supermarkets, but actually *is* healthier for them. This difference in nutrient value can be attributed to the distance that produce sold in common food retail facilities often travels; the longer a fruit or vegetable is off of the vine

or tree, the more its vitamin content decreases (Eller 2002). Because farmers selling their produce at farmers' markets have the luxury of picking their produce and then selling it within the next day or two in a local venue (Corum et.al 2001; Eller 2002), the nutrient value of their produce is at its peak when it is sold to the consumer. This factor is especially relevant for low-income persons who may suffer from a lack of fresh fruits and vegetables, and thus lack necessary vitamins and minerals.

Variety is another aspect of why consumers choose to patronize farmers' markets. At farmers' markets people are often able to see and sample varieties and products that cannot be found in everyday supermarkets, including ethnic and specialty items (Los Angeles Fresh Food Access Guide 2002). While a common food retailer may only sell one variety of a product, such as apples, direct marketers may sell a wide range of different varieties of apples (Corum et.al.2001). And it is not only the diversity of different types of varieties that makes the produce special, but it is arguably also the natural differences that occur in fruits and vegetables of the same variety that make farmers' market produce a choice for consumers. In the realm of the modern supermarket where all produce is predictably the same size, shape, and color, it is refreshing to shop at farmers' markets where the foods are unadulterated and have 'real personality' (Eller 2002).

Price is always one of the greatest considerations that consumers take into account when making purchasing decisions, and farmers' markets are no exception. The prices at farmers' markets are often described as 'premium' or 'competitive' (Delacruz pers. comm 2004), and are thus usually affordable for persons of all income levels. Price has been shown to be the next most important factor for consumers after freshness and quality, and a survey conducted in 1993 found that farmers' markets provide consumers with lower prices than supermarkets, with 59% of consumers finding prices at farmers' markets to be lower (Ashman et.al.1993). This affordability

of farmers' market produce is due to the fact that farmers who sell their goods are able to set their own prices without having to go through a middleman (such as grocery retailers) who would otherwise take a portion of their profits, thereby forcing the farmers to increase their prices (Los Angeles Fresh Food Access Guide 2002; Ashman et.al.1993).

This ability of farmers to set their own prices and avoid a middleman has been shown to be one of the most significant advantages for farmers who chose to sell their produce directly to consumers at farmers' markets, and surveys have indicated that farmers believe the 'business aspect' is the most important benefit (Lamkin 1996). Due to the current economic plight of many American farmers (especially small, family farmers), selling their produce and products directly to consumers is proving to be a means of survival; today in the United States, growers only make 20 cents out of every dollar spent on food (*Farmers' Markets* 2003). Profits for farmers have decreased as the percentage of the consumers' dollar has increasingly gone toward activities and services such as packaging, retailing, and transportation (Ashman et.al.1993). In the direct marketing activity of selling at a farmers' market, however, the farmer can either eliminate the additional costs of these services or provide them to the consumer himself. Farmers' markets consequently help farmers stay in business by providing them with a space where they can get premium prices for their produce, and therefore a larger cash return; and the profits are immediate, because at markets farmers are paid cash-in-hand (Corum et.al 2001).

One of the most important aspects that both consumers and farmers experience from buying and selling at farmers' markets is in fact intangible: the advantages of human connection. The farmer-consumer bond that is created by direct marketing is said to be the 'heart and soul' (Corum et.al 2001) of farmers' markets, and buying from the people who have a personal commitment to the food they grow helps to facilitate an understanding of the workings of the food

system to the consumer-from the farm to the table (Los Angeles Fresh Food Access Guide 2002). The social atmosphere at farmers' markets creates a nexus between the grower and the consumer, and it has been shown that shoppers have three (Ashman et.al 1993) to seven (Jablow et.al 1999) times as many social interactions in a farmers market as they do at supermarket. In contrast to the 'depersonalized institutions' (Ashman et.al.1993) of supermarkets, farmers' markets celebrate human interaction. Consumers and farmers alike can benefit from conversations about how and where the food was grown, and through this discussion the farmer may even be influenced by the consumer in what he or she chooses to grow and how it is grown (Community Food Security: *Farmers' Markets* 2003).

Benefits of Farmers' Markets for Communities

A successful farmers' market can be extremely valuable to a community, providing a single place in which economic, social, and cultural activities can be effectively integrated. Communities that host farmers' markets are therefore able to reap the many advantages that markets have to offer, as does the environment as a whole.

A successful farmers' market can be economically advantageous to a community. Food dollars that are spent on local fruits and vegetables instead of produce transported or imported

from far away go directly into the hands of the producer, thereby keeping the food dollars in a given region and strengthening local economies (Abel et.al.1999). Cities have been transformed and revitalized with the implementation of farmers' markets, and markets are now viewed as important vehicles to the rejuvenation of declining downtown areas (Corum et.al. 2001; *Farmers' Markets* 2003). Although some falsely believe that farmers' markets may hurt the local economy by taking business away from local retailers, it has in fact been shown that farmers' markets actually stimulate the local economy with the foot traffic generated on market days (Abel et.al. 1999; Ashman et.al. 1993).

Often fun social and educational events are offered at farmers' markets, such as workshops on cooking certain types of foods, thereby helping to create farmers' markets as a place for important community interaction. And although many cities in the United States are rife with racial tension, farmers' markets can be viewed as a non-divisive 'haven', a place where people can become knowledgeable about other cultures through food (Ashman et.al 1993; *Farmers' Markets* 2003). People who may not normally have a reason to interact with their neighbors have the valuable opportunity to forge relationships with one another at their local farmers' markets, exemplifying the idea that markets provide a venue for a diverse group of people of all races, income levels, and ethnic backgrounds to come together with the common goal of purchasing fresh and healthy local produce (Ashman et.al.1993; Corum et.al 2001; *Farmers' Markets* 2003).

Benefits of Farmers' Markets for the Environment

When looking at the larger picture, it is evident that farmers' markets not only have a positive effect on the health of consumers who shop at the markets, but that farmers' markets also can be seen as a means of improving the health of the environment and planet.

Organic vegetables and fruits are quickly growing in popularity in the United States, and

direct marketing is one of the main ways that organic produce is sold to consumers. Loosely defined, organic agricultural practices can be described as the use of chemical-free and ecologically conscious farming methods as opposed to the use of destructive toxic sprays and nitrogen fertilizers (Goldstein 2000). It has been shown that a much higher percentage of organic growers use direct marketing than do conventional growers, and out of total organic sales in the U.S. in 2000, 3% were through direct marketing practices such as farmers' markets (Greene et.al. 2001). And though many farmers who sell at farmers' markets would like to employ organic agricultural practices because they are undeniably safest for the environment, not all farmers selling at farmers' markets can grow organic due to the various costs involved. However, studies have indicated that in general, the majority of farmers who sell their produce at farmers' markets are conscious about the environmental effects of farming (Ashman et.al. 1993). Therefore, the act of eating and purchasing food can be considered an environmental act (Los Angeles Fresh Food Access Guide 2002).

Whereas farmers' markets promote the direct interaction of farmers and consumers through the buying and selling of local and seasonal food, the food system in America conversely is becoming more globalized, and therefore more anonymous. Direct interaction between the consumer and the producer is no longer a necessity, and it is not uncommon for food to be flown across seas or transported across the nation before it is placed in the grocery stores for consumption (Norberg-Hodge et.al. 2002). In addition to these globalized practices hurting local agricultural economies, the energy used to transport this food creates an additional negative environmental impact. It is true that even if the produce that has traveled thousands of miles is organic, there is absolutely nothing ecological about the method of transportation (Daryn 2002). Also, local food typically requires less packaging, processing, and refrigeration, and the marketing

of these foods is highly decentralized: miles the food has traveled are therefore low, as is the distance that people need to travel in order to purchase local food (Norberg-Hodge et.al. 2002). Consequently, shopping at farmers' markets can be viewed as a small step toward counteracting the negative effects of the globalized food industry.

Food Insecurity in the United States and California

Most third-world countries suffer from hunger due to food shortages, yet hunger in the United States is can not be attributed to a lack of food; instead, it is the inequitable allocation of food resources that cause people to go hungry or to experience food insecurity in America (Ashman et.al. 1993). The term 'food security' can be defined in many ways, but is most commonly defined as "all persons having access to culturally acceptable, nutritionally adequate food through non-emergency sources at all times" (*Weaving the Food Web: Community Food Security in California* 2002; Ashman et.al. 1993). More generally, having food security means that a person has, at all times, enough food for an active, healthy life (*USDA Community Food Security Initiative Action Plan*). Three key elements to food security have been outlined by the USDA in it's Community Food Security Initiative Action Plan, including: 1) Physical and

economic access to food by individuals and households; 2) Adequate availability of food; and 3) Full utilization of food: a balanced, adequate diet; safe water; sanitation; education; and health care. Therefore, if a community lacks one or more of these three factors to food security, it is said to be 'food insecure'.

Although there are multiple reasons that contribute to food insecurity, studies have shown that the most common reason for experiencing food insecurity is a lack of financial resources (Ashman et.al 1993; FNS: *Food Stamp Participants Food Security and Nutrient Availability*), and factors that affect the personal income of the poor commonly include job availability, wage rates, and taxes, as well as the cost of non-food items such as heating, housing, and transportation (Ashman et.al. 1993). Unfortunately, after having experienced recent declines in the 1990s, the nation's poverty rate is now rising again, increasing from 11.3 percent in 2000 to 11.7 percent in 2001. These data indicate that 1.3 million more people were poor in 2001 than in 2000, bringing the total number of the nation's poor from 31.6 million up to 32.9 million (US Census Bureau 2003). And because the poverty rate has been increasing in America, the rate of food insecurity has also been on the rise.

If food security can effectively measure the existence of adequate resources for the prevention of hunger, then hunger can be viewed as a negative consequence of food insecurity (Ashman et.al 1993). Millions of people are hungry or suffer from food insecurity in the United States despite the nation's more-than- adequate food supply, and USDA studies have indicated the number of people who live in households that experience hunger or food insecurity is between 31 million (Los Angeles Fresh Food Access Guide 2002) to 36 million (*USDA Community Food Security Initiative Action Plan*). Additionally, the prevalence of food insecurity in America has been increasing over the past few years, and whereas food insecure households were 10.3 percent

of all households in 1995 and 10.2 percent in 1998, in 2001 10.7 percent of all houses were food insecure, rising to 11.1 percent in 2002 (FNS: *Household Food Security in the United States 1995-1998*). Clearly, the immense problem of food security in America is only becoming more severe.

When examining California, it is not readily apparent to most people that the state has a hunger problem; the state is known for leading the nation (and the world) in food production and is ideal for producing food because of its incredible climate, land, and water resources. Regardless of these facts the number of Californians experiencing food insecurity is great, and ‘Record numbers of individuals and families are experiencing hunger’ (*Weaving the Food Web: Community Food Security in California* 2002). Los Angeles County is an area in California that is especially hard-hit with hunger, and in 2002 more than 2.5 million of the county’s residents experienced hunger (Lopez et.al.2004); it is estimated that 777,000 low-income adults plus 1,734,000 other persons living in these households were hungry or food insecure, causing the total number of people who were ‘touched’ by hunger and food insecurity in Los Angeles County to be 2,511,000 (*Hunger Touches 2,511,000 People in Los Angeles County* 2003).

And while high levels of hunger and food insecurity have an impact on all of the nation’s citizens as well as California’s residents, some sub-groups of the population are affected disproportionately. These groups include but are not necessarily limited to: the working poor; senior citizens; children living in poverty; the homeless; single-parent households; residents of low-income communities, including rural areas; and immigrants affected by welfare reform (*USDA Community Food Security Initiative Action Plan*). Food insecurity and hunger have an especially negative impact upon pregnant women, children, and the elderly, because these sub-groups are more susceptible to the problems that are linked to not having an adequate supply of food (Los Angeles Fresh Food Access Guide 2002).

There are many serious diet and health-related consequences that result from a lack of availability of healthy foods, and poor minorities are also disproportionately impacted due to the fact that they make up the primary demographic in inner cities. One of the most severe outcomes of poor nutrition is an increased incidence of chronic disease, and Latinos and African-Americans have been shown to be most vulnerable to suffer from these illnesses; studies have indicated that 35-60% of all cancers in the United States are diet-related (Gottlieb et.al. 1996). Other relevant statistics include the fact that childhood anemia, a deficiency due to poor nutrition, is found in 20-33% of all black children in America, and that Latinos have three times the likelihood of developing diabetes as whites. Obesity is also another major health concern in the United States, and although obesity is a problem that is growing among all groups, the poor and lower-income minorities are at a much higher risk (Corum et.al. 2001). It has been shown that 58% of African Americans and 54% of Latinos are overweight, as opposed to 44% of whites (Gottlieb et.al. 1996). In Los Angeles, as many as 25% of children are considered to be overweight or obese (Los Angeles Fresh Food Access Guide 2002). And although obesity is a problem that is growing among all groups, the poor and lower-income minorities are at a much higher risk. These various statistics illustrate that food insecurity has longer-lasting and more devastating consequences than mere hunger, and that peoples' eating habits are directly related to their level of health. Because 2/3 of Californians don't eat the recommended 5 servings of fruit and vegetables per day (and one in three eat 2 servings or fewer), the health of California's people will continue to suffer until residents are both aware of the impact that their eating habits has on their health and have increased access to these necessary fresh fruits and vegetables.

In addition to health consequences that result in malnutrition, there are many other negative impacts that result from food insecurity. Children that are underfed have been shown to

have a lower potential for learning and performance in school, and also have a higher tendency to suffer from behavioral problems such as hyperactivity and aggression (*Weaving the Food Web: Community Food Security in California* 2002). The implications of children suffering from these physical and mental problems are serious, and bode ill for the future of our communities.

Because direct-to-consumer outlets such as farmers' markets can provide people with nutritious produce as well as a range of other benefits and opportunities, markets have the potential to play a critical role in increasing levels of community food security. Although tackling the problem of food insecurity in California and America as a whole is irrefutably a daunting task, helping to localize food production and consumption through farmers' markets can be viewed as a movement toward ultimately building stronger community, state, and national food security.

Obstacles Faced by Low-Income Individuals in Shopping for Healthy Food

In addition to basic food insecurity that is mainly derived from a lack of basic financial resources, it has been shown that low-income persons in the United States often face a number of barriers that hinder them from obtaining a healthy diet. Many of these obstacles to eating healthily are closely connected, leaving poorer Americans trapped in a cycle of not having an adequate supply of nutritious food to eat. Additionally, many of these factors that typically prevent low-income persons from obtaining healthy food also present challenges to their patronage at farmers' markets. Therefore, the underscoring of these issues helps to elucidate what needs to be done in order to help facilitate low-income persons' access to fresh food and to a healthier diet.

Low-income persons have been shown to be less likely to purchase fresh fruits and vegetables than middle-to-upper income persons, and cost is a barrier that is commonly cited by

low-income women as an obstacle to increased produce consumption. Some of the other major risks associated with buying fresh food for poorer people also typically include factors such as not being in the habit of eating produce, spoilage, cost, time, and a lack of skills needed to prepare food (Fisher 1999). These barriers result in a lower percentage of fresh food consumption among low-income individuals, and also present major difficulties to encouraging low-income consumers to shop at farmers' markets.

