

# Market Thymes

A Publication of the Pacific Coast Farmers' Market Association

Special Edition 2008

## Innovative Study Examines Farmers' Market Shoppers

In September 2006, the Pacific Coast Farmers' Market Association (PCFMA) was awarded a grant from the USDA Agricultural Marketing Service under the Farmers' Market Promotion Program for a project entitled "Growing Customers at the Farmers' Market: Testing Marketing and Advertising Strategies for Increasing Customer Visits and Producer Sales."

The Growing Customers Project is designed to help farmers' market operators develop and implement more effective and cost-efficient promotional activities by testing different marketing, outreach and advertising strategies in the farmers' markets operated by PCFMA in the San Francisco Bay Area. The Project will test the strategies to assess which are most effective in bringing customers to farmers' markets, encouraging repeat customer visits, and increasing customer purchases.

The Project consists of five phases – collection of baseline data; development of marketing, outreach and advertising strategies; implementation of strategies; collection of follow-up data; and distribution of Project lessons to peer organizations.

This publication, completed in January 2008, provides a summary of the data from the baseline surveys. From January through October, 2008, PCFMA will complete the remaining phases, with final completion of the project by December, 2008.

The collection of baseline data was completed through customer intercept surveys in eight certified farmers' markets operated by PCFMA. The markets included in the survey were in Alameda on both Tuesday morning and Thursday evening, Brentwood on Saturday morning, Cupertino Square on Friday morning, Danville on Saturday morning, Fairfield on Thursday evening, San Francisco's Fillmore district on Saturday morning, and Oakland's Jack London Square on Sunday morning.

Over the course of 19 days, 2070 customer intercept surveys were completed. Estimated crowd counts provided by the farmers' market managers for the days on which the surveys were conducted suggest a 12.3% response rate across the eight farmers' markets. The crowd counts, like the surveys, reflect counts of adult shoppers.

The survey instrument used in each farmers' market was virtually identical to allow pooling and comparisons of data. It was composed of 18 questions concerning customer behavior, one concerning marketing, five concerning demographics and one which asked for the respondent's home zip code. The zip code question was used to pool demographic data for comparison to 2000 US Census data reported by zip code.

In each farmers' market, the surveys were conducted by PCFMA staff and staff from a temporary agency. All survey takers were instructed to approach all adult shoppers and ask that they complete the survey. Shoppers who agreed to participate were handed a clipboard with a survey form and pen. In rare instances, the respondent refused to complete the survey form him/herself and the survey taker asked the questions verbally, and then recorded the

responses. As an incentive to participate, each survey included a \$2 coupon that the respondent could use towards any purchase in the farmers' market.

The survey form was available in English and Spanish. The vast majority of those responding utilized the English form so it is likely that those without English proficiency were more likely to have a higher refusal rate and be undercounted. As survey forms were not available in any Asian languages, this would most likely impact Asian shoppers. Survey takers also reported that Asian customers appeared to be more likely than other shoppers to refuse the survey, possibly contributing to the observed under-representation of Asian shoppers.

Those who were shopping together were allowed to complete separate surveys, though in many instances one member of the group would suggest that the other complete the survey. Many of the survey takers reported that when a man and woman were shopping together and only one was willing to complete the survey, it was most often the female shopper who did so. Results from the surveys reinforce this observation. The responses to the gender question show that 72.7% of the responses were female, though observational evidence in the market suggests more equal numbers of men and women in the market, though female shoppers did appear to outnumber male shoppers.



# Organically-Grown Produce Tops Shoppers' Lists

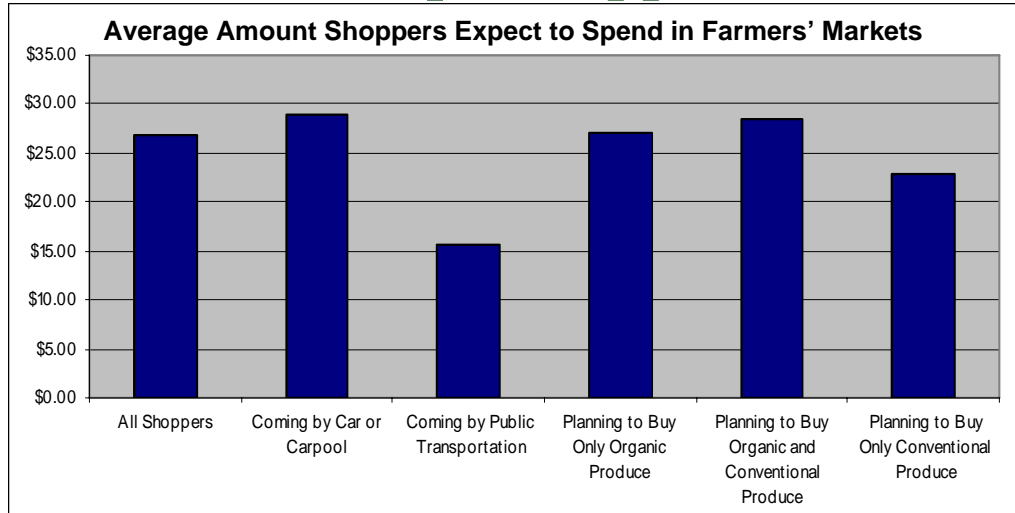
The majority of farmers' market shoppers responding to PCFMA's 2007 customer intercept survey reported they planned to buy organic produce. Overall, 76.1% of shoppers said they planned to buy organics. It was the top choice in all eight markets studied.