The challenge of balancing low-income consumers' need for an affordable product with the producers' need to make a profit on his or her sales is clearly the greatest challenge faced by farmers' markets in low-income areas (Corum et.al.2001). Although there are multiple factors as to why producers choose to sell their produce or products in a low-income market, it is evident that if the producer cannot generate a profit in a certain market, they will have little (if any) incentive to sell at that particular venue. Likewise, if a low-income consumer does not feel that he or she can afford to shop at a farmers' market or if the produce and products are not 'worth the money spent', the consumer will likely make the decision to shop at a food retailer where the prices are lower (even if the quality of produce is not as high as it would be at a farmers' market). Consequently, farmers' markets that cater to mixed or low-income individuals typically need to be subsidized in order to be a success for both producers and consumers. The utilization of federal food nutrition benefits at farmers' markets (described in detail in the following sections) is perhaps the best way to ensure that both the low-income consumer and the producer selling in a low-income community will benefit from the transaction.

Farmers' markets can also be useful in addressing the problem of what has been shown to be consumers' increased reliability on ready-made food and restaurants and a consequent deterioration in cooking and food preparation skills (Fisher 1999). A lack of time for cooking is

something that impacts individuals of all income levels, yet in poorer households where both partners are forced to work to earn their livelihood, it is a greater challenge to find the resources (namely the time and money) to cook a meal from scratch. Food nutrition and cooking classes offered at farmers' market are therefore potential ways for consumers to be exposed to the products available for purchase as well as to learn basic cooking skills needed in order to feel more confident about their ability to prepare fresh foods.

Even if low-income persons are not deterred from purchasing fresh food because of the aforementioned barriers (such as not being in the habit of consuming produce and lacking a knowledge of food preparation), the food that they desire to buy may simply not be accessible to them for purchase. One of the most highlighted issues regarding food access within inner-cities is the 'flight' of supermarkets from poorer areas; as supermarkets have increasingly abandoned cities and have chosen not to invest in low-income areas, the impact upon low-income residents has been devastating. Studies have also proven that when there are fewer supermarkets in an area the competition declines, and therefore the few supermarkets remaining in a particular low-income area are able to demand higher prices for a lower quality of product or produce (Shaffer 2002). For example, a 1997 study by the USDA's Economic Research Service determined that supermarket prices were around 10 percent lower on average, nationwide, compared to grocery, grocery/gas, and convenience stores located in rural and central city areas where a higher proportion of low-income residents live (Kantor 2001). And because people often have no other choice but to consume what is made readily available to them and healthy food is often made unaffordable, poorer individuals who do not have the monetary resources to purchase fresh fruits and vegetables are forced to opt for cheaper, less nutritious food options. Consumers in poorer areas therefore are rendered without a source of fresh food at an affordable price, and may

therefore be forced to travel outside of their immediate community in search of nutritious food. However, it is also frequently the case that a significant number of low-income consumers are without cars and may not have the means to travel longer distances for the purpose of food shopping.

Transportation issues typically plague the poor in all areas of the United States, and the problem is particularly acute in the city of Los Angeles. A previous study showed that in Los Angeles farmers' markets 20% of lower-income residents did not have a car (Ashman et.al.1993), and a lack of private transportation coupled with Los Angeles' notoriously inadequate public transportation system compounds the issue of the poor obtaining access to fresh food. In addition to the creation of more farmers' markets in low-income communities that are within walking distance of neighborhood residents, it would be most beneficial to low-income persons to increase the accessibility of farmers' markets that are currently in existence in the Los Angeles county area. Previous studies have recommended the creation of transit programs to help shoppers without transportation farmers' markets; such a program can also serve to increase a particular market's trade area by reaching a larger group of consumers (Fisher 1999). Additionally, it has been shown that because the poor are often transit dependent and have to work long hours, the highly limited days and hours of farmers' markets also present significant barriers for low-income shoppers (Sharp, pers. comm. 2004). Therefore, it has been suggested that farmers' markets catering to lower income communities adjust their hours of operation in order to accommodate those who work, such as opening the market during the weekends or in the evenings on the weekdays (Fisher 1999).

Increasing low-income individuals' fresh food intake is a significant challenge, for the common barriers that prevent low-income consumers from eating nutrient-rich fruits and

vegetables range from food preference to a basic inability of accessing the foods needed for a healthy diet. Bolstering the patronage of these types of consumers at farmers' markets can help to address and overcome these barriers, ultimately resulting in the improvement of the diets of a greater number of low-income individuals.

Combating Food Insecurity: The Federal Food Stamp Program

Although many criticize the Federal government for not doing enough to combat the severe problem of food insecurity in the United States, federally funded programs do exist with the sole purpose of providing nutrition assistance to low-income residents. The most wide-reaching and well known of these federal programs is the Food Stamp Program.

The Food Stamp Program was an idea born more than seventy years ago in the 1930s, and over the years the program has evolved greatly. The current program structure was adopted in 1977, with the goal of 'alleviating hunger and malnutrition by permitting low-income households to obtain a more nutritious diet through normal channels of trade'. The Food Stamp Program essentially provides monthly coupons that can be used to buy food for eligible low-income families, and the federal government pays 100% of food stamp benefits; in the Fiscal Year 2002, over \$18.2 billion was allocated in food stamp benefits to 19 million individuals (FRAC: *Food Stamp Program: Basic Facts and Data*).

In terms of basic statistics, it is shown that nearly 90% of food stamp households have income below the poverty line, and the average gross income of food stamp households is \$633 per month (FRAC: *Characteristics of Food Stamp Households*). More than half of all food stamp recipients are children, and over 79% of benefits go to households with children. Additionally, 27% of food stamp households contain at least one disabled person, and 1.7 million seniors (9%

of all total recipients) receive food stamp benefits. Therefore, over 90% of benefits go to households with either a child, senior, or disabled individual (FRAC: *Food Stamp Program Frequently Asked Questions*).

The Food Stamp Program plays a critical role in helping to improve the health and nutrition of America's low-income persons (USDA: *Nutrition Program Facts: Food Stamp Nutrition Education*), and receiving food stamps reportedly increases the nutritional value of a low-income household's home supplies by 20-40% (FRAC: *Food Stamp Program: Basic Facts and Data*). The Food Stamp Program typically provides an average of \$75 per month per person, and these benefits can be used at venues such as grocery stores and farmers' markets in order to purchase food. There are some limitations to what can be bought with food stamps (for instance, the purchase of alcohol is prohibited (FRAC:*Food Stamp Program Frequently Asked Questions*), but for the most part people are allowed to select their own food for consumption. Giving low-income shoppers the ability to choose what they want to eat is unarguably an important freedom, and although ideally these food stamp recipients would choose foods that are fresh and nutrient-rich, this is not always the case. It has been argued that the majority of food stamps are in fact spent on non-nutritious and non-staple foods at retail outlets such as local 7/11s and food marts in gas stations (Corum et.al. 2001), which underscores the necessity of proper nutrition education for food stamp participants and improving access.

States have the option of providing nutrition education to food stamp recipients as a part of their Food Stamp Program, and this education is aimed at helping food stamp recipients to make healthy food and lifestyle choices (USDA: *Nutrition Program Facts: Food Stamp Nutrition Education*). California is in fact a state that provides nutrition education to its low-income residents, and this education is critically important; even a basic knowledge of nutrition has

shown to increase nutrient intake considerably (Butler 1996).

Although the Federal government's website maintains that the Food Stamp Program is the single federal benefit program available nationwide to all who need it and meet eligibility standards (FRAC: *Food Stamp Program Frequently Asked Questions*), it is argued that there are many people who are actually eligible for food stamps than apply for and use the service; some studies have found that in certain areas in the United States only 50% of those eligible actually apply for and receive food stamps (Butler 1996). Additionally, from 1996 to 1999 participation in the U.S. Department of Agriculture's food-stamp program dropped by nearly 30%; although a portion of this decline can be attributed to the improvement of the economy during this period, many of those who no longer receive food stamps are former welfare recipients who are employed in low-paying jobs that make it hard for low-income families to cover necessities, including food (*Fewer food stamps for poor Americans* 1999). These statistics are worrisome, for they indicate that the Food Stamp Program may not be providing benefits to all people who are eligible and needing assistance in the nation.

The inadequate participation in the Food Stamp Program nationally is also reflected in the declining participation rate in California; in Los Angeles County, participation dropped by a full 37% from 1995-2003, and some USDA estimates show that the program may only be reaching half of all people who may be eligible in Los Angeles County (Lopez et.al. 2004). One of the main reasons attributed to the plummeting participation in Los Angeles County is that although most legal immigrants and many working poor households are considered eligible to be food stamp participants, there is a rampant misconception that they are not able to receive nutrition benefits. Therefore, people who could potentially receive the benefits that food stamps have to offer then suffer the consequences. (Los Angeles Fresh Food Access Guide 2002).

Evidently, the Federal government needs to work more diligently at upholding its objective of increasing the level of food security in America. The United States Department of Agriculture (USDA)'s Food and Nutrition Service (FNS) lists the intervention strategies to increase fruit and vegetable consumption among low-income groups as one of its top areas to focus on (USDA: *Nutrition Program Facts: Food Stamp Nutrition Education*), and therefore the Federal government's continual and increased support of programs such as the use of food stamps at farmers' markets is a way in which the nation can move toward effectively achieving this goal.

Benefits and Barriers: Food Stamps and Farmers Markets

Although farmers' markets currently account for a relatively small portion of total food purchases of low-income households and only 0.02 percent of food stamps are reportedly redeemed at farmers' markets nationwide in 2001 (Kantor 2001), the amount of food stamp dollars spent at farmers' markets is a significant number; it is estimated that food stamp purchases at farmers' markets around the United States ranges from \$75 million to \$100 million annually (Corum et.al. 2001). Even though this dollar amount seems small in relation to the billions of dollars that Americans spend on food each year, food stamp purchases at farmers' markets are especially valuable because of their other positive effects.

There are no significant barriers that have might discourage farmers' markets that want to start accepting food stamps, with one exception: it may take time for the processing of the food stamps collected by the farmers (Corum et.al. 2001). This factor might mean that the farmer loses the benefit of having cash-in-hand at the end of the day, a key advantage of selling at a farmers' market. However, the many opportunities that potentially exist for farmers' markets that are able to accept food stamps arguably outweigh this factor.

Through the assistance of the USDA the application process for farmers' markets to start accepting food stamps is not complicated, and many farmers' markets in the United States have already integrated food stamps into their markets because the benefits of being able to accept food stamps extend to consumers as well as farmers. The most obvious benefit of food stamps in farmers' markets is the ability of low-income residents to purchase fresh and healthy fruits and vegetables that they might otherwise not have access to or be able to afford (Sharp, pers.comm. 2004). Farmers are eager to accept food stamps because they can sell their products to consumers of all income levels, thereby expanding their overall customer base and hopefully increasing their sales. Additionally, the acceptance of the food stamp nutrition benefits can help a market become mainstream within a community and a permanent rather than niche food provider for all residents.

USDA's Farmers' Market Nutrition Program: A Focus on the Woman, Infant, and Children Program (WIC FMNP)

Although food stamps are hailed as the most important federal program that is working to combat hunger and food insecurity in the United States, the innumerable food-related problems are so severe in this country that it has been necessary for the Federal government to supplement the Food Stamp Program with other hunger-fighting programs. The U.S. Congress has developed both the Woman, Infant and Children (WIC) Farmers' Market Program, and, more recently, the Senior Farmers' Market Nutrition Pilot Program (SFMNPP). Both of these programs are funded by the USDA, and were established in order to encourage low-income people to consume more fruits and vegetables (*The Use of Farmers' Market Nutrition Programs in the Mid-Atlantic* 2004) as well as seek to increase awareness and use of farmers' markets by expanding the customer base

(Farmers' Market Nutrition Programs (FMNP); The Use of Farmers' Market Nutrition Programs in the Mid-Atlantic 2004). Although the two programs are similar in that both provide recipients with coupons that can be exchanged for fresh produce at authorized farmers' markets, they are distinct programs and thus managed separately. This specific study will focus solely on the use of WIC coupons at farmers' markets; therefore, only a brief overview of the SFMNPP program as a part of the greater Farmers' Market Nutrition Program is provided.

The SFMNPP is a relatively new pilot program that was started in 2001, and is targeted toward eligible individuals who are at least 60 years old and who have household incomes of not more than 185% of the federal income (FNS: *Senior Farmers' Market Nutrition Program; The Use of Farmers' Market Nutrition Programs in the Mid-Atlantic 2004*). Currently 35 states operate a SFMNP, and because the program is focused on providing fresh food to seniors it also cooperates with support services that assist elderly persons, such as transportation providers, delivery services, and senior centers (*Farmers' Market Nutrition Programs (FMNP)*). The program has been widely successful, and has grown from receiving \$10 million from the federal government in 2002 in order to serve approximately 370,000 seniors (*Farmers' Market Nutrition Programs (FMNP)*) to Congress appropriating 15 million for the program for 2003 (FNS: *Senior Farmers' Market Nutrition Program*).

The SFMNP coupons have proved to be very popular in California, and even though the state of California in Fiscal Year 2003 was awarded a SFMNP grant of \$791,800 for its low-income seniors (FNS: *FNS Announces FY 2003 Senior Farmers' Market Nutrition Program*), the supply has not been able to keep up with demand; over the past couple of years, the resources available cannot fill the need (Schnitt 2002 (a)). It is also notable that spending per SFMNP recipients is typically higher than those receiving WIC FMNP benefits. Some attribute this

greater level of SFMNP participation to factors such as seniors being more likely to care about the nutritional value of fruits and vegetables, being more knowledgeable about cooking/preparing produce, and thinking of market days as a meaningful social event (*The Use of Farmers' Market Nutrition Programs in the Mid-Atlantic* 2004). It is important to examine these factors, for pinpointing the reasons of the SFMNP's success can help to ultimately strengthen the WIC FMNP.

The WIC program is a USDA nutrition program that seeks to help fight hunger in America by providing targeted food vouchers and nutrition education for pregnant mothers, new mothers, and young children less than 5 years of age. Some of the main services that WIC provides include vouchers for nutritious foods (such as milk, cheese, baby food, and peanut butter), information regarding nutrition and breastfeeding, assistance in finding low or no-cost health care, and (since the creation of the WIC Farmers' Market Nutrition Program) summer vouchers for farmers' markets fruits and vegetables (Los Angeles Fresh Food Access Guide 2002; Schumacher et.al.1992).

The Farmers' Market Nutrition Program was an idea born in Massachusetts in 1986 (Schumacher et.al.1992), and had expanded as a national demonstration project to ten states by 1989 (Ashman et.al. 1993). In 1992 the WIC Farmers' Market Nutrition Program was established as a permanent program, and was launched as a component of the USDA's WIC program in an increased effort to enhance the diets of low-income mothers and young children by providing WIC recipients with additional coupons for fruits and vegetables at farmers' markets (*The Use of Farmers' Market Nutrition Programs in the Mid-Atlantic* 2004); therefore, anyone who meets the eligibility requirements for WIC coupons is also eligible to receive WIC FMNP nutritional benefits. The federal food benefit level is typically between \$10-\$20 annually, and states issue

these benefits in either redeemable coupons or cashable checks in units from \$1 to \$5. State agencies also have the discretion of supplementing the annual level with matching funds (FNS: *WIC Farmers' Market Nutrition Program; The Use of Farmers' Market Nutrition Programs in the Mid-Atlantic 2004*).

A variety of fresh, nutritious, unprocessed and locally grown produce and herbs can be purchased with FMNP coupons, giving the consumer the freedom to shop for the products and produce they want to purchase. However, just as there are certain limitations as to what can be purchased with Food Stamps, each state that has an authorized WIC FMNP is responsible for defining which foods qualify under the basic definitions that are provided by the USDA (*The Use of Farmers' Market Nutrition Programs in the Mid-Atlantic 2004*). For example, honey and dried fruit (both items that are typically found at farmers' markets) cannot be purchased with WIC FMNP coupons, and yet plants that will ultimately flower and produce food are accepted as a WIC FMNP purchase.

In terms of operation, the FMNP is administered through a Federal/State partnership in which the USDA's Food and Nutrition Service (FNS) provides cash grants to state agencies for the WIC FMNP program (FNS: *WIC Farmers' Market Nutrition Program; The Use of Farmers' Market Nutrition Programs in the Mid-Atlantic 2004*). States are required to provide 30% of the funds for the program from either state or private monies, and the federal government provides the additional 70% (Ashman et.al.1993). Importantly, each state can choose to allocate as much as 2% of its funding to the promotion and/or development of farmers' markets in low-income or remote locations (*The Use of Farmers' Market Nutrition Programs in the Mid-Atlantic 2004*).

State agencies are responsible for the establishment, administration, and support of the FMNP, and every year the agency leading the WIC FMNP in each state must submit a master

plan to be approved by the USDA's Food and Nutrition Service. This WIC FMNP plan describes the manner in which the state will implement, operate and administer the program (including the training of farmers and market managers and the plans for nutrition outreach and education), and the plan also serves to define exactly which farmers' markets are authorized to accept WIC coupons, how farmers will be authorized, and exactly what portion of the WIC population is to be targeted (FNS: *WIC Farmers' Market Nutrition Program; The Use of Farmers' Market Nutrition Programs in the Mid-Atlantic* 2004).

The WIC FMNP has spread quickly across the nation over its 12 year history (since 1994), and the money allocated for the program as well as the number of participants has increased significantly since its inception. In Fiscal Year 1993, 22 states were participating in the program (California was not yet participating in the program at this point in time), and \$3 million was appropriated for the program nationwide (Ashman et.al. 1993). The numbers have since climbed significantly: in 1994 \$8 million was authorized for the program, and in 2003 Congress provided a total of \$25 million for the 44 states that currently authorize WIC FMNPs.

The increase in funding is encouraging, for it indicates that more needy women, infants, and children are receiving better nutrition assistance. Prior to the implementation of the WIC FMNP, pregnant women and young children were unable to receive fresh fruits and vegetables with their nutrition benefits; now the number of WIC recipients who are able to reap the needed nutritional benefits is substantial, and in fiscal year 2001 more than 2 million recipients received WIC benefits at farmers' markets nationwide (*Q & A: Iowa Farmers' Market Nutrition Program* 2003).

Farmers also benefit from the financial support that WIC FMNP provides, and acceptance of WIC FMNP coupons has been shown to increase profitability of marginal farmers' markets in

low-income neighborhoods (Ashman et.al 1993). As a result of Congress providing a higher level of funding for the WIC FMNP, data from 2002 indicate that 13, 176 farmers at 1,911 farmers' markets throughout the nation were authorized to accept WIC coupons, resulting in more than \$20.8 million in total revenue for farmers (*The Use of Farmers' Market Nutrition Programs in the Mid-Atlantic* 2004).

The monetary and food nutrition benefits that the WIC FMNP has to offer farmers and recipients is a critical aspect of the program, but these tangible advantages are not the only aim of the USDA. Whereas the federally funded Food Stamp Program gives states the choice whether or not to provide nutrition education to food stamp recipients, the WIC FMNP aims to focus its energies equally on food supplementation and the education of coupon recipients on the practice of healthier eating habits. For example, integral parts of the WIC FMNP program include nutritional counseling and training in food preparation (*The Use of Farmers' Market Nutrition Programs in the Mid-Atlantic* 2004).

The WIC FMNP has proven to have a positive impact for all parties involved in the program, and therefore the most common complaint of farmers, consumers, and food activists is that the nutritional benefits of the WIC FMNP are only offered during the so-called 'summer months'. Whereas the standard WIC program benefits are available to recipients year-round, Federal regulations dictate that the acceptance of WIC FMNP benefits are limited to months when produce is most readily available. As a result of this regulation, farmers that are authorized to accept WIC coupons suffer from inconsistent sales, grossing higher revenues during the authorized WIC FMNP months and then experiencing a decline in profits during the months when the acceptance of WIC FMNP benefits is prohibited. It is unfortunate that this national regulation has the impact of making fresh produce available for only a portion of the year, for in areas like

Southern California farmers are able to produce seasonal vegetables and fruit year-round.

Funding and support for the WIC Farmers' Market Nutrition Program is an especially relevant topic today, due to the fact that President George W. Bush's current budget proposal seeks to slash the WIC FMNP by a full 26%. This proposal would reduce current funding from \$27 million to \$20 million nationwide, and the effects on the farmers who accept WIC coupons as well as the low-income, pregnant women, infants and children who depend on WIC coupons for their nutritional benefits would be potentially devastating. By proposing this cut, according to the New York City Coalition Against Hunger, the President has irrefutably "missed an opportunity to give substance to his calls for compassion by putting real money behind the fight to end childhood hunger" (Berg 2004). If Congress does not reject such a severe cut to the WIC FMNP, the level of food insecurity among current and eligible WIC recipients will be likely to increase a substantial amount in the near future.

The Transition from Paper to Electronic: Electronic Benefits Transfer (EBT) Technology

In an era of advancing technology the redemption of paper nutritional benefits is becoming obsolete, and the Electronic Benefits Transfer (EBT) system is now the predominant method for redeeming food stamp programs across the nation. EBT is defined by the California Health and Human Services Agency as the "automation of food stamp and cash welfare delivery, redemption,

and reconciliation”, and more generally is an electronic system that allows a person receiving Federal nutritional benefits to authorize a transfer of their government benefits from a Federal account into a retailer account to pay for products purchased (FNS: *Applicants and Recipients: Frequently Asked Questions About EBT*). Recipients use a magnetic stripe card that is similar to a commercial ATM, debit, or credit card in order to access their food stamp benefits for the purchase of food at authorized retail outlet.

The application process for obtaining an EBT card is no different than the usual application process for receiving federal nutrition benefits, and after eligibility and the level of benefits has been determined an account is established in the participant’s name. A plastic card is then issued to the individual along with a personal identification number (PIN) in order to access the account, and food stamp benefits are then electronically deposited in the recipient’s account each month. With this new system, neither money nor food stamps ever changes hands between the consumer and the retailer (FNS: *Applicants and Recipients: Frequently Asked Questions About EBT*).

The first demonstration project of EBT was started 20 years ago in 1984, and the system is now expected to be implemented nationwide by September 2004. The number of recipients that EBT has reached is great, and as of August 2003 more than 95% of Food Stamps were being issued through EBT to approximately 8.4 million households, resulting in redemption of 1.7 billion in food stamp benefits every month of that year. Today the Food Stamp Program is almost entirely paperless, and 19 out of every 20 food stamp dollars are now issued and redeemed electronically (*Food Stamp Electronic Benefit Transfer Systems: A Report to Congress 2003*).

As EBT has replaced traditional paper food stamps at food retail outlets, the electronic food benefits system has also begun to be implemented in farmers’ markets nationwide, thereby marrying “new technology with ancient commerce” (Pollock 2004). While some believe that there

are substantial benefits to making this electronic transition, numerous studies also indicate that there are a great number of drawbacks hindering the implementation of EBT within farmers' markets. Because California has been one of the last states to make the transition from food stamps to EBT at farmers' markets as well as typical food retailers (*Food Stamp Electronic Benefit Transfer Systems: A Report to Congress* 2003), the state therefore has the advantage of examining other states' transition processes in order to help ensure the ease of its own.

Initially, EBT was mandated by the Federal government as a means of providing cost savings through a reduction of the printing and handling costs of paper food stamps (Fisher 1999; Fisher; Sender 1998). Faster processing can potentially be provided with electronic technology, and retailers also can reduce labor costs by eliminating the need for the bundling up and the counting of food stamps (Taneja 1998). Additionally, the idea that fraudulent retail behavior can be reduced with the implementation of EBT is a major benefit of the system, due to the fact that data from EBT provides a trail of transactions that could not before be determined with the use of paper food stamps (Hammonds 1999).

Another important advantage to the recipient of EBT, according to Matt Sharp of the California Food Policy Advocates, is that 'replacing the coupons with a plastic card will significantly reduce the stigma experienced by participants.' Because the EBT cards look and work just like other common forms of electronic payment, such as credit and debit cards, it will not be (visibly) apparent that the recipient is using Federal nutrition benefits when they swipe their card in a grocery store or in a farmers' market. Helping to reduce or erase the social stigma experience by food stamp recipients could even result in an increased number of individuals applying to receive these important nutrition benefits.

Aside from these advantages of converting to EBT, there are many who feel that the

electronic system's flaws and problems more than outweigh its benefits: especially when the electronic system is applied to farmers' markets. In grocery stores and other retail outlets that have the necessary infrastructure, the conversion to EBT may be implemented much more easily than in a farmers' market. The most common concern regarding the viability of EBT implementation in farmers' markets is that these markets typically operate in areas where the power and land-line telephone access required for EBT redemptions is not readily available (*USDA Community Food Security Initiative Action Plan*). In California as well as around the country people have therefore been unclear about whether or not those who receive food stamps will be able to make produce purchases at farmers' markets that have no phone lines (Pollock 2004).

Andy Fisher of the Community Food Security Coalition, the author of Hot Peppers and Parking Lot Peaches, a report for the University of California Sustainable Agriculture and Education Program (1999), casts the transformation of food stamps to a card-based system in a negative light. Among other disadvantages of the system, Fisher maintains that the adoption of EBT in the nation's farmers' markets will in fact threaten the ability of low-income consumers and food stamp recipients to shop at farmers' markets, and will additionally cause 'logistical nightmares' to ensue.

One reason that food stamp recipients may be less likely to utilize the new technology is the issue of inconvenience. A study that operated a test site for the implementation of EBT in a low-income neighborhood in Washington, D.C. describes the inconvenience experienced by the customers; after they had selected their produce, customers then were required to ask for assistance with EBT. They then were required to cross the street, select the amount they wanted to withdraw from their nutritional benefits account, receive a paper voucher for that amount, and then give the

voucher to the vendor (*Improving and Facilitating a Farmers' Market in a Low-Income Urban Neighborhood: A Washington, DC Case Study* 2002). Clearly, walking back and forth between each transaction was an inconvenience for consumers, and such inconveniences may be particularly burdensome for elderly consumers, consumers with handicaps, or consumers with children. This example underscores the great importance of simplifying the EBT transaction process for the consumer so that he or she will continue to shop at farmers' markets.

It has also been indicated by both farmers' market operators and vendors that the implementation of EBT has been detrimental to sales, and the drastic decline in food stamp redemption at farmers' markets between 1994 and 1998 from \$6.4 million to \$3.8 million has also been linked to the time period when States began implementing EBT for food stamps (*USDA Community Food Security Initiative Action Plan*). Studies have also been conducted in order to examine the validity of the claim that the transition to EBT in farmers' markets has a negative impact on sales. In a study that was conducted in Hawaii in 1999 that sought to test an alternative to the conventional implementation of EBT, it was shown that following the EBT rollout in the Hilo Market in June of 1998, the average monthly amount of food stamp redemptions at the market fell 98%, from \$13,000 to \$233 (Offerman 1999).

Likewise, as California has now begun its transition from paper food stamps to EBT, some farmers have experienced a negative impact in their sales. As of March 2004 around 50 of the wireless machines had been provided free of cost to individual authorized vendors or certified vendors in the state, and in Fresno one farmer who does not yet have access to the technology has experienced a sales loss of \$600-\$1000 per week as a result of the paperless system (Pollock 2004). And just as an increase in food stamp dollars being spent at farmers' markets indicates that both farmers and consumers are benefiting from the exchange, so a major decline in sales points to

the fact that both parties are suffering the negative consequences; food stamp recipients are purchasing and consuming less nutritious, local produce, and farmers are seeing a reduction in revenues and profits.

Carolyn Thompkins, a Benefit Access Coordinator in Los Angeles County who is closely involved with the state's implementation of EBT, discussed many of the logistics, problems, and benefits of implementing the paperless system in California's farmers' markets. When questioned on why California was the last state to have implemented EBT, Thompkins responded that it was the state's choice to be last, and that this was in fact going to work toward California's advantage. Because all other states have already 'perfected the system' of EBT, Thompkins echoed the idea that California can therefore learn what exactly needs to be done in order to make the transition process as easy as possible. And, she continued, the state has thus far done an 'excellent job of getting ready for the system'.

Thompkins explained that because the State feels that farmers' markets are an essential part of Californians' food stamp recipients' business, it was important that the markets not be left out of the process of converting paper nutritional benefits to EBT. Wireless EBT has been the technological option that has been promoted for use in Los Angeles County, and there are currently 12-13 wireless systems within the county's farmers' markets. Previous reports have indicated that the cost of equipping markets with wireless equipment is substantial (Fisher 1999), and Thompkins said that although she didn't know what the price of implementation had cost California, she explained that the state is responsible for paying a portion of the cost and the county is also charged based on its total caseload. The price of EBT machinery has decreased considerably since its invention, and each piece of wireless equipment now costs around \$50, as opposed to devices in the early 90s that were around \$800.

When asked the greatest barriers or problems that producers, consumers, and market managers face associated with the implementation of EBT, Thompkins answered that the transition process for market managers is a 'big deal'. One of the major difficulties associated with wireless EBT is that the transaction necessarily has to work in conjunction with the creation of a scrip system, and it is the market managers who face the responsibilities of creating the scrip as well as the costs of production. Because markets that utilize the wireless system only have a single EBT device, a token, coupon, or other voucher must be produced so that the consumer can make an exchange with the producer in order to make food purchases. Additionally, markets that utilize scrip must have someone who is responsible for swiping each recipient's card and distributing the scrip, which means extra time, labor, and cost for the market.

Thompkins also discussed the hassle of paperwork that is involved in the initial implementation of EBT as a hindrance for market managers. The first step for a farmers' market that wants to integrate EBT is to complete a 3-step implementation process that Thompkins labeled as being 'cumbersome'. Two documents are initially sent to market managers, including a Proposal for EBT Food Stamps and the California EBT Farmers' Market Scrip Guidelines. Market managers then have to create a scrip system and send it to Sacramento for approval, and also are required to fill out more forms for the State and for the wireless device vendor. After the decision has been made whether or not the market has been authorized for EBT, within 5-7 days the wireless device will be shipped out to the market. The city will then call market managers for a training session on utilizing EBT technology, either over the phone or on-site.

Another major hindrance for market managers is the necessity of advertising and promoting the use of EBT to both their market's farmers and customers; if the producers and consumers don't know about the system, they will be unlikely to utilize EBT. Thompkins cited the

Adams and Vermont low-income market as an example of a market that isn't doing a sufficient job in promoting the electronic technology by explaining that the market doesn't have posters that advertise EBT, and the wireless device itself isn't visible to consumers who shop at the market. The primary reason that markets like Adams and Vermont are not yet using EBT, Thompkins believes, is simply because they are not yet in the habit of using the new system for food stamp recipients. Thompkins concluded by saying that if Los Angeles County were to engage in more marketing and outreach activities regarding EBT within its communities, EBT sales would likely increase as a result.