Conventionally-grown produce was the second choice at 49.5%. In each market the percentage of shoppers reporting that they planned to buy organics was at least 15 points higher than the percentage who said they planned to buy conventional produce.

This pattern was seen in the Alameda Thursday Farmers' Market – organics outpaced conventional at 70.4% vs. 45.2% – which had organic vegetables but no organic fruits and at the Fairfield Farmers' Market – organics outpaced conventional at 79.0% vs. 48.2% – which had organic strawberries but no other organic fruits or vegetables.

The nature of the survey, with analysis taking place after the last survey has been collected, does not allow for follow-up questions. The disconnect between what customers say they plan to buy that day, and what is known to be in the market that day, could be due to any one of a number reasons.

Some shoppers may assume that everything sold in the farmers' market is organic when that is usually not the case. Consumers'



confusion may be due to a lack of understanding of what it means to be "certified organic" or customers may simply be satisfied that products they choose to buy in the farmers' market may comply with the principles of organics, such as no chemical pesticides, but do have formal organic certification.

After fresh produce, the next three products that were most likely to be on consumers' shopping lists were bread, 25.0%; flowers, 22.3%; and prepared foods, 12.7%.

In order to learn which products shoppers would like to see added to the farmers' market, shoppers were asked what they would buy if it were available. Organically-grown produce was the top choice of items shoppers would buy, at 59.0%. The next three products selected were bread, 39.6%; conventionally-grown

produce, 39.4%; and cheese, 36.6%. Olive oil was the least likely to be selected at 5.4%.

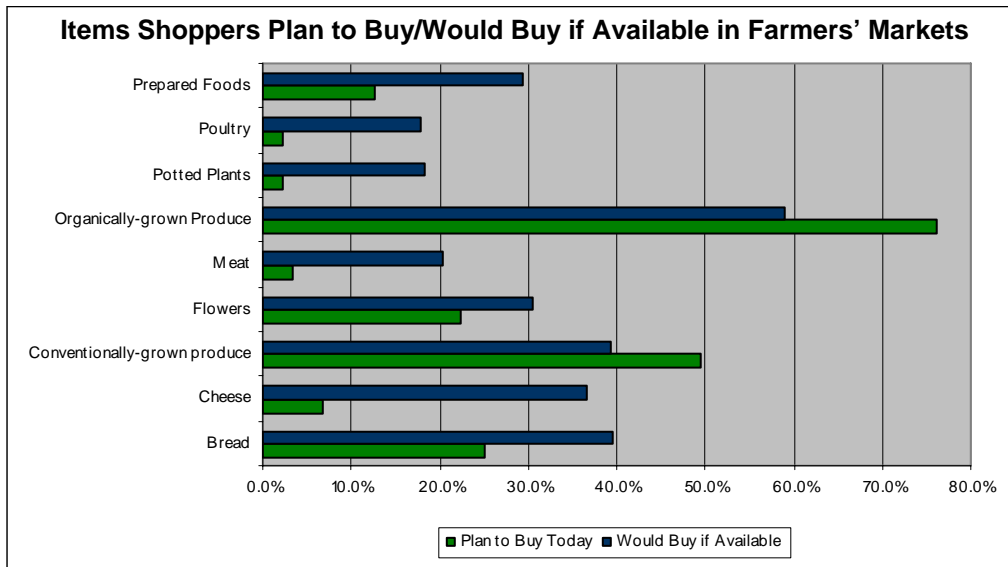
Overall, the average amount that farmers' market shoppers expected to spend in the market was \$26.93. The highest average amount was found in the Danville Farmers' Market – \$34.27 – while the lowest average amount was found in the Fairfield Farmers' Market – \$11.79.

In the two days of the Alameda Farmers' Market, those shopping in Tuesday morning reported a higher average amount of spending than those shopping the Thursday evening market. The average amount on Tuesday was \$25.96 versus \$21.61 on Thursday.

The amount that a shopper expected to spend is correlated with the products the shopper planned to buy. When examining just those shoppers that either planned to buy just organically-grown or just conventionally-grown product, those that planned to buy organically-grown produce tended to be planning to spend a larger amount of money – \$27.17 versus \$22.80.

This suggests the price premium typically found on organically-grown produce may lead shoppers to spend more money rather than leading them to buy less in order to spend a smaller amount. Those that planned to buy both organic and conventional produce planned to spend even more—\$28.57 –

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# Most Shoppers Willing to Pay More for Locally Grown

California's certified farmers' markets are "buy local" marketplaces. By state law, the fresh product sold in a *certified* farmers' market can only be sold by the farmer that grew the crop and only farmers in California can sell their products in the farmers' market.

When shoppers were asked to select the amount they were willing to pay for a locally-grown item in the farmers' market that would cost \$1.00 in the grocery store, 57.5% of market shoppers reported they were willing to pay more than \$1.00, while 25.1% were willing to pay less than \$1.00.

The highest percentage of those willing to pay more were in the Danville Farmers' Market, 67.4% and the Jack London Square Farmers' Market, 66.4%. The lowest was in the Fairfield Farmers' Market at 32.3%. This was the only farmers' market studied in which the majority of shoppers did not report that they were willing to pay more than in the grocery store.