Thompkins felt that individual farmers would be able to undergo the change smoothly, for acceptance of the scrip is just another form of currency for them that they can cash in at the end of the market day. The only minor challenge that they could face is adjusting some of their prices slightly, due to the fact that scrip only comes in increments of either \$1 or .50 cents; for example, a producer who typically sells his oranges for \$2.25 per lb would have to sell for either \$2.50 or \$2.00, because change cannot be given when using scrip.

For consumers, Thompkins believes that the major barrier to utilizing the new technology is whether or not the cardholders are educated on how EBT works and where they can redeem their nutritional benefits. Participants receive EBT material in the mail that includes posters, handouts, and a list of farmers' markets where they can use their nutritional benefits. Additionally, cardholders are provided with information on training meetings where they are able to test out using their new cards. A total of 53 public forums on EBT translated in 7-8 languages have been held in Los Angeles County, illustrating the county's desire to educate recipients on the new system. Notably, attendance at these meetings was above average in the state of California, and approximately 27-28% of all card recipients in Los Angeles County participated in one of these

information sessions. However, because training for EBT card holders is not mandated by the state and many consumers don't read the information packet sent to them regarding the transition to EBT, many consumers are still rendered clueless about the transition from paper to electronic. Faced with an unfamiliar change in the way nutritional benefits are redeemed, food stamp recipients may start to use cash instead of their benefits to purchase food. This challenge experienced by EBT cardholders links back to the necessity of the market managers' critical role in the promotion of and education about EBT within the farmers' markets. As Thompkins noted, in order for EBT to be successful within farmers' markets, the consumer needs to be convinced that the new technology is of use to them.

Inevitably, the state of California as well as its farmers' markets will potentially face a number of difficulties as well as opportunities along with the transition from paper nutritional benefits to an electronic system. Although opponents of this change argue that the traditional way of redeeming nutritional benefits is less expensive and easier than implementing and utilizing EBT technology, it is evident that EBT is here to stay. Eventually all government benefits will be allocated and redeemed electronically, and although WIC coupons are still tangible, paper coupons in California will also most likely be integrated into the electronic benefits system. Farmers, market managers, and consumers who shop at farmers' markets around the United States would therefore be wise to accept the imminent electronic transition of government nutritional benefits, and also to make an effort in order to learn how EBT can become a beneficial change instead of a detriment.

Facilitating the Transition to EBT in California's Farmers' Markets

States that did not meet the mandated October 2002 implementation deadline failed to do

so for a number of reasons, including a lack of sufficient staff resources and technical expertise as well as high EBT costs in comparison to the cost to issue paper federal nutrition benefits. By October 2003 EBT was operational in every state except for Guam and California, and although California had been successful in starting pilot programs in 2002, statewide implementation will not be completed until September of 2004. California's late implementation and the state's lengthy planning and procurement process has been attributed mostly to the county government structure in California and the unique county design requirements (*Food Stamp Electronic Benefit Transfer Systems: A Report to Congress* 2003). There are also larger issues for EBT implementation in California (as well as in all states) that include shrinking state budgets coupled with rising food stamp caseloads.

Initiatives have been taken in order to help ameliorate the problems associated with transition by states to EBT. The USDA's Food and Nutrition Service (FNS) has attempted to resolve some of these issues in partnership with food retailers, EBT system vendors, and client advocates. Guidance for state agencies in the transition to EBT is a point of focus for FNS, and studies have been done in order to analyze possible changes that FNS and states could make to existing EBT implementation and system models to increase competition among EBT vendors, facilitate system implementation nationwide, and lower the general costs of EBT. The FNS additionally acts to brief state agencies on ways in which alternative pricing models and changes to RFP requirements could serve to make EBT more attractive and marketable to new vendors (*Food Stamp Electronic Benefit Transfer Systems: A Report to Congress* 2003).

Importantly, the FNS also actively participates on national councils such as the Electronic Benefits and Services Council (EBS) and the Electronic Funds Transfer Association (EFTA) EBT Industry Council. Participation on such national councils has been of critical importance by

facilitating information sharing as well as the development and implementation of national standards and procedures across varied EBT stakeholder groups. FNS also participates as members of national standards associations such as the American National Standards Institute (ANSI), a committee for electronic transaction processing. Notably, the development and implementation of standards for EBT transaction processing has resulted in the successful implementation of national interoperability, which essentially means that recipients are able to access and utilize their EBT benefits in any part of the country at no additional cost to them (Leyser 1998). Additionally, FNS has also enabled the analysis of EBT transaction data to help identify fraudulent activities, and also works with state agencies to plan and participate in the annual food stamp EBT Directors meeting. This meeting is comprised of both workshops and general sessions, and attendees are able to discuss and address EBT issues and problems from a government perspective (*Food Stamp Electronic Benefit Transfer Systems: A Report to Congress* 2003).

There are a variety of technological options for EBT implementation, and the FNS has also been helpful in approving pilot projects in states in order to promote a greater knowledge about EBT issues and potential solutions. The most important aspect of EBT is arguably finding a technology that is fast and low-cost (Fisher 1999). For farmers' markets in low-income communities it is even more imperative that the technology be made affordable. By briefly outlining the available EBT technological options and determining the benefits and barriers they represent, it is clear that there are some EBT technologies that may prove to be easier and more effective than other options. In his own study, Fisher (1999) outlined the following EBT technologies and their drawbacks and benefits:

1) Hard Wire: Connecting farmers' markets with phone lines and electricity to run standard terminals is one possibility for EBT. However, problems with this technology include the fact that many farmers' markets are located in outdoor areas that are either without electricity or not in close proximity to phone lines. Therefore the greatest obstacles to the implementation of a hard wiring system is the high cost and its impractical nature; however, the major benefit of this type of technology is the low cost of making a phone call.

2) Wireless: A variety of wireless technologies exist, including cellular, radio, and satellite. However, the cost of equipping markets with terminals and wireless equipment is high: in a pilot project conducted in Maryland each market was equipped with a terminal, which cost between \$1,500 and \$1,800. The cost for each separate wireless call is also expensive, and the Maryland project showed that the cost of each transaction via cellular technology ranged, on average, from \$1.21 and \$2.69. Additionally, the processing of each transaction by phone would not be efficient in a higher volume market with many vendor stalls and consumers, due to the fact that it would take at least a few minutes for each call. For example, if a vendor needed to be on the phone for each separate transaction, that would mean less time spent with consumers and potentially a drop in sales.

3) **Off-Line:** Transactions are also able to be conducted without any communications technology. Manual vouchers, like credit card slips, could be processed by a vendor and then authorized periodically (possibly at the end of each market day). This method would be beneficial in that it would reduce capital and transaction costs, but the major drawback would be that it could incur more risks overall. Drawbacks to the off-line technology include the time involved in filling out vouchers, as well as the risk that producers face of potentially fraudulent transactions.

4) **Stored Value Cards:** EBT with the existing magnetic strip technologies or the newer ‘smart chip’ in the card could be swiped through a hand-held card reader or ‘smart wallet’. The information from the reader would then be uploaded, and funds could then be directly transferred to the vendor’s bank account. This technology has the potential to reduce transaction costs and time, and could cost as little as \$50-\$100 per vendor.

5) **Paper Currency:** Farmers’ market currency could be issued by the market itself, with the EBT recipient purchasing it with their card benefits. This scrip would only be valid at the farmers’ markets issuing it. Drawbacks to this particular system may be an increased potential for fraud with the use of paper, and using paper currency may also require either extra staffing by the market manager or another employee.

Different states have tested all available options of EBT technology in pilot projects in order to best determine which technology is the most efficient, easy, and cost effective, and

California has been demonstrating the use of wireless point-of-sale (POS) technology at several open-air produce stands and farmers' markets throughout the state since October 2002.

Additionally, California has approved a pilot project to use scrip at farmers' markets once the particular county implements EBT. The state will continue to use scrip at farmers' markets once the particular county implements EBT. The state will continue to evaluate this specific application of wireless point-of-sale technology through the next few months, until June of 2004 (*Food Stamp Electronic Benefit Transfer Systems: A Report to Congress 2003; FNS: 2003 EBT Farmers' Market Demonstration Project Update*).

According to Los Angeles Benefit Access Coordinator Carolyn Thomkins, Los Angeles County has already made the decision to utilize the wireless technology in conjunction with a scrip system. Therefore a recommendation for what type of technology should be chosen for the County's low-income farmers' markets need not be made, for the decision has already been finalized and implementation of the wireless devices is already completed (or is currently in the process of being implemented) in many markets. However, in order for Los Angeles County as well as other counties to successfully implement this specific type of EBT technology (wireless EBT with the utilization of a scrip system), it is critical to examine obstacles as well as potential benefits related to this system that have arisen in other pilot projects and real-life situations in order to facilitate L.A. County's own EBT transition.

Although there are problems commonly associated with the scrip or token system, it has been shown that these obstacles can typically be overcome through smart planning and sufficient preparation. Before approving scrip for a particular market, for example, certain steps have to be completed. Among other factors prior to scrip implementation, a market that wants to utilize a

scrip system has to first demonstrate that they have the ability to securely store the scrip. Methods for the prevention of fraud need to be developed by the market, and the market additionally needs to have a proper mechanism for allowing recipients to easily refund their unused scrip back into their EBT food stamp accounts.

In terms of specific obstacles related to a scrip system, not having the needed communication infrastructure or electricity in farmers' markets can result in markets failing to have a location where they can make a scrip system a feasible solution to EBT implementation. Also, individual markets are forced to incur the costs of printing and issuing the scrip, and this problem may be of greater concern for markets in low-income areas that have no funds to spare. A lack of sufficient staff and funds to pay producers at the end of each market day may also be an issue, as well as the fact that a scrip system may result in re-creating the potential stigma that paper food stamps generated, thereby discouraging low-income individuals from shopping at farmers' markets (*Food Stamp Electronic Benefit Transfer Systems: A Report to Congress* 2003). And although these issues are undoubtedly barriers to the implementation of a scrip system, it is also necessary to note that all the existing EBT options present obstacles. Therefore, the scrip system as an alternative solution may indeed be the best current EBT option for lower volume markets with smaller transaction amounts (Fisher 1999); namely, for low-income markets such as the ones examined in this particular study.

In the pilot county of Alameda, CA, farmers' markets were suffering from a drop in food stamp sales after the implementation of a digital system. In anticipation of future problems, state officials set up two separate pilot programs to test two different EBT models. The Old Oakland Farmers' Market in downtown Oakland has been used as a model of utilizing EBT at a higher

volume food market without an information booth. For this pilot project the state is attempting to encourage and assist producers to become authorized to accept food stamps and to utilize a point-of-sale machine. In this instance, there have been various problems with producer participation due to the problem of adopting this particular type of technology (such as limited English skills and not having a high enough food stamp redemption). As a result of these issues Alameda County farmers' markets have had a difficult time in their transition to EBT, and producers and consumers have both suffered the consequences (*Weaving the Food Web: Community Food Security in California* 2002).

In contrast to this model, at the smaller Berkeley Farmers' Market in Alameda, a pilot program was set up in which the customers initially swipe their EBT cards and then receive wooden tokens in the amount that they think they will spend on federal food nutrition benefits for that market day. After the customers finish shopping, they are able to return their unused tokens to the market and then have their EBT cards credited with the returned amount. Producers who sell their products and produce at the Berkeley Farmers' Market simply have to turn in the token currency at the end of each market day to the information booth in exchange for cash for their goods (*Weaving the Food Web: Community Food Security in California* 2002).

When asked about the Berkeley pilot project utilizing scrip, Frank Tamborello of the Los Angeles Coalition to End Hunger and Homelessness said that the farmers' market issue is one area in which it was to California's advantage to be the last state to get EBT, because in most other states a solution [like scrip] wasn't figured out until the markets had already missed several months of being able to take food stamps, by which time they had permanently lost some of their low-income customers. Tamborello also said that the only alternative to scrip seems to be providing Point of Sale devices to individual farmers, and yet this EBT option results in the slowing of the

‘flow’ of farmers’ markets. The farmers and their helpers don’t have time to be swiping cards, checking to see if a person has sufficient benefits in their account, and therefore Tamborello believes that ‘It’s much better to have a central device with a well-trained person swiping cards (RECC) and giving out market money, tokens, scrip, etc...’ (Tamborello pers.comm. 2004).

Tamborello also explained that another critical barrier to the utilization of Point of Sale technology is that California is not giving out any more Point of Sale devices to markets due to the state budget crisis. However, this is contrary to the state’s promise to give one Point of Sale device free to each market that was doing a minimum of \$100 in food stamp sales per month, and plans to protest this broken promise to the state’s farmers’ markets are currently being made. If the EBT technology will be made available to more California farmers’ markets in the future is therefore still to be determined.

The example of the first scrip project ever implemented in the United States in Hilo, Hawaii in 1999 also helps to illustrate the potential that the scrip system has for success in low-income farmers’ markets. After EBT was initially implemented in the Hilo Farmer’ Market, food stamp purchases at the market drastically fell by 98%. However, after the alternative scrip system was later implemented at the market, food stamp sales rebounded to nearly 50% of pre-EBT purchase levels. And although the implementation of scrip failed to totally ameliorate the decline in food stamp sales that occurred as a result of the transition to EBT, it is important to note that many food stamp recipients that shopped at the Hilo market may have simply switched to using cash instead of Federal nutrition benefits after the transition to EBT, which could partially account for the extreme drop in sales (Offerman 1999).

During a telephone interview, Hilo market manager Keith Delacruz discussed the drop in

Federal nutrition benefit redemption that occurred after the implementation of EBT at the Hilo Farmers' Market. Delacruz said that when EBT was first implemented there was 'no avenue' for people to use their food stamps at the market, and therefore they stopped shopping at the market. He additionally explained that in his opinion the drastic drop in food stamp redemptions was not simply due to the EBT transition, but also to the fact that fewer people were receiving the government benefits.

Delacruz also discussed the scrip system used at the Hilo market (durable paper cards are used that are hard to replicate and have the look and texture of a playing card), and the benefits of the scrip system. Delacruz explained that scrip was a good option for EBT because it is flexible and easy to understand, for both farmers and consumers. He went on to say that it is most important that the system is easy for consumers, because they don't want to have to go through a 'red tape process' each time they want to buy a fruit or vegetable. Scrip is like money, and it 'allows the people who really need produce to shop for it'. When asked what percentage of sales at the Hilo market were from food stamp recipients, Delacruz guessed that the number was somewhere between 10-20%. Because such a high percentage of people who shop at the Hilo Farmers' Market are food stamp recipients, it was necessary for the market to determine that the most efficient EBT option would be the utilization of scrip.

The Berkeley Farmers' Market in Alameda County as well as the Hilo, Hawaii market examples illustrate that scrip can and be a viable alternative for EBT, and both evaluations have also pointed to the fact that scrip can be most successful in markets that handle a low-to-moderate volume of food stamp redemptions. In larger markets where more transactions are being made and a greater number of food nutrition benefits are being redeemed, another EBT method may prove to be

more efficient.

It is also critical to point out that both studies determined that the role of the market manager is crucial to the successful implementation and management of scrip (*Food Stamp Electronic Benefit Transfer Systems: A Report to Congress 2003; Weaving the Food Web: Community Food Security in California 2002*), for the manager necessarily must help with familiarizing their market's consumers as well as producers about the EBT processes. It is often the case that producers at farmers' markets may have a limited exposure to technologies such as EBT, and therefore farmer training has been suggested as a key way to ensure the successful implementation of EBT (Fisher 1999). Additionally, consumers who are not yet used to the transition from paper benefits to EBT may be reluctant to utilize the new technology without some type of outside assistance (including information classes, advertising, etc...). Matt Sharp of the California Food Policy Advocates echoed this belief in the necessity of market manager involvement in the transition to EBT, maintaining that though the USDA, State DSS and County DPSS are all poised to assist, the process of centralizing the technology and establishing a system 'requires an involved market manager who is committed to food stamps' (Sharp pers. comm. 2004).

In this time of transition from paper to electronic Federal nutrition benefits in California, market managers and other involved parties first need to undergo an extensive planning process in order to help ensure that the implementation of EBT will not result in a decline in market sales and a loss of the food stamp customers. After this initial goal has been accomplished, steps can then be taken in order to help *increase* the usage of EBT, ultimately raising the sales of electronic benefits within farmers' markets.

Case Study 1: Adams and Vermont Farmers' Market

The Adams and Vermont Farmers' Market is one of the oldest markets in one of the oldest neighborhoods in Los Angeles, and is located on West Adams Boulevard, just west of Vermont Avenue. The Adams and Vermont market is one of 22 markets operated by the Southland Farmers' Market Association, an association that was founded in 1983 and is now the largest trade association of certified farmers' markets in the state. Southland offers assistance to markets and growers with marketing, promotions, member services, legislative advocacy and self-enforcement programs (www.cafarmersmarkets.org), and the Adams and Vermont market has been serving primarily low-income shoppers since the market's opening in 1979. Ida Edwards and her husband Roy Edwards are currently the market managers of the Adams and Vermont market, and also are farmers who vend their aloe products to consumers at this market as well as other farmers' markets in the Los Angeles area.

The market is small in size, and during the winter months in Southern California there are considerably fewer vendors selling their products; this fluctuation in size is normal for farmers'

markets due to factors such as seasonal changes and time devoted to harvesting. During the time in which surveys were completed in the Adams and Vermont market there were a total of 16 vending booths, and this number typically grows to around 20 booths during the summer months. In addition to fresh fruits and vegetables, vendors sell items such as honey, eggs, specialty jams, bags of peanuts, and sugar cane stalks.

During an open-ended interview on February 25 2004, market manager Ida Edwards explained that the Adams and Vermont has been accepting Federal food stamps for 13 years (since 1991), and that WIC FMNP coupons then began to be accepted in 1993. Edwards affirmed that the Adams and Vermont market was able to attract a greater number of low-income residents due to farmers' ability to accept WIC FMNP coupons and food stamps, and she also believes that the location of the market is one of the main reasons that low-income consumers frequently shop there. Edwards further noted that most markets located in wealthier areas don't want the 'kind of people' that utilize food stamps and bring their children along with them to the market, and that most markets that serve consumers with higher incomes don't typically also serve consumers who need to use food stamps.

When asked about the barriers that farmers typically face with the acceptance of food stamps or WIC FMNP coupons, Edwards explained that the farmers themselves don't encounter any obstacles, due to the fact that the market management is the party responsible for deciding whether the farmers can accept nutritional benefits. If a farmer is able to redeem stamps it will always be beneficial for him or her, because he can make more of a profit; in fact, Edwards cited this ability to make more revenue as the greatest advantage of farmers who are able to accept food stamps and WIC coupons. Therefore, it will be a loss to the farmer if the market manager doesn't facilitate the

acceptance of WIC FMNP coupons and food stamps.

Edwards further lauded the use of food stamps in her market by saying that there is a waitlist for farmers who want to come to the low-income Adams and Vermont market to sell their produce because the profit they can make at this particular market is high. Edwards attributed the potential of farmers at the Adams and Vermont market to make a greater income to her belief that there is less competition (for example, one of the many orange producers at the Hollywood market may make only \$200 as opposed to the single orange producer who can make \$2000 in a market day at Adams and Vermont), and also to the fact that farmers can accept food stamps; the farmers actually prefer the food stamps, she explained, 'because they make more money'.

Edwards was unsure of the exact revenue derived from food stamps and WIC FMNP coupons that were redeemed each day at the market. In the summer months WIC FMNP sales are much higher, and she estimated that revenue generated from food stamps during the fall and winter to be 'low'. When asked whether or not she felt that WIC FMNP coupons and food stamps are underutilized resources, she answered that she felt like the WIC FMNP is underutilized; she attributed this to the idea that there are a 'circle of friends' in the area who are knowledgeable about WIC FMNP nutrition benefits, and that these people tell their friends about it to get them involved. However, many people are left unaware of the benefits of WIC FMNP. Edwards does not consider food stamps to be underutilized, because she thinks most people are aware of them and they are 'multi-use.' In terms of how Adams and Vermont has been advertising that farmers are able to redeem food stamps and WIC FMNP coupons, Edwards said that there was information online regarding this fact, as well as information that alerted customers of other markets in Los Angeles that can accept Federal nutritional benefits

When questioned about the Electronic Benefits System, Edwards said at the time of the February 2004 interview that the EBT program was a new program that was going to be implemented at Adams and Vermont beginning next month: March 2004. Edwards pulled out the EBT machinery that she now keeps in a metal box at her own vending stall, and illustrated how a card would be swiped for the redemption of nutrition benefits. Additionally, a scrip system of bright blue coupons had already been created and copied for consumers' use; people would therefore have to decide how much of their nutritional benefits they wanted to utilize during a specific market day, swipe their card at a predetermined location on the market premises, receive coupons, and then shop. At the end of the day, farmers would then exchange their blue scrip coupons for money, just as they would exchange paper Food Stamps or WIC FMNP coupons.

The EBT machinery is already available to the Adams and Vermont market, and the new system will begin to be utilized in the near future. Edwards explained that when food stamp and WIC FMNP recipients go in to receive their benefits, they are given (in addition to their new card) a booklet that lists stores where they can redeem their benefits as well as a farmers' market map that illustrates where they can utilize their EBT cards. And although Edwards affirmed that these recipients are all now 'already in the network' of EBT, she also stated that the people are not yet aware of the transition from paper to electronic. When questioned about what could be done to bolster the knowledge and use of EBT technology, Edwards said that the farmers themselves cannot advertise EBT, and Edwards emphasized that it is the responsibility of the Food Stamp Program to spread the information and educate customers about the new electronic system. As a market manager, Edwards maintained that it is not her responsibility to individually teach people how to use the EBT; all they have to do is swipe a card. Questions regarding the benefits, barriers, and impact

on sales of the Electronic Benefits Transfer system couldn't be answered, due to the fact that it is still too early to determine the new system's impact upon the Adams and Vermont market.

Case Study 2: Central Avenue Farmers' Market

The Central Avenue Farmers' Market, located at 43rd and Central Avenue in Los Angeles, is operated by the private nonprofit community development corporation titled Sustainable Economic Enterprises of Los Angeles (SEE-LA), as are the Hollywood and Hollywood-Sears markets also examined in this study (www.see-la.org). And although SEE-LA is the corporation in charge of the Central Avenue Farmers' Market's operation, the market was also started in collaboration with the Dunbar Economic Development Corporation, a local business association, local schools, health clinics, and residents. The Central Avenue market has only been in business for one year and is struggling to stay afloat, yet many have high hopes for the market's future. Councilwoman Jan Perry attended the market's one-year anniversary on March 20, 2004, and she stated that 'The Central Avenue Farmers' Market has brought fresh food access to our community, promoting good health and a great sense of community pride...it has proven to be a great asset'. (*Central Avenue Farmers' Market Celebrates One-Year Anniversary* 2004).

During the time in which interviews were conducted there were a total of only 5 booths in which consumers could buy products and produce; these booths consisted of two vegetable producers, one Mexican food vendor, one soap and body products vendor, and one honey vendor. There was also an information booth, a musician playing ethnic music, and a booth being run by a volunteer from the California Nutrition Network who was giving out recipes and samples that helped to show low-income consumers ideas on how to easily integrate fresh fruit and vegetables into their diets. When questioned about the size of the Central Avenue market, the California Nutrition Network volunteer said that it was the smallest farmers' market she had ever seen. In the summer months, when fewer farmers are harvesting, it is expected that the number of vendors will rise to around 8-10 total vendors.

Because Central Avenue market manager Pompea Smith was absent on the day in which surveys were conducted (February 28, 2004), a staff person who will remain unnamed agreed to informally discuss some of the obstacles that are currently facing the Central Avenue low-income market. The staff person began by pointing out that one of the most surprising aspects about the Central Avenue market is that there is an extremely low turnout for people who utilize food stamps; given that the market is located in a notoriously poor neighborhood of Los Angeles, one would expect that the majority of sales would come from people who were redeeming federal nutritional benefits. Instead, the assistant manager quoted that less than \$500 is being spent at the market each weekend, and that the percentage of food stamp sales is currently zero; she believes the problem to be that shoppers are unaware of the fact that they are able to redeem their food stamps in a farmers' market. However, WIC FMNP redemptions are more successful at the Central market, and, during the summer months, 50% of sales are from WIC FMNP coupons.

Since there are potentially three more WIC offices opening soon in close proximity to the Central Avenue market, they are expecting an even greater percentage of WIC sales beginning in May of this year.

The staff member felt that among the top barriers that exist for farmers' markets in low-income neighborhoods was the difficulty for customers to get to the market regularly in order to do their shopping. Also, there is a need to educate consumers in low-income areas on the benefits of buying farm-fresh produce at a farmers' market as opposed to buying it at a grocery store, even if some items cost more.

And even though few food stamps are being redeemed at the Central Avenue farmers' market, the assistant manager was knowledgeable about the transition from paper nutritional benefits to EBT; in fact, the Central Avenue market was the very first market in Los Angeles to introduce the EBT technology. But regardless of the fact that the market was ready to utilize EBT for the redemption of nutritional benefits, they haven't had an opportunity to use the electronic system yet. This is unfortunate, the assistant manager said, for the state of California has paid for the machines that are likely to be 'very expensive', and the benefits that the system may have to offer includes both ease of use and reduction of the stigma associated with food stamps. However, the assistant manager also believes that the major detriment of the new system is that even though there is information about EBT distributed at Food Stamp offices, people rarely read the information they are given and therefore do not know what the card is nor how to use it. As a result, the EBT technology is sitting unused and locked up at the Central Avenue market's information booth; ironically, the booth did not appear to have a flyer available to consumers regarding the transition from paper food stamps to EBT.

Case Studies 2, 3, and 4: The Central Avenue, Hollywood, and Hollywood-Sears Farmers' Markets

Pompea Smith, Executive Director of Sustainable Economic Enterprises of Los Angeles (SEE-LA), is the manager the low-income Central Ave and Hollywood-Sears markets, as well as the mixed-income Hollywood Farmers' Market in Los Angeles County. Due to time constraints and the difficulty of setting up multiple interviewing dates, Ms. Smith chose to discuss all three markets with the interviewer during one interview session instead of answering all proposed questions for each individual market. As a result, some of her answers apply to all three markets, and some of her responses are specific to a particular market.

The Hollywood farmers' market, located on Ivar Ave between Sunset Blvd and Hollywood Blvd, is one of the largest and most popular markets in Los Angeles. Each Sunday Los Angeles' residents come to the Hollywood market in order to buy fresh produce as well as a wide variety of other foods and products (such as jewelry, clothing, and ethnic gifts), to listen to music, and to mingle with an extremely diverse group of Angelenos. The variety of produce and products for

sale draws thousands of people, and approximately 90 farmers, 40 local artisans, and 23 baked goods and prepared food vendors come to sell their wares and produce. The Hollywood Market is operated as a non-profit community activity of SEE-LA, and the market hosts local nonprofit community organizations and frequently offers other special events (www.farmernet.com/hollywood).

Although the Hollywood market is not defined as a low-income market because it also has many middle-to-upper income shoppers, Smith explained that the area is surrounded by low-income residents, and that most of the children who live in close proximity to the market are eligible for the National School Lunch Program (a program that ensures free or reduced-price lunches). In Smith's opinion it is the mix of people of different incomes that contributes to the market's success. The Hollywood market has been in operation for 13 years, and has accepted food stamps for as long as it has been in business; Smith maintains that from the very beginning it was a goal to have good programs for low-income residents. In 1994 the Hollywood market was authorized to accept WIC FMNP coupons.

The Hollywood-Sears market is also a part of SEE-LA, and market's name comes from the fact that it is located in the Sears parking lot off of Santa Monica Boulevard, between Wiltern and Western. The market accepted food stamps from the moment it opened in November of 2002, and it accepted WIC FMNP coupons as soon as it was able to do so the following summer.

Additionally, the market advertises on its website that community-based services are available to low-income and disadvantaged residents (www.farmernet.com/hollywood-sears). The Hollywood-Sears market is even smaller than the Central Avenue farmers' market, and typically there are only 3-4 vendors selling at this time of year; in the summer months, 5 total vendors are expected at the

market. Fresh fruits and vegetables are the only items sold at the tiny Sears market, including strawberries, avocados, radishes, citrus fruits, brussel sprouts, and exotic guavas and Asian pears. Additionally, there is an information booth with shaded picnic tables situated at the market's entrance, an area that is often utilized for weekly cooking and nutrition classes.

In response to the question whether she felt that farmers' ability to accept food stamps and WIC FMNP coupons in the Hollywood-Sears market as well as in the Hollywood and Central Ave markets attracts low-income customers, Smith said that this was true, especially because the WIC FMNP coupons were created with the sole purpose of redemption at farmers' markets. And in the markets she manages, Smith makes sure that prices stay reasonable for WIC FMNP recipients; because WIC FMNP recipients, unlike food stamp recipients, can only redeem their benefits in farmers' markets, there is a concern that vendors could therefore increase their prices at will.

In terms of barriers to farmers who want to accept nutrition benefits, the only thing that Smith believed could be inconvenient for producers was that it takes a little longer to deal with a food stamp or WIC coupon transaction than it does when a customer is paying with cash. As a result, the producer may risk losing a couple of dollars in sales if there are other cash-paying customers who are waiting for him to finish his other transaction. But Smith believes that there are essentially no real problems faced by the producer, and that often producers simply use the food stamps they have collected to pay for their stall fees at the end of a market day.

Smith feels that both food stamps and WIC FMNP coupons are underutilized resources, but for different reasons. Food stamps are not easily accessible to all who are in need due to the fact that many of the people who could greatly benefit from the Federal program are immigrants, and therefore people who are afraid of applying because they are not legal citizens of the U.S. For the

WIC FMNP coupons this particular problem doesn't exist, because applicants are not forced to disclose personal information that would compel them not to apply. However, the high lack-of-redemption rate of WIC FMNP coupons indicates that there are many people who are not using their benefits for whatever reason; Smith guessed that in some areas up to 60% of WIC FMNP coupons were not redeemed.

Smith is highly engaged in advertising activities for her farmers' markets, and the fact that the markets accept WIC FMNP coupons and food stamps as well as Senior FMNP coupons is always integrated into the advertising. She explained that the farmers' markets she manages through SEE-LA are involved in do a lot of work with the WIC and Food Stamp offices as well as the State Department and the Department of Social Services (DPSS), and other local venues where market promotion is targeted include health clinics, community housing, and schools. Pamphlets are also created in 8 languages for all food stamp recipients on Los Angeles County, which Smith estimated to be around 600,000 people.