On average, shoppers were willing to pay 20¢ more for locally-grown products than in the grocery store. The highest amount shoppers were willing to pay was in the Jack London Square Farmers' Market where the average amount was \$1.29 and the lowest amount shoppers were willing to pay was in the Fairfield Farmers' Market where the average amount shoppers were willing to spend was \$1.02.

The amount that shoppers were willing to spend was also examined for subgroups of shoppers. For the purpose of this analysis, the eight options offered on the survey were collapsed into three groups – those willing to pay less (50¢ or 75¢ for an item costing \$1.00 in the grocery store), those willing to pay about the same (90¢ to \$1.10) and those willing to pay more (\$1.50 to \$2.00).

Using this three-part scale, 42.1% of shoppers said they were willing to pay more and 21.0% were willing to

pay less. Shoppers whose shopping lists only included organically-grown produce were more likely to be willing to pay more, with 42.8% willing to pay more than in the grocery store. Of those whose shopping lists only included conventionally-grown produce, only 32.2% were willing to pay more than in the grocery store.

White shoppers were most likely to be willing to pay more with 48.3% willing to pay more. African-American shoppers were least likely to be willing to pay more. Only 27.9% said they were willing to pay more while 35.4% said they were willing to pay less than in the grocery store.

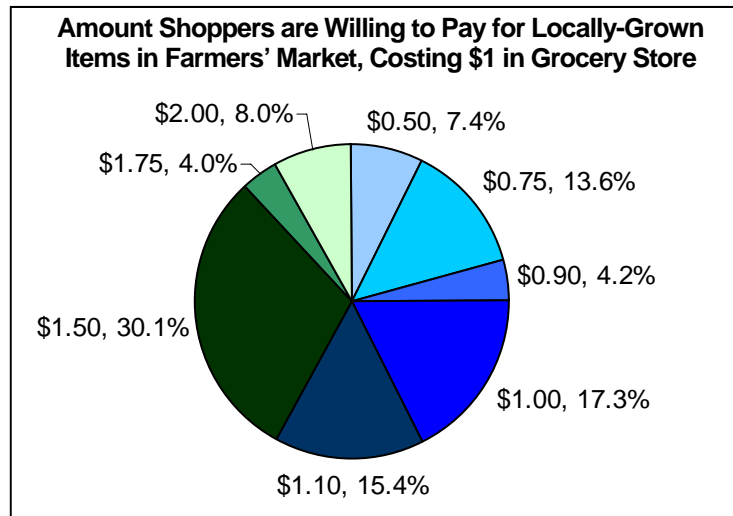
The percentage of shoppers willing to pay more in the farmers' market than in the grocery store increased as their household income increased. The lowest percentage of those willing to pay more – 32.8% – was found among those with household incomes under \$25,000 while the

highest amount – 51.0% – was found among those with incomes between \$150,000 and \$200,000.

But the percentage of those willing to pay less than in the grocery store did not simply decrease as household income increased. Instead, there was variation among income groups between those willing to pay less than in the grocery store and those willing to pay the same.

About one quarter of those with incomes between \$25,000 and \$35,000 and those with incomes between \$75,000 and \$100,000 are willing to pay less, compared to less than one fifth of those with incomes between \$50,000 and \$75,000.

This suggests that for shoppers with lower incomes, there are factors in addition to economics that drive the shoppers' decisions to purchase locally-grown products.



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suggesting that for this group, buying local in the farmers' market might be more important than buying organic.

The amount that shoppers planned to spend in the farmers' market also varied when analyzed in conjunction with the shopper's transportation to the market.

The highest average amount spent in the market – \$33.31 – was

reported by those who said they carpoled, followed by \$28.59 for those who drove to market. The combined average for these two responses was \$28.87. The lowest average amount to spend – \$15.75 – was reported by those who took public transportation.

Market shoppers were also asked what stopped them from buying more that day and one of the nine potential responses was "Too much to carry." This selection was most

often selected by those who traveled to market by bicycle – 34.4% – followed by those who traveled by public transportation – 24.6%.

Those who said they carpoled were more likely than those who said they drove to indicate that they did not buy more because it would be too much to carry – 15.4% versus 9.4% – perhaps an indication of limited space in the vehicle when there are shoppers purchasing for more than one household.

# Farmers' Market Shoppers Reflect Community Demographics... But Surveys Reveal Some Gaps

The customer intercept surveys conducted by PCFMA reveal that farmers' market shoppers are a reflection of their community—with a diversity of ages and ethnicities represented, and varied amounts of educational attainment and household income.

But certain subgroups — such as shoppers under age 35, shoppers with household incomes of less than \$25,000 and ethnic minorities — were a smaller percentage of farmers' market shoppers than their percentage of the general population.

However, there were notable exceptions to this pattern that suggests that certain farmers' markets, like other commercial enterprises and community institutions, may be perceived as more welcoming or responsive to certain subgroups of the population, resulting in that subgroup being over-represented in the market.