Importantly, Smith's main point of focus right now is on the transition to EBT that is taking place within farmers' markets in California. Of 82 farmers' markets in Los Angeles County there are only 18 markets that are currently participating in EBT; the Central Avenue, Hollywood, and Hollywood-Sears markets all have implemented EBT. When questioned as to why market managers would be reluctant to implement EBT in their markets, Smith said that she thinks many of them are discouraged because of the administrative work involved. In order to encourage more markets to transition from paper to electronic nutrition benefits, a major countywide campaign with support from the Department of Health Services has been launched to promote all 18 markets that have already implemented EBT. Important campaign activities include the publication of an

EBT press release later this month, as well as a workshop to be held in April for market managers regarding the implementation and use of EBT. Because the central goal is to raise the level of EBT participation in farmers' markets, the workshop is mainly held in order to illustrate to market managers who have been reluctant to implement the system that it is quite an easy process.

Although Smith confirmed that it is the responsibility of the Department of Social Services to train food stamp recipients on the utilization of EBT, Smith also said that the DPSS agency also provides funds for the promotion of EBT within the markets in an effort to make consumers more aware of the change that is happening in the redemption of nutrition benefits. At the Hollywood-Sears market there are signs posted and flyers readily available (see **Appendix D**) on the uses of EBT for the consumers. Smith didn't think that the producers faced any problems with the implementation of EBT nor really had to even be educated about the new system (although there had been a memo sent out regarding the transition), mostly because the system is centralized. Individual farmers therefore don't need to know how to use the cards, they only need to know the few rules that apply to accepting scrip (such as the straightforward regulation that people can only purchase food items with their EBT benefits card, etc...).

The State of California has paid for all EBT implementation in farmers' markets, and the only costs incurred thus far for the markets has been the creation of scrip. Additionally, although the state has taken care of all EBT transaction costs so far, in the future it will be the farmers' markets who will have to pay for these nutrition benefit transactions. Also, Smith said that it may be necessary to hire an extra employee to do all of the EBT handling at the bigger Hollywood market when EBT really takes off, given the higher volume of food stamps that are redeemed at that particular market. Smith believes that EBT will be positive in that it will create a more

systematic system and reduce or eliminate fraud, and the single barrier she listed was the issue of consumers not knowing how to utilize the system.

Survey Methodology

Before forming the survey for this particular study, the interviewer did background research on other surveys that had previously been conducted at farmers' markets. These works consulted include the following: Lamkin's 1996 UCLA survey and study of certified farmers' markets; Offerman's 1999 survey included in the author's report on the Hilo Farmers' Market in Hawaii; the USDA's 2001 survey conducted at the low-income Anacostia Farmers' Market in Washington, D.C.; the Journal of Extension's 2002 survey regarding consumer trends, preferences, and characteristics; and the information in Corum's 2001 publication that discusses customer surveys and public opinion (see **Sources Consulted**).

After reviewing the literature, producers questionnaires for this particular study were created, copied, and translated into Spanish (see **Appendices A, B**). Surveys were then conducted at 4 farmers' markets in the Los Angeles County area. Three of these farmers' markets in which surveys were conducted (including the Adams and Vermont, Central Avenue, and Hollywood-Sears markets) are considered to be low-income markets; surveys were also conducted at the

mixed-income Hollywood farmers' market. Of the 38 surveys completed by producers, 16 were conducted in Spanish.

Surveys at each market were completed during one market day. Surveys were conducted at the Adams and Vermont market on Feb 25 2004, at the Central Avenue market on Feb 28 2004, at the Hollywood market on Feb 29 2004, and at the Hollywood-Sears market on March 10, 2004. The interviewer attempted to interview as many producers as possible, and all producers/product vendors who were willing to participate were successfully surveyed at the Adams and Vermont market, the Central Avenue market, and the Hollywood-Sears market. Due to the Hollywood markets' larger size and diversity of foods and products being sold, only the vegetable and fruit producers were surveyed at the mixed-income Hollywood farmers' market.

After all surveys had been completed, information was compiled and results were recorded in order to draw conclusions about the data.

Interview Methodology

Informal interview questions were formulated for market managers prior to each interview conducted for the purposes of this project (see **Appendix C**). For market managers, interview questions were additionally provided via email before interviews were conducted.

Market manager Ida Edwards of the Adams and Vermont market was interviewed in person on February 25 2004 at the Adams and Vermont market. Market manager Pompea Smith of the Central Avenue, Sears-Hollywood, and Hollywood farmers' markets was interviewed in person at the Sears-Hollywood market on March 10, 2004. Benefit Access Coordinator Carolyn Thomkins of Los Angeles County was interviewed in person at the California EBT Control Center on March

3, 2004. All other sources of personal communication consulted for the purposes of this study (see **Sources Consulted**) were conducted via email and telephone communication.

Survey Results

Of the 38 farmers successfully surveyed at the Central Avenue, Hollywood, Sears-Hollywood, and Adams and Vermont farmers' markets in Los Angeles County, 4 were conducted at the Central Avenue market, 21 were conducted at the Hollywood market, 2 were conducted at the Sears-Hollywood market, and 11 were conducted at the Adams and Vermont market. Of the 38 surveys, 16 were conducted in Spanish, or approximately 42%. Although the ethnicity of producers was not recorded in the survey process, the fact that nearly half of all producers surveyed were Spanish-speaking provides a rough idea of the ethnic breakdown of producers who sell at low-income farmers' markets in Los Angeles County.

1) Of 38 producers surveyed, 8 sold at 1-2 markets, 4 sold at 2-3 markets, 4 sold at 3-4 markets, 5 sold at 4-5 markets, and 17 sold at more than 5 markets. In the instance that an actual number was given for the number of markets a farmer sold his or her produce/products at in question #1, the number was rounded down to the nearest bracket; for example, if a

farmer stated that he/she sold in 3 markets total, it was calculated that he/she sold in 2-3 markets as opposed to 3-4 markets.

- 2) Of the total number of markets that producers sold their produce/products at, producers were asked how many of these markets served primarily low-income shoppers. 24 of the producers said that between 1-2 of these markets served primarily low-income shoppers, 5 said 2-3, 2 said 3-4, 3 said 4-5, and 2 farmers said that more than 5 of the markets they sold their produce/products at served primarily low-income shoppers. Two of the producers were unable to answer the question, because he didn't know which of the markets were in low-income communities. As in question #1, answers were rounded down to the nearest bracket for the purposes of calculation.

- 3) In question #3 of the survey regarding the benefits of selling produce/products at a low-income farmers' market, producers did not choose only one answer, but instead chose all answers that applied. 30 producers said that making a profit was one of the top benefits; 1 producer said that one of the benefits of selling at a low-income market was making a greater profit that he/she would be able to make at an upper-to-middle income market; 25

producers stated that cash-in-hand was a major benefit; 25 producers said that personal contact with consumers was one of the most important advantages for them at low-income markets; 22 producers said that providing low-income communities with increased access to fresh food was one of the greatest benefits.

- 4) In response to the question regarding the greatest barriers of selling produce/products at low-income farmers' markets, 15 of the producers said that not grossing as high of a profit was a barrier; 1 producer said that he/she had difficulties in accepting food stamps and/or WIC FMNP coupons; 2 producers listed not having the capacity to utilize EBT technology as a barrier; and 22 producers said that there were no major barriers to selling at low-income markets.
- 5) When asked whether producers adjusted their prices when selling their produce/products at low-income farmers' markets, 15 producers said yes they adjust their prices, 22 said that they don't adjust their prices, and 1 said that he/she sometimes adjusted his/her prices.
- 6) Of the 15 producers that adjust their prices when selling their produce in a low-income community and the 1 producer that sometimes adjusted his/her prices, all stated that they adjusted their prices to be lower when selling to primarily low-income shoppers.

- 7) In response to the question asking whether producers believed that the particular market is able to attract more low-income residents because of producers' ability to accept food stamps and WIC FMNP coupons, 27 producers said yes, this is true, 6 producers said no, they do not think that this is true, and 4 producers said that they didn't know whether the market's acceptance of food stamps and WIC FMNP coupons results in attracting more low-income shoppers.
- 8) Producers were asked to explain the greatest barriers that they faced in the acceptance of food stamps and WIC FMNP coupons; 33 of the producers said that there were no problems, 3 producers said that they didn't know, 1 producer said that making correct change for consumers that wanted to use food nutrition benefits was the single barrier that he/she had encountered, and 1 producer said that competition among farmers presented a barrier.
- 9) The benefits that producers gained by accepting food stamps and WIC FMNP coupons included the following: 30 of the producers surveyed said that the ability to sell products to consumers of all income levels is a major advantage, 17 producers identified an increase in sales revenue, and 18 said that they felt like the personal feeling of satisfaction that comes from being able to accept food stamps and WIC FMNP coupons was a main benefit. No producers listed additional benefits that were not included in the survey question.
- 10) For question #10, producers were asked the revenue value of food stamps and WIC FMNP

coupons that they receive at their vending stall each market day. Producers listed specific amounts, and these answers were then fit into subcategories. 10 producers said that they currently are making no money on food stamps and WIC FMNP coupons, 7 producers said that they make \$2-\$10, 9 producers said they make \$10-\$20, 5 said they make \$20-\$50, 4 said between \$100-\$150, and 2 said that they make more than \$150 each market day from food stamps and WIC FMNP revenue. 1 producer said that he/she didn't know the answer to the question.

- 11) When asked what percentage of sales are from WIC FMNP coupons and food stamps, 29 producers said that the approximate percentage was between 0%-10%; 5 producers said %10-25%; 3 producers said %25-50%, and no producers said that 50%-75% of their sales are from food nutrition benefits. 1 producer said that he/she didn't know. When given a specific answer on the percentage of sales that are grossed from WIC FMNP coupons and food stamps, the percentage was rounded down to the nearest bracket.
- 12) For producers, the greatest benefits of the EBT system include the following: 13 producers believed that EBT is easier to use than paper food stamps and WIC FMNP coupons; 12 producers thought that the payment from the customer would be more secure; 15 thought that EBT greatly reduced fraud. 16 producers were either totally unfamiliar with EBT and/or had never utilized the new system, and therefore couldn't answer what they thought the benefits to be. 1 producer had heard about/was familiar with EBT, but he/she did not

think that there were any major benefits to the electronic system.

13) The greatest barriers of EBT for producers include the following: 4 producers said that there were no problems; 3 said there were inconvenience issues for both consumer and producer associated with EBT, 1 producer said that the extra time it took to utilize the system was a barrier, 2 producers said that consumers were unaware of how to work the system, 1 producer said that any change made within a traditional system would cause difficulties to arise, 1 producer cited not having his/her own EBT system was a barrier, 1 producer was concerned about electronic difficulties associated with EBT, and 24 total producers said that a lack of knowledge about and experience with using EBT was a major obstacle to the utilization of the new system. 1 producer said that there were no problems associated with the utilization of EBT.

14) When asked about what additional policies could be established in order to promote the use of food stamps, EBT and WIC FMNP, 3 producers said internet promotion, 23 producers

said that there should be increased advertising at WIC and food stamp offices, 12 producers said that there needed to be greater community outreach, 2 producers suggested newspaper advertisements, 2 producers suggested making flyers for distribution in the community, and 9 producers didn't know what could be done in order to further promote WIC FMNP, food stamps, and EBT in farmers' markets.

Discussion of the Data

Although a significant number of producers sell their produce at 2 or less markets (21% of total producers), 45% of producers surveyed sell at more than 5 different farmers' markets throughout the county and state. It was also conveyed to the interviewer during the process of conducting surveys that, among the group that sold at 5 or more markets, there are some producers who sell at up to 20 different markets within California; for these producers, selling at farmers' markets is their main source of revenue.

Importantly, the majority of producers (63%) said that of all of the markets they sell their produce/products at, only 1-2 of these markets primarily serve low-income shoppers. Only 2 producers, or approximately 5% of the total number of producers, said that they sell at more than 5 markets that primarily serve low-income shoppers. The fact that the majority of producers only sell their produce/products at such a small number of low-income markets is likely an indication of the following: 1) the supply for farmers' markets in low-income communities is failing to meet the demand and need for fresh food access and increased food security in Los Angeles county; 2) producers are reluctant to attempt to sell at farmers' markets that primarily serve low-income communities due to concern about generating adequate revenue for their

produce/products; and/or 3) there are only a limited number of low-income markets in which to sell. In addition to the long-term plan of eventually creating a greater number of successful farmers' markets that are accessible to low-income residents of Los Angeles, it is critically important as a shorter-term goal to help strengthen the low-income farmers' markets that already are up and running within the county. One of the initial steps toward achieving this is to encourage more producers to sell their produce/products in these markets that serve lower income residents.

Although results from the surveys have shown that most producers sell in only 1-2 markets that primarily serve low-income shoppers, it is also notable that the surveys have indicated that there are few major barriers preventing producers from selling at these market venues in Los Angeles county; more than half (58%) of producers said that there were no obstacles to selling in low-income areas. However, the most common obstacle for producers is one that has been shown to be the most difficult to overcome: producers being able to make a profit while balancing the consumers' need for low/affordable prices. 15 of the producers surveyed (approximately 39%) said that not grossing as much for their produce/product as they typically could in a middle-to-upper income market was the greatest deterrent of selling to primarily low-income consumers. One of the benefits of direct-to-consumer markets is that producers have the ability to adjust their prices. Since 16 producers either always or sometimes adjusted their prices to be lower when they sell to low-income shoppers, it may follow that selling in low-income markets may not always be as lucrative as selling in a market where such price adjustments were unnecessary (such as in a middle-to-upper income farmers' market).

In order to combat this reluctance of selling in low-income markets, incentives should be

established to help encourage producers to invest a greater portion of their time and efforts toward selling at markets that cater to low-income shoppers. One suggestion would be for the state of California to create certain subsidies for producers who make the choice to sell in low-income markets. For example, the state could agree to pay for the market stall fee for each producer who chose to sell his or her produce at low-income markets in order to offset the 'loss' that the producer may incur by lowering his or her prices for low-income consumers. As a result of more producers having incentives to sell at low-income markets, these markets will be more likely to grow in size and popularity and therefore achieve greater stability and success. The Hollywood Farmers' Market is a successful market within Los Angeles County due to its wide diversity of foods, produce, crafts, and shoppers. Conversely, smaller markets with few vendors (such as the Central Avenue and Hollywood-Sears markets) lack the diversity to be attractive to most shoppers; this is partially responsible for the fact that these markets are struggling to remain in existence. A lack of vendors makes it difficult to attract customers that want to shop at a larger market, while at the same time vendors are reluctant to sell at markets with a small number of customers. If it could be made more economically feasible for more producers to sell their products/produce in lower income communities, the markets located within these areas would be given the opportunity to grow and flourish.

Aside from the concern of grossing less revenue when selling at a market in a low-income community, producers were more vocal about the many benefits that are a part of selling at low-income markets. Also, it is important to note that although a substantial number of producers voiced their concern regarding their inability to make enough income at a low-income market, fully 30 (79%) of all producers listed the ability to make a profit as one of the top

benefits of selling their produce/products at a low-income market. Therefore, it can be inferred that nearly all producers at each market would not be making the choice to sell their produce/products at that particular venue if they didn't think that they could turn a profit (even if the profit may be lower than profits grossed at another, higher-income market; only 1 producer said that he/she could make more money at a low-income market). And although it was not indicated in the data results from the surveys, many of the producers told the interviewer that the greater profit made from middle-to-upper income markets was in fact negligible, and that most markets, regardless of their consumer base, yielded more or less the same profit. One orange farmer explained to the interviewer that although he may be lowering his prices slightly when selling to low-income consumers, he was also able to sell low-income customers oranges with more imperfections than the oranges he sold at a higher-income market. In the end, the losses and gains could balance each other out.