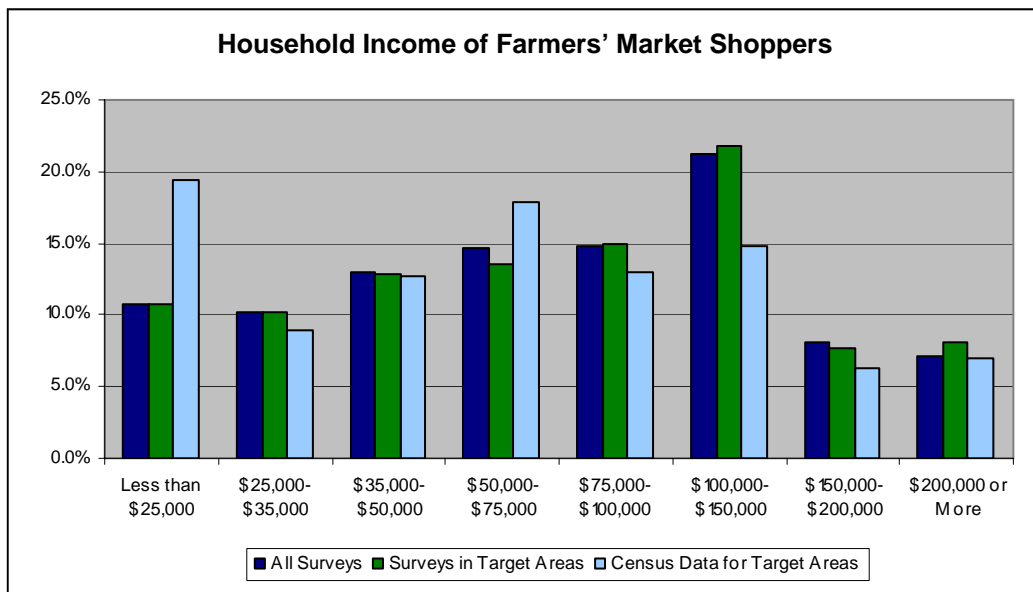
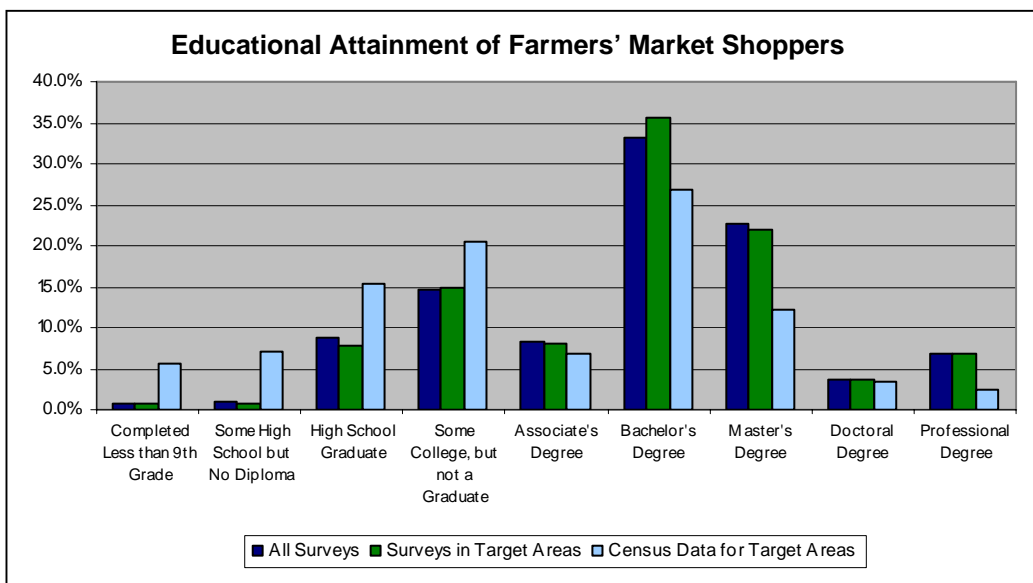
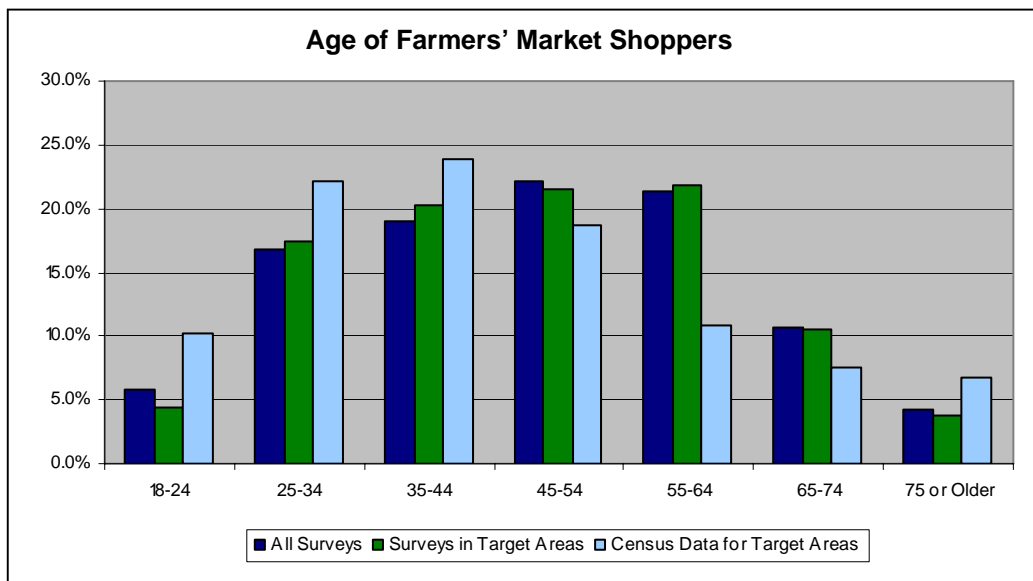
In order to compare the data on market shoppers to census data on the communities in which the farmers' market shoppers live, PCFMA developed a methodology to identify those groups that are over- and under-represented in the farmers' market. (See page 8 for a description of the methodology.)

The surveys included five demographic questions: gender, age, ethnicity, educational status and household income.

Overall, 72.7% of respondents indicated they were female, with percentages ranging from a low of 62.3% in the Fillmore Farmers' Market to a high of 81.1% in the Cupertino Square Farmers' Market. These figures do not appear to accurately reflect the gender mix observed in the farmers' markets, possibly due to a response bias. (See page 1 for more information.)

An examination of data by gender revealed few differences. Both men and women had the same items on their shopping lists and they

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planned to spend about the same amount of money in farmers' market.

On the question of what brought them to the area that included the farmers' market women were more likely to say they came for the farmers' market – 72.8% versus 61.4%. On the question of how often they shop the farmers' market, men were more likely than women to say they shopped the market weekly – 61.9% versus 56.1%.

Data on the other four demographic questions was analyzed and compared to data from the 2000 Census for comparable geographic areas. (See page 8 for a description of this methodology.)

While adult shoppers of all ages were found at each of the farmers' markets surveyed, shoppers ages 18-24 were consistently under-represented and shoppers ages 25-34 were under-represented in 7 of the 8 markets studied.

Shoppers in the 45-54 age category were over-represented in 6 of the 8 markets studied while shoppers ages 55-64 were over-represented in each of the 8 farmers' markets studied.

The surveys also revealed that the farmers' market shoppers tended to have more years of formal education than what was found in the market areas. Those with no college or some college but no degree, tended to be under-represented at the markets, while those with a college degree or an advanced degree tended to be over-represented.

While income and education tend to be highly correlated, the farmers' markets served a more diverse group economically than one might expect. Those making under \$25,000 were under-represented, but those making \$25,000 to \$50,000 were present in the market in equal proportion to the population. The largest over-representation was among those earning \$100,000 to \$150,000.

While the surveys were anonymous, respondents were more

hesitant about responding to the income question than any other question. The income question was left blank by 13.3% of respondents.

Overall white shoppers were over-represented by the widest margin. Anglos are 49.4% of the population of the target areas surrounding the markets, but were 65.9% of market shoppers.

In two markets, however, white shoppers were slightly under-represented due to the over-representation of minority shoppers. In a third market, one minority group of shoppers was over-represented while another minority group was under-represented.

Each of these three farmers' markets have a reputation as "ethnic markets" due to the populations that tend to shop those markets and, in the case of the Cupertino Square and Fairfield Farmers' Markets, the ability of those markets to support multiple farmers selling traditional Asian vegetables.

In the Cupertino Square Farmers' Market, Asians were 53.4% of shoppers though they are only 36.6% of the population.

In the Fairfield Farmers' Market, African-Americans were 30.4% of shoppers but they are only 15.3% of the population.

African-American shoppers were also over-represented in the Fillmore Farmers' Market. There,

African-Americans were 19.6% of shoppers but are 13.2% of the population.

Overall, Asian and African-American shoppers were slightly under-represented as they tended to be under-represented in the other farmers' markets surveyed.

Hispanics were the most likely to be under-represented. They are 11.4% of the population, but only 6.0% of farmers' market shoppers.

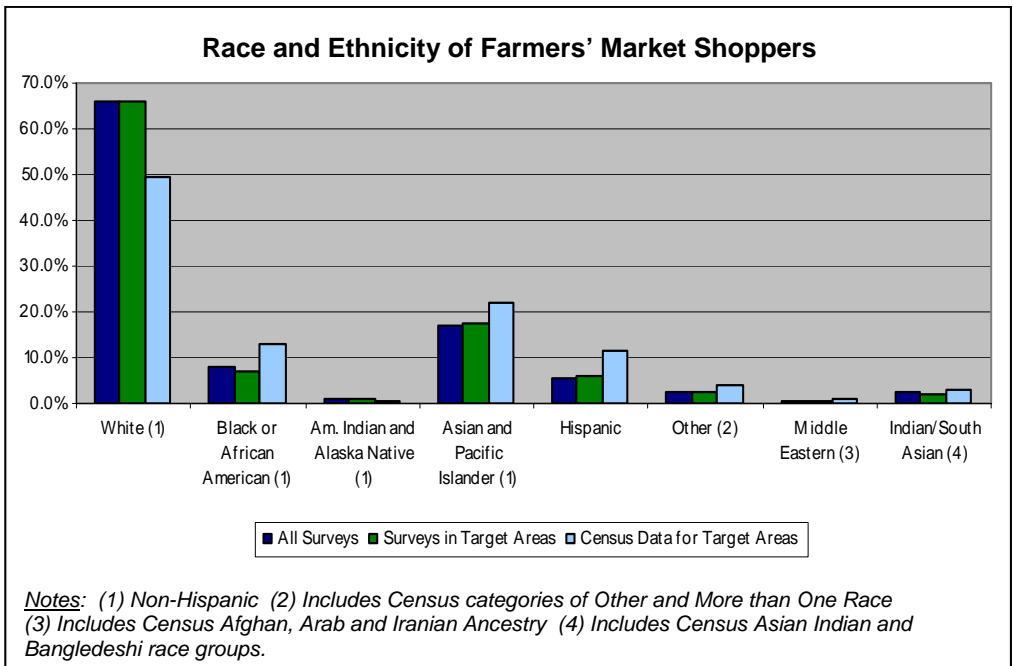
Within the demographic categories of age, education, income and race/ethnicity, comparisons were made between the subgroups most often under-represented and the subgroups most often over-represented. This analysis allowed for some conclusions that help to illustrate the differences between subgroups:

Overall, across the eight farmers' markets studied, shoppers ages 55-64 were 4.6 times more likely to shop at a farmers' market than shoppers ages 18-24.