Although producers are undoubtedly involved in farmers' markets because it is an integral part of their livelihood and survival, the social and intangible aspects of direct-to-consumer farmers' markets was also shown to be one of the major advantages of selling at low-income markets. 25 of the producers (66%) said that the personal contact they were able to experience with consumers who purchased the produce or products they had grown or created was one of the greatest benefits, thereby enforcing previous research that has been done on the many social benefits of farmers' markets. And although this personal contact is achieved at all farmers' markets and producer-to-consumer outlets, for many producers this contact is more meaningful in communities that have fewer resources. Indeed, the survey data also indicate that 22 producers (58%) feel that providing low-income communities and their residents with

increased access to fresh food is a critically important, intangible benefit. This is relevant because it indicates that producers who chose to sell their produce/products at farmers' markets have a social commitment to the customers they serve in low-income communities.

Just as there are few barriers that producers cited regarding the vending of their produce/products in low-income communities, there were also shown to be more benefits than barriers in the acceptance of food stamps and WIC FMNP coupons. 33 of all producers, or 87%, said that there were no problems that they had faced in the acceptance of food stamps. Because only one producer brought up the issue of making change for the person utilizing the food nutrition benefit as a problem, this particular obstacle seems minimal. At most markets, change in cash is never given to persons redeeming their food nutrition benefits; producers usually round the price of their product/produce (be it up or down) to the nearest whole number that can be redeemed with food stamp or WIC FMNP benefits. Producers explained to the interviewer that any problems or obstacles to the implementation and/or acceptance of food nutrition benefits would be burdened by the market manager, for it is wholly a managerial decision whether or not to accept food stamps and WIC FMNP coupons. Most producers simply use the nutrition benefits that they have been redeemed at their individual booth to pay for their stall fee at the end of the market day, or just turn them in to the market manager for cash. Either way, it is rare that the producer himself would have to accept the responsibility of going to the bank and dealing with the transaction, and the barriers to acceptance are therefore negligible.

As was expected, the most frequently cited benefit of being able to accept food stamps and WIC FMNP coupons is that producers can sell to consumers of all income levels; 30 producers, or 79%, said that this was a major advantage. Additionally, the social benefits and

personal feeling of satisfaction that come from being able to sell to food stamp and WIC FMNP recipients was a benefit for 18, or 45% of producers, which is closely related to the idea of providing low-income communities with increased access to fresh food; it is important for producers to feel as though they are an active participants in the improvement of the food security of low-income communities. 17 of the producers (45%) said that their ability to accept WIC FMNP coupons and food stamps helped them to increase their overall sales revenue. However, many of the producers explained that their sales revenue from WIC FMNP and food stamp coupons only increased during the period when WIC FMNP coupons are made available to recipients; it is only during the 'summer months', which translates to only around 6-7 months of the year, that WIC FMNP coupons are available for use in farmers' market; Ida Edwards, market manager and vendor at the Adams and Vermont Farmers' Market, said that the coupons are distributed sometime in May and can be used with 'a little buffer time' through November (Edwards pers.comm. 2004). A citrus producer at the Hollywood market voiced her frustration at the fact that WIC participants can only purchase food from farmers' markets for a limited amount of time each year, saying that it is 'as though they are teaching women and children that they should only be able to eat fresh fruits and vegetables for half of the year'. In regions such as Southern California where fresh produce can be grown and harvested throughout the year, it makes little sense to offer federal nutrition benefits to WIC recipients for such a limited amount of time. Instead of the 'win-win' situation that is created when both the consumer can utilize WIC FMNP coupons and the producer can earn a higher profit (Schumacher et.al. 1992), it is a seemingly no-win situation for eligible women, infants and children as well as producers when the WIC FMNP coupons are not able to be redeemed in farmers' markets during the months when the benefits are not offered. The implementation of a year-round WIC FMNP would be

highly advantageous to both WIC consumers as well as farmers' market producers. Currently, groups such as the marketing operator SEE-LA are working to help change this legislation and encourage WIC FMNP coupons to be made available to recipients throughout the entire year.

The amount of revenue that each producer generated from food stamp and WIC FMNP coupons each market day varied greatly, and many producers said that they have made a significantly higher profit during the months when WIC FMNP coupons are allocated and redeemed. During the months in which the interviews were conducted (February and March of 2004), WIC FMNP recipients had not yet been given their nutrition benefits for the spring. The fact that 10 producers (26%) reported that they are currently making no money on food stamps and WIC FMNP coupons combined reflects the fact that no WIC FMNP coupons were being redeemed during the time of the surveys. Many of the producers were optimistic about the potential rise in sales over the next few months as recipients begin to receive their benefits and then utilize the coupons at the farmers' market. Even for producers that were generating some revenue from WIC FMNP and food stamps, the numbers were discouraging: 7, or 18% of producers stated that they were currently making between \$2-\$10 each market day from food stamps and WIC FMNP coupons combined, and 9, or 24% of producers were generating between \$10-\$20. Only 2 of the 38 producers surveyed said that they were making more than \$150 from food stamp and WIC FMNP sales each market day.

Given the low numbers for revenue generated from WIC FMNP and food stamps combined, food stamps and WIC FMNP coupons consequently comprise a small percentage of the majority of farmers' total sales: 29 producers, or fully 76%, said that WIC FMNP and food stamp coupon redemptions accounted for only 0%-10% of their total sales. And although three

of the four markets surveyed are considered to be ‘low-income’, only 3 producers (8%) said that food nutrition benefits accounted for %25-%50 of their sales, and no producers said that 50%-%75 of their sales were from WIC FMNP and food stamps. These statistics further emphasize the need for the WIC FMNP to be offered throughout the year, yet they also may indicate that many people who are eligible for food nutrition benefits are not using gaining benefits or utilizing their benefits in the market. In the Central Avenue market, for example, market managers and other involved persons are concerned about the fact that there are little to no food stamps being redeemed by low-income shoppers, given that the area the market is located in an area where a high concentration of people are eligible to receive food nutrition benefits.

The USDA data has also shown that less than one-quarter of food stamp recipients reported shopping at a farmers’ market (Kantor 2001). Clearly, greater outreach needs to be done in order to boost the amount of food nutrition benefits that are redeemed in farmers’ markets. When asked about what additional policies could be established in order to promote the use of food stamps, EBT and WIC FMNP coupons in farmers’ markets, some producers said that internet promotion, newspaper advertisements, and flyers would be helpful (3, 2, and 2 producers, respectively), but most producers said that the best way to increase the number of food nutrition benefits redeemed in farmers’ markets is to advertise at WIC and food stamp offices. Studies have indicated that one of the most common ways in which consumers found out about a particular farmers’ market was through advertising at the local WIC office (*Improving and Facilitating a Farmers’ Market in a Low-Income Neighborhood* 2002), further emphasizing the opportunities for advertising that exist at these venues. And though all 4

markets surveyed for the purposes of this study already utilize these resources, the belief that many recipients chose not to read the information that is given them at the food stamp or WIC office is a factor that makes advertising a greater challenge. New methods of advertising could be employed in order to attract a higher number of food stamp and WIC FMNP recipients to farmers' markets; one idea would be to have a representative of a particular farmers' market visit the local WIC and food stamp offices in order to talk to recipients one-on-one. The representative could further encourage the use of WIC FMNP and food stamps at farmers' markets by creating extra incentives (such as coupons to be redeemed for a price reduction) for shopping at the market.

Greater community outreach in general was thought to be a good method of advertising by 12 of the producers surveyed, and this broad category of advertising may include methods such as creating flyers and banners, using the media (internet, radio, newspaper, television), and other outreach activities at the markets which could include a market newsletter, nutrition information and cooking classes offered at the markets, and inviting other community groups to set up their own information booths at the market (*Improving and Facilitating a Farmers' Market in a Low-Income Neighborhood* 2002). Indeed, working in conjunction with community services that are already well established within the community (such as churches) have been shown to help boost farmers' market sales. Hugo Ortiz of the Central Avenue market has said that a larger marketing and outreach strategy has been proposed for the struggling Central Ave market, including flyers and presentations at local schools, churches, and community institutions. However, Ortiz also said that the market currently does not 'have the funds to support the marketing approach necessary to compete', illustrating the need for greater funding

to be allocated for the promotion of farmers' markets.

When producers were asked what the greatest benefits are of the new Electronic Benefit Transfer (EBT) system in Los Angeles County, it was shown that 13 of those who were familiar with the system believed that it was easier to use than paper food stamps and WIC FMNP coupons, 12 producers thought that the payment from the customer was more secure, and 15 thought that fraud would be reduced with the utilization of the new system. More importantly, however, 16 of the producers (42%) had either never heard about EBT or had never utilized the new technology, and therefore could not answer what they thought the benefits and barriers were of the electronic system.

When those producers who knew about or were experienced with EBT were asked about the barriers of the new system a range of issues were named (such as inconvenience issues for both producers and consumers and the potential for electronic difficulties), fully 24 producers, or 63%, said that a lack of knowledge and experience (which extends to both consumers and producers) with using EBT was a major obstacle to the utilization of the new system. Additionally, the fact that nearly half of producers' surveyed were unfamiliar with EBT technology (and many also didn't realize that the technology would be utilized in farmers' markets within the next couple of months) is a highly relevant finding of this study. The general lack of awareness regarding the transition to EBT in itself may prove to be one of the greatest barriers to a smooth transition to EBT in the state of California. Because the state's farmers' markets all must necessarily convert to EBT by September of 2004, it is critical that market managers and other supporting parties act quickly in the education of both producers and consumers.

One way to ensure that food stamp recipients are informed about EBT and confident in their ability to easily utilize the new technology would be to make the forums held mandatory instead of optional. For example, before a food stamp recipient were to receive his or her Federal nutrition benefits he or she would need to attend one of the forums offered in Los Angeles County on how to use the new card. After the person had successfully completed a training session, his or her card would be activated and ready for use. Additionally, farmers' markets located in Los Angeles County would be wise to take the advice of Benefit Access Coordinator Carolyn Thomkins and engage in more marketing and outreach activities regarding EBT in order to increase EBT sales. Maybe all farmers' markets currently participating in EBT could offer extra incentives for consumers to utilize their new card, such as a market day event in which all customers using EBT would be able to receive an additional \$1 price reduction on their EBT purchases. Other advertising methods such as the aforementioned ways in which to boost food stamp and WIC FMNP sales at farmers' markets (including the media, a market newsletter, and other outreach activities) would also be useful to employ in promotion and education about EBT in low-income farmers' markets.

It is argued that producer knowledge regarding the utilization of EBT is not as critical as consumer knowledge about the new technology, which may or may not be true depending upon what type of EBT technology is being utilized. In the case of the scrip system, there are indications that the transition is thought to be easier for producers than consumers because the producers simply have to deal with an alternative form of currency that they can either cash out or put toward the payment of their stall fee at the end of the market day. However, in the case that California chooses to increase its funding and promotion of an EBT option such as the Point

of Sale technology where each producer is individually outfitted with a device, it would be detrimental for producers to not have a basic knowledge about EBT. More importantly, the fact that such a high percentage of producers didn't know that the market/s they sold in were in the process of a major transition indicates a greater issue: a significant lack of communication that exists between those in charge of farmers' market operation and those who sell their products/produce in L.A. County's farmers' markets. Failing to inform and educate producers about imminent changes that are happening within California's farmers' markets may ultimately prove to be highly detrimental, and producers need to be made aware of such changes in order to prepare themselves for a potential change in sales. Therefore, even if producers themselves do not need to be directly involved in the processes of using EBT technology, market managers should be required to provide producers with basic EBT information sessions in order to fairly communicate to them what to expect with the transition to EBT.

As California is currently undergoing the transition from paper Federal nutrition benefits to the Electronic Benefits Transfer system, whether EBT sales in Los Angeles County's low-income farmers' markets decline, remain steady, or increase in the near future is still to be determined. However, it is believed that food stamp sales in these farmers' markets can not only be maintained at their current pre-EBT level, but can actually be *increased*; and this goal can only be achieved with a combination of market manager participation and effective consumer, producer, and community outreach and education.

Conclusion

The findings from this study on low-income farmers' markets in Los Angeles County

have helped to strengthen the argument that farmers' markets are beneficial to all parties involved, including the producers who sell their produce/products at low-income farmers' markets, the communities that are able to host these farmers' markets, and most importantly, the disproportionately under-served consumers who reside in these low-income areas. Because farmers' markets have the potential to revitalize communities as well as provide economically disadvantaged residents with greater health and overall food security, the increase in support for these direct-to-consumer outlets can be viewed as a necessary and significant step toward a more equitable society.

The information gathered from the producer surveys as well as the interviews with market managers at the Adams and Vermont, Central Avenue, Hollywood, and Hollywood-Sears farmers' markets bring to light many important issues that exist within these markets in Los Angeles County. Most importantly, it has been shown that the majority of producers don't think that there are major barriers to selling their produce/products in low-income areas, or to the acceptance of Federal nutrition benefits in these markets. Instead of listing many drawbacks or barriers, most producers instead emphasized the many advantageous aspects of selling at a low-income farmers' market, such as the personal contact they have with customers, their ability to sell to people of all income levels and make a profit, and the fact that they are helping to provide low-income communities with increased access to fresh food. These findings bode well for the future of farmers' markets in low-income communities, for they indicate that persons involved in farmers' markets in low-income areas have a greater social commitment, and that the few obstacles presented can feasibly be overcome.

As the number of farmers' markets within California as well as the nation continues to

rise, it will be critical that the people and communities most in need of the benefits that farmers' markets have to offer are not neglected. In order to help ensure that the needs of these low-income residents and neighborhoods are met, necessary steps need to be taken and certain policies need to be implemented in order to strengthen farmers' markets in low-income communities. The following recommendations offer suggestions on ways in which to increase food security, bolster producer participation, encourage consumer patronage, and facilitate the implementation of the Electronic Benefits Transfer system within low-income farmers' markets

Recommendations

Increasing Food Security

Clearly, more funding needs to be allocated for Federal nutrition programs that have been implemented with the goal of alleviating food insecurity in the United States; in the case of consumers that shop at farmers' markets, it would be most beneficial increase the funding for both the Federal Food Stamp Program and the Women, Infant and Children Farmers' Market Nutrition Program (WIC FMNP).

Given the fact that in some areas as much as 50% of eligible persons are not currently applying for benefits through the Food Stamp Program, it is important to increase outreach activities in order to get a greater percentage of people the nutritional benefits that they are lacking. Additionally, it should be made mandatory instead of optional for individual states to provide nutrition education for their food stamp recipients, and funding should be made available for this outreach and education.

In terms of the WIC FMNP program, it is clear that the benefits offered to the women,

infants, and child recipients should be offered year-round instead of for half of the year, similarly to the regular WIC program. Federal legislation regarding the WIC FMNP will first need to be altered in order to adopt this policy recommendation, and work is currently being done on pushing through this important piece of legislation. If the WIC FMNP were to be made a year-round program, funding for the program would also necessarily have to increase as a result.

Bolstering Producer Participation

Although most producers surveyed for the purposes of this study did not feel as though there were any major barriers to selling their produce/products in low-income farmers' markets, it was shown that the biggest potential disadvantage to selling at these markets was not grossing as high of a profit. Producer participation in low-income farmers' markets is an absolute necessity, for more producers selling at a particular market means a greater diversity in products, thereby drawing a larger number of customers. Therefore, the creation of incentives in order to encourage producer participation will likely result in the strengthening of low-income markets.