Those with an advanced degree were 1.8 times more likely to shop at a farmers' market than those without a high school diploma.

Those making \$100,000 to \$150,000 were 2.7 times more likely to shop the farmers' market than those making under \$25,000.

Anglos were about 2.4 times more likely to shop at a farmers' market than African-Americans or Latinos.



## Weekly and Long-term Shoppers Sustain Markets

Farmers' markets are an anomaly in the San Francisco Bay Area's retail food industry. While many supermarkets are open 24 hours and the major chains are now offering online ordering and home delivery, most farmers' markets are open for only four hours per week and their products change with the seasons. But despite this, farmers' markets are growing in number and popularity.

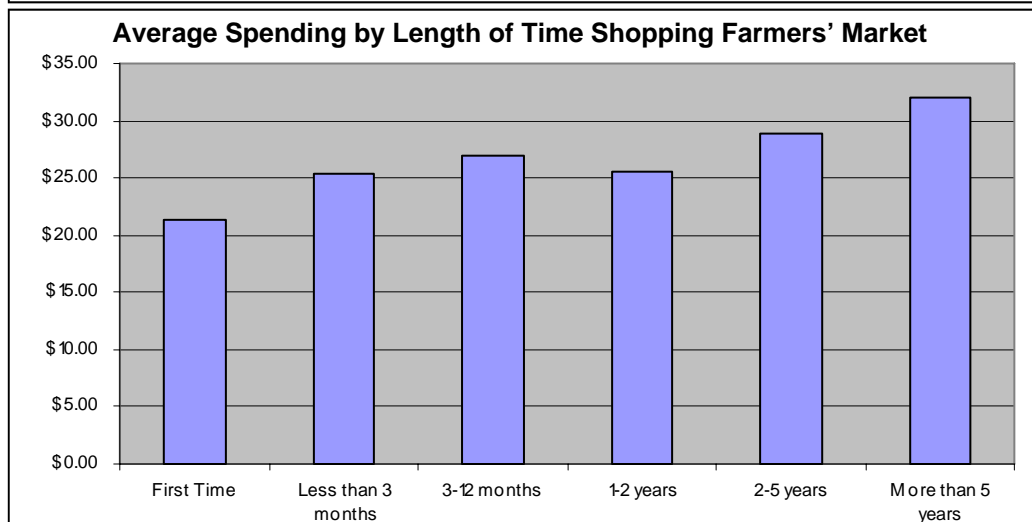
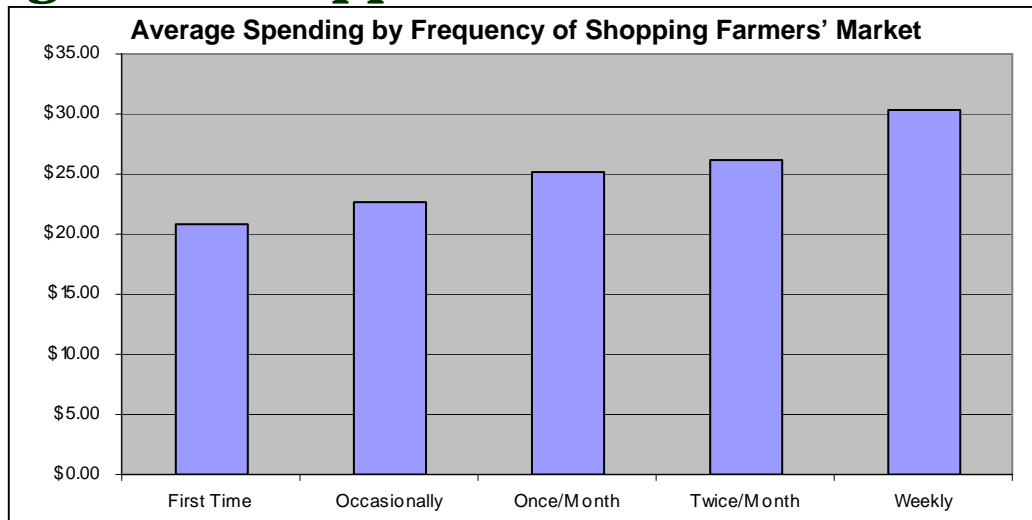
PCFMA's customer survey asked shoppers how often they shop the farmers' market, and how long they have been shopping there.

In seven of the eight markets surveyed, over half of respondents said they shopped the farmers' market weekly. Shopper visited the market an average of 2.98 weeks per month. When those who said they did not shop weekly were asked why not, a plurality (26.6%) wrote in a response. Responses ranged from live out of the area, to too busy with work or family, to competing demands on their time. Of those not shopping weekly, 23.2% said it was not on their mind, 15.8% said they usually shopped other markets, 13.3% said the market was at an inconvenient day or time, and 11.7% said it was out of the way.