One idea to increase producers' willingness to sell at a low-income market would be to subsidize the stall fee that each producer has to pay to the market for renting the stall space. At the SEE-LA markets (the Hollywood, Hollywood-Sears, and Central Avenue markets) the stall fees are 6.5% of each producers' daily sales, and at the Southland Adams and Vermont market 6% of sales are taken for the daily market fee. Because it is currently the case that a producer has to pay the same percentage of his or her total sales whether they are selling at the highly

successful, mixed-income Hollywood market or the struggling, low-income Central Avenue market, it seems as though few incentives exist for a producer to choose to sell at the low-income market. Therefore, it is recommended that the stall fee be decreased in these low-income markets (possibly to 5% of total sales) in order to encourage a higher level of producer participation where it is needed the most. The SEE-LA community development corporation and the Southland Farmers' Market Association may even be able to create this recommended subsidy themselves by adjusting the stall fees in their more successful markets; for example, the stall fee at the Hollywood market could be boosted to 7.5% in order to make up for SEE-LA's potential loss in stall fee profits at the Central Avenue and Hollywood-Sears farmers' markets.

Encouraging Consumer Patronage

There are many obstacles that prevent consumers in the United States from accessing fresh food, and finding ways in which to facilitate low-income persons' access to farmers' markets is necessary in order to improve their food security and health.

The development of a transportation system in order to assist those without cars to have easier access to farmers' markets is an idea that has been promoted in other studies (Fisher 1999). In Los Angeles County such a system would undoubtedly be beneficial to the poor, many of them who do not own cars and therefore are forced to rely on the city's public transportation. Farmers' markets within L.A. County would be wise to work with community groups that are interested in working on social justice and/or transportation issues in Los Angeles in order to help develop a transportation system that would help the poor have increased access to farmers' markets. Additionally, it is critical that these markets are open on days and at times that work for the people they are catering to, and that the transportation be made easily accessible at these days

and times as well.

Greater promotion in low-income communities of farmers' markets' ability to accept Federal nutrition benefits will also help to increase consumer patronage at farmers' markets. The media can be utilized for the purposes of advertising (including the internet, television, and the radio) as well as advertising through newspapers, market publications, banners, and flyers. Most producers thought that advertising at local WIC and food stamp offices would be most effective in informing the community's low-income residents about the local farmers' markets, emphasizing that even greater efforts need to be made toward advertising at these locations. And because it has been argued that many Federal nutrition benefit recipients are not likely to read the information provided to them at the WIC and food stamp offices, it is recommended that local farmers' markets periodically utilize community outreach that would involve a market representative visiting these offices in order to talk to these recipients in person (and hopefully, to recruit these Federal nutrition benefits recipients as future farmers' market customers).

And just as monetary incentives would likely increase producer participation at low-income farmers' markets, so these types of incentives would also result in a greater number of customers shopping at these markets. Having promotions that offer low-income consumers an opportunity to buy farmers' market food at a discount (such as \$1 coupons to be spent on fresh produce at the market) could be offered in the local paper or at the WIC and food stamp offices, thereby encouraging more consumers to shop at their local farmers' market.

Facilitation of the Implementation of EBT

As EBT is currently being implemented in California's farmers' markets, the surveys conducted for the purposes of this study indicate that the greatest potential problem to the state's

smooth implementation from paper to electronic Federal nutrition benefits is that both producers and consumers are generally unaware about this immanent change.

In terms of consumer education, it should be made mandatory by the Food Stamp Program that each Federal nutrition benefit recipient/future EBT card holder attend one of the forums held in Los Angeles County regarding the technological utilization of EBT as well as places where the card can be used to purchase food. This would be doubly beneficial, for mandatory classes could increase card holders' ability and confidence about utilizing the new technology as well as providing a means of communicating the fact that these benefits can also be utilized in farmers' markets.

Additionally, just as a farmers' market can bolster consumer participation by offering monetary incentives, so this method of advertising can be employed in order to encourage consumers to utilize the new EBT system. One strategy may be for market managers to hold an educational EBT event at the market for consumers to participate in, with the incentive of receiving a complimentary \$1 scrip token for using an EBT card to purchase food at the market. If consumers could be provided with an incentive to utilize their EBT cards for the first time, they will quickly learn how easy it is and thus be more likely to use their EBT cards at farmers' markets in the future.

And even if producers will not be directly dealing with the technological aspect of EBT transactions (such as when a scrip system is being used at the market), it should regardless be made mandatory that market managers provide a basic education of EBT for their producers. By informing producers what to expect from the transition to EBT, market managers will help illustrate to producers (many that may be Spanish-speaking and unfamiliar with computer

technologies) that they are an integral part of the market's successful operation.

The Need for Further Research

Over the next few months leading up to the complete implementation of EBT in California by September 2004, it is still uncertain what will happen to food stamp sales in low-income farmers' markets. More research therefore should be conducted during this transitional period in order to determine how California's markets have undergone this significant transition. Additionally, it is suggested that further research be conducted on what can be done in order to boost EBT sales, as well as on what can generally be done in order to strengthen low-income farmers' markets in Los Angeles County, the state of California, and the nation as a whole.

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Appendix E**Guidelines for Successful Low-Income Farmers' Market Operation**

(Taken from Andy Fisher of the Community Food Security Coalition's *Hot Peppers and Parking Lot Peaches: Evaluating Farmers' Markets in Low Income Communities*, January 1999)

- 1) Low-income markets generally need to be subsidized.
- 2) Community Organizing is an essential component of any successful market in a low-income community.
- 3) Low-income markets should tailor their product mix to focus on basic foods at affordable prices.
- 4) Farmers should consider hiring sales staff from the neighborhood.
- 5) Transportation needs of consumers may prove to be a significant barrier for market operation,
and therefore the creation of transit programs may be necessary in order to help shoppers without transportation to have improved access to farmers' markets.

Farmers' Markets Participating in EBT in Los Angeles County
as of March 2004

(Carolyn Thompkins, EBT Control Center 2004)

Adams and Vermont Farmers' Market
Alhambra Farmers' Market
Burbank Farmers' Market
Central Avenue Farmers' Market
Cerritos Farmers' Market
Gardena Farmers' Market
Gardena La Salle Farmers' Market
Hollywood Farmers' Market
Hollywood-Sears Farmers' Market
Huntington Park Farmers' Market
La Cienega Farmers' Market
Long Beach Downtown Farmers' Market
Long Beach Marina Farmers' Market
Pasadena Villa Farmers' Market
Pasadena Victory Park Market
Signal Hill Farmers' Market
Santa Monica Farmers' Market
Santa Monica Main Street Farmers' Market
Santa Monica Organic Farmers' Market
Santa Monica Pico Farmers' Market
Venice Farmers' Market
Whittier Uptown Farmers' Market

**California Farmers' Markets Using Scrip and a Central POS device to
Accept EBT Cards as of 3/25/04**

(Penny Leff: The Ecology Center 2004)

Alameda County

Tuesdays

Alameda, 9:30 am – 1 pm

Taylor & Webster Streets (Jan – Dec)

800-949-3276

Berkeley, 2 – 7 pm

Derby St & Martin Luther King, Jr. Way (Jan – Dec)

510-548-3333

Thursdays

Berkeley, 2 pm – 7 pm

Shattuck Ave. & Rose St. (May – Dec)

510-548-3333

Livermore, 4 – 8 pm

Carnegie Park, Third & J Sts. (May – Oct)

800-949-3276

Fridays

Kaiser Hospital, 10 am – 2 pm

3801 Howe St. (Jan – Dec)

800-949-3276

Saturdays

Berkeley, 10 am – 3 pm

Center St. & Martin Luther King, Jr. Way (Jan – Dec)

510-548-3333

Pleasanton, 9 am – 1 pm

West Angela & Main Sts. (Jan – Dec)

800-949-3276

Union City, 9 am – 2 pm

Smith & Watkins Streets (May – Nov)

800-949-3276

West Oakland (Mandalla Market) 10 am – 2 pm

5 th Street & Mandalla Parkway (Jan – Dec)

510-534-7657

Contra Costa County

Tuesdays

Concord, 10 am – 2 pm
 Todos Santos Plaza, Willow Pass & Grant (Jan – Dec)
 800-949-3276

Thursdays

Concord, 4 pm – 8 pm
 Todos Santos Plaza, Willow Pass & Grant (May – Oct)
 800-949-3276
 Martinez, 10 am – 2 pm
 Court & Main (May – Nov)
 800-949-3276

Saturdays

Danville, 9 am – 1 pm
 Downtown, Railroad & Prospect (Jan – Dec)
 800-949-3276
 Pinole, 9 am – 1 pm
 City Hall Parking Lot, Plum & Prune (May – Nov)
 800-949-3276

Sundays

Danville, 9 am – 1 pm
 Blackhawk (Jan – Dec)
 800-949-3276

Humboldt County

Tuesdays

Arcata, 3 – 6 pm
 Wildberries Marketplace, 13th & G St. (June – Oct)
 707-445-3166
 Eureka, 10 am – 1 pm
 Old Town Gazebo, 2nd & F St. (June – Oct)
 707-445-3166

Thursdays

Eureka, 10 am – 1 pm
 Henderson Center, Henderson & F St. (June – Oct)
 707-445-3166
 McKinleyville, 3 – 6 pm
 Safeway, Central Ave. (June – Oct)
 707-445-3166

Saturdays

Arcata, 9 am – 2 pm
 Arcata Plaza (April – Nov)
 707-445-3166

Los Angeles County

Tuesday

Pasadena Villa Park Farmers' Market, 8:30 am – 12:30 pm
 363 E. Villa Street at Garfield
 (626) 449-0179

Wednesday

Adams & Vermont Farmers' Market, 2 pm – 5 pm
 1432 W. Adams Street at St. Agnes Church
 (323) 777-1755

Gardena Farmers' Market, 7:30 am – 11:30 am
 1670 W. 162nd & La Salle
 (323) 777-1755

Hollywood-Sears Farmers' Market, 12 pm – 5:30 pm
 Santa Monica Boulevard at Wilton in Sears parking lot
 (323) 463-3171

Huntington Park Farmers' Market, 9:30 am – 1:30 pm
 Bissell Street & E. Florence Avenue
 (866) GOOD-VEG

Santa Monica Farmers' Market, 9 am – 2 pm
 3rd Street at Arizona Avenue
 (310) 458-8712

Thursday

La Cienega Farmers' Market, 3 pm – 7 pm
 .La Cienega Boulevard & 18th Street
 (310) 398-1786

Signal Hill Farmers' Market, 3 pm – 7 pm Nov-Mar, 3 pm-8 pm Apr-Oct
 Walnut Avenue & 27th Street
 (866) GOOD-VEG

Friday

Long Beach Downtown Farmers' Market, 10 am – 4 pm
 Broadway & Promenade North
 (866) GOOD-VEG

Venice Farmers' Market, 7 am – 11 am
 Venice Way & Venice Boulevard
 (310) 399-6690

Whittier Uptown Farmers' Market, 8 am – 1 pm
 Bailey & Greenleaf

(714) 526-5814

Saturday

- Burbank Farmers' Market, 8 am – 12:30 pm
Olive at Glen Oaks
(626) 308-0457
- Central Avenue Farmers' Market, 9 am – 1 pm
Central Avenue & 43rd Street
(323) 463-3171
- Cerritos Farmers' Market, 8 am – 12 pm
Towne Center & Park Plaza Drives
(866) GOOD-VEG
- Gardena Farmers' Market, 6:30 am – 12 pm
13000 S. Van Ness (Hollypark Church)
(323) 777-1755
- Pasadena Victory Park, 8:30 AM - 12:30 PM
Sierra Madre Boulevard at Paloma
(626) 449-0179
- Santa Monica Organic Farmers' Market, 8:30 am – 1 pm
3rd Street at Arizona Avenue
(310) 458-8712

- Santa Monica Pico Farmers' Market, 8 am – 1 pm
Airport Avenue & Donald Douglas Loop
(310) 458-8712

Sunday

- Alhambra Farmers' Market, 8:30 am – 1 pm
Monterey & E. Bay State Streets
(626) 570-5081
- Hollywood Farmers' Market, 8 am – 1 pm
Ivar & Selma Avenues
(323) 463-3171
- Long Beach Marina Farmers' Market, 9 am – 1 pm
Marina Drive south of 2nd Street
(866) GOOD-VEG
- Santa Monica Main Street Farmers' Market, 9:30 am – 1 pm
2640 Main Street at Ocean Park Blvd.
(310) 458-8712

Monterey County

Sundays

- Marina (Everybody's Harvest), 10 am – 3 pm
280 Reservation Rd (across from Marina P.O.) (May – Nov)
831- 384-6961

Orange County

Wednesdays

Fullerton, 8 am – 2 pm
 Woodcrest Park, 450 W. Orangethorpe Ave (Jan – Dec)
 714-871-5304

San Francisco County

Tuesdays

Ferry Plaza, 10 am – 2 pm
 Ferry Building, Embarcadero & Market St. (Jan – Dec)
 415-291-3276

Thursdays

Ferry Plaza, 10 am – 2 pm
 Ferry Building, Embarcadero & Market St (Jan – Dec)
 415-291-3276

Fridays

Kaiser Hospital, 11 am – 4 pm
 Kaiser Commons Area, 2190 O'Farrell St (Jan – Dec)
 925-825-9090

Saturdays

Ferry Plaza, 8 am – 2 pm
 Ferry Building, Embarcadero & Market St. (Jan – Dec)
 415-291-3276
 Fillmore, 9 am – 1 pm
 Fillmore & Eddy St (May – Nov)
 925-825-9090

San Mateo County

Wednesdays

San Mateo, 9 am – 1 pm
 College of San Mateo, W. Hillsdale & CSM Drive (Jan – Dec)
 800-949-3276

Saturdays

San Mateo, 9 am – 1 pm
 College of San Mateo, W. Hillsdale & CSM Drive (Jan – Dec)
 800-949-3276

Sundays

Belmont, 9 am – 1 pm
 CalTrans lot, El Camino Real & O'Neill (May – Nov)

800-949-3276

Santa Clara County

Wednesdays

Milpitas, 10 am – 2 pm

Mervyn's lot, Calaveras & Town Center Dr. (Jan – Dec)

800-949-3276

Santana Row, 9 am – 1 pm

Stevens Creek & Winchester Blvd (April – Oct)

800-949-3276

Fridays

Cupertino, 9 am – 1 pm

Vallco Fashion Park Mall (Jan – Nov)

800-949-3276

San Jose, downtown, 10 am – 2 pm

San Pedro Square (May – Dec)

800-949-3276

Sundays

Milpitas, 9 am – 1 pm

Mervyn's lot, Calaveras & Town Center Dr. (Jan – Dec)

800-949-3276

Santa Cruz County

Wednesdays

Santa Cruz, 2:30 – 6:30 pm

Lincoln & Center St (Jan – Dec)

831-454-0566

Fridays

Watsonville, 3 – 7 pm

Peck & Main St. (Jan – Dec)

831-726-7266

Sundays

Santa Cruz, 10 am – 2 pm

East Cliff Shopping Center, 15th & E. Cliff (May – Oct)

831-454-0566

Solano County

Wednesdays

Vallejo, 4 – 8 pm

Georgia & Marin (June – Sept)

800-949-3276

Saturdays

Vallejo, 9 am – 1 pm

Georgia & Marin (Jan – Dec)
800-949-3276