When asked how long they have been shopping the farmers' market, over 10% said they were visiting the market for the first time that day, while nearly a quarter said they had been shopping the market for over five years. The average farmers' market shopper has been shopping that market for 2.93 years.

The amount that shoppers planned to spend tended to increase as both the frequency of visits per month increased and as the number of years shopping the market increased. Those who said they shopped the market once a month spent an average of \$25.52, while those that shopped the market weekly spent an average of \$29.64.

Similarly, those who said they had been shopping the farmers' market for less than three months



spent an average of \$27.91 while those that had been shopping the market for more than five years spent more, averaging \$35.36.

This suggests that the long-term health of a farmers' market does not simply depend on attracting new shoppers. It also depends on building customer loyalty so that shoppers return more often each month, and return to the market year after year.

For example, in the Jack London Square Farmers' Market, total reported spending in the market on the day of the survey was approximately \$77,300. Of that amount around \$5,500 was spent by shoppers visiting the market for the first time — 11.6% of the 2500 shoppers in the market that day.

Those who shop the market weekly — 48.2% of shoppers — spent over \$43,000 at the market. Their

average spending was around \$7.25 higher than the spending for those shopping the market twice a month. That difference in \$7.25 per weekly shopper totaled \$8,700 — over \$3,000 more than the total amount spent by the first-time shoppers.

A similar pattern is found when examining how long a shopper has shopped a farmers' market. Those who have been shopping the Jack London Square Farmers' Market for less than a year were one-third of market shoppers, but accounted for only 27.2% of money spent in the market. The average spending by shoppers that have been coming to the farmers' market for a year or longer was about \$8.75 more than the average spending by those shopping the market less than a year. This additional spending accounted for 18.8% of all funds spent in the market.

# Farmers' Market Shoppers Lift Local Economies

Farmers' markets are often looked to as attractions and economic development tools for communities, downtown areas, and retail districts. The results of PCFMA's 2007 customer surveys demonstrate that farmers' markets generate both foot traffic and economic impact on surrounding businesses.

When asked their primary reason for coming the area of the farmers' market (downtown Brentwood, Jack London Square, etc.) over two-thirds – 69.7% – of farmers' market shoppers said they came for the farmers' market. This rate was highest in the Brentwood Farmers' Market – 87.4% and lowest in the Fillmore Farmers' Market – 47.9%.

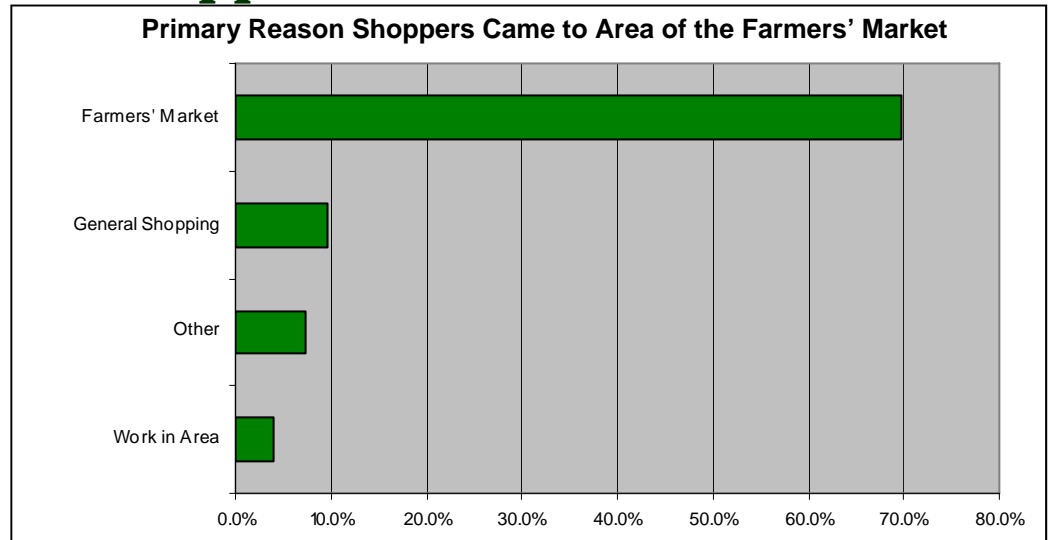
The percentage of those reporting "other" as their reason for coming to the area of the market was highest in the two days of the Alameda Farmers' Market and in the Fillmore Farmers' Market, where the farmers' markets are in closest proximity to residences. A review of the handwritten responses for these markets shows that between 12% and 19% of respondents in these markets indicated that they live in the neighborhood.

Farmers' market shoppers also said they planned to spend money at stores and restaurants surrounding the farmers' market, in addition to the amount they planned to spend in the market.

Overall, 56.2% of farmers' market shoppers said they planned to spend money on additional shopping or eating in the area around the farmers' market. The response was highest in the Fillmore Farmers' Market – 77.3% – and lowest in the Cupertino Square Farmers' Market – 39.7%.

The average amount spent outside of the market was \$26.97. The highest average amount – \$38.98 – was reported in the Danville Farmers' Market and the lowest – \$18.05 – was reported in the Alameda Farmers' Market on Tuesdays.

While some of these amounts are relatively low, their cumulative impact over the course of the season can be significant. The farmers' markets surveyed had

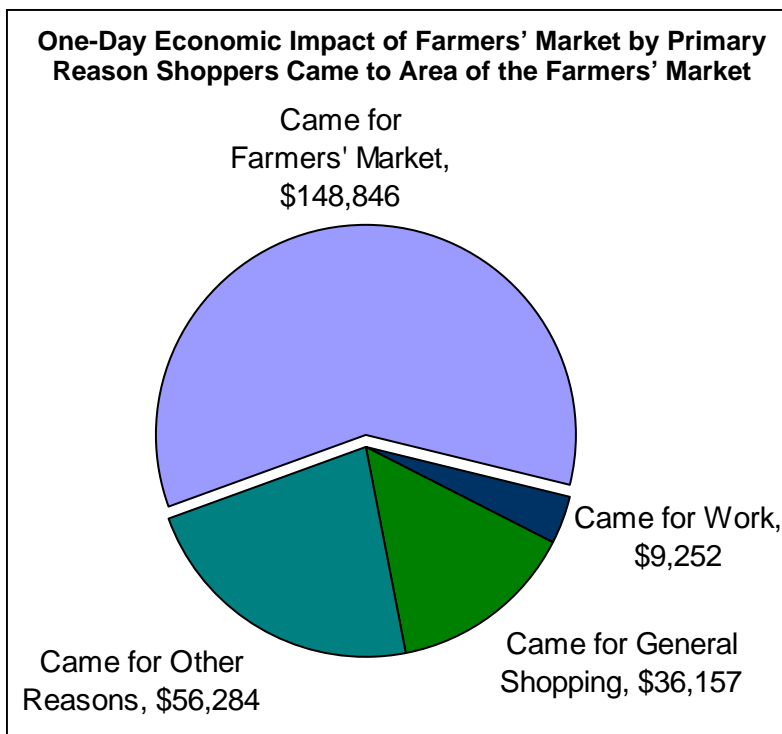


approximately 16,800 combined customers on their survey days according to crowd counts provided by the markets' managers. With 56.2% of those shoppers spending an average of \$26.97 outside of the market, just these eight farmers' markets had an economic impact of over \$250,000 on surrounding businesses that week.

Even in the markets with least amount of spending, the economic impact quickly adds up. The Fillmore Farmers' Market reported one of the lowest average amounts for spending outside of the market. But that amount – \$21.71 – multiplied by the average crowd count of 965 persons over the 28 weeks the market was open, created an estimated economic impact of over \$586,000 during the market's 2007 season. Those who said their primary reason for coming to the Fillmore neighborhood was the farmers' market – shoppers that are probably less to likely to shop in the Fillmore

neighborhood if the farmers' market were not open – accounted for 45.8% of that economic impact.

And at the Cupertino Square Farmers' Market, which reported the lowest percentage of shoppers planning to do additional shopping or eating, an average crowd count of 1,950 shoppers and an average spending of \$29.58 outside of the market, the farmers' market created an economic impact of over \$1.1 million on the shopping center over the course of the farmers' market's 52-week season.



## About PCFMA's Target Areas Methodology for Measuring Farmers' Market Demographics

One of the goals of PCFMA's customer intercept survey project was to develop a demographic profile of farmers' market shoppers. Demographic information was collected through five questions: asking age, gender, ethnicity, educational status and household income.

While the responses to those questions described who was shopping at the farmers' market, they did not provide insight into whether or not those shopping at the farmers' market were a reflection of community of potential farmers' market shoppers.

Developing a demographic profile of the surrounding community required the development a physical description of the community in which farmers' market shoppers lived. This description came to be known as the "target area" for each market surveyed.

To build this description, the surveys asked respondents for their home zip code. Results for each market surveyed were sorted by zip code of residence of the respondent. Contiguous zip codes were added together beginning with the most reported zip code and continuing in descending order until a "target area" consisting of 60% or more of the responses was built. The decision to stop building a target area at 60% was arbitrary. A different percentage could have been chosen causing different results in the comparisons between survey data and community demographics.

Data from the 2000 Census by zip code was summed for each target area and compared to data from the surveys for the same target areas. Data from survey responses that did not include a zip code were not included in the comparison.

The table below provides an overview of the target areas for each of the farmers' markets surveyed, with some population data from the 2000 Census for comparison.

An additional benefit of this methodology is that it allowed for a visual representation of the areas in which most farmers' market customers live. As the next phase in the Growing Customers Project is to test marketing, outreach and advertising strategies, this information will help to more efficiently target farmers' market customers.

	Alameda (Tuesday/ Thursday)	Brentwood	Cupertino Square	Danville	Fairfield	Fillmore	Jack London Square
Zip Codes	1	1	4	3	2	2	9
Responses	240/248	256	301	229	168	186	442
In Target Area	78.0%/84.5%	65.3%	71.2%	63.4%	71.2%	60.5%	62.6%
Square Miles	8.15	113.82	50.41	55.67	258.58	2.31	37.42
Major City	Alameda	Brentwood	Cupertino	Danville	Fairfield	San Francisco	Oakland
City Population*	72,259	23,302	50,546	41,715	96,178	776,733	399,484
Target Area Population*	58,561	28,481	193,191	67,186	122,605	70,945	277,803

\*US Census, 2000



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Our mission is to establish and operate community supported certified farmers' markets and other direct marketing outlets that provide: viable economic opportunities for California farmers and food producers, local access to farm fresh products, support for local businesses and community organizations, and education concerning food, nutrition and the sustainability of California agriculture.