

August 2019

EB 2019-05

Assessing the Barriers to Increasing Customer Participation and Farm Sales at Farmers Markets: Implications for Marketing Strategy

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August 8, 2019

* Associate Professor, Extension Associate, and Research Assistant, Charles H. Dyson School of Applied Economics and Management, respectively. This work was supported by a grant (ENE-18-150) from Northeast Sustainable Agriculture Research & Education Program (NE SARE). We are appreciative of the efforts of the Farmers Market Federation of NY, Cornell University Cooperative Extension, Maryland Farmers Market Association, Community Involved in Sustaining Agriculture, Maryland Rural Enterprise Development Center, Northeast Organic Farming Association, and CenterMost Marketing in data collection efforts, communication with industry stakeholders, and reviewers of prior versions of this manuscript. The authors have no financial interest or benefit from the direct application of this research. The views expressed are the authors' and do not necessarily represent the policies or views of any sponsoring firms or agencies. All errors remain our sole responsibility.

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INTRODUCTION

Farmers' markets (FMs) could be considered the original flag bearer of the local foods movement. They represent one avenue in addressing customer demand for "locally grown" and provide a means for farmers to capture 100% of the customer dollar. FMs may also increase customer loyalty and create non-economic benefits and ties between farmers, consumers, and communities.

Brown (2002) estimates that between 1970 and 2001 the number of FMs in the United States grew nearly ten-fold, from 340 to over 3,000. They attribute part of the expansion to funding from the Farmer-to-Consumer Direct Marketing Act aimed at expansion of direct marketing of agricultural commodities from farmers to consumers (U.S. Congress 1976). In 2009, the USDA launched the "Know Your Farmer, Know Your Food Program" as a means to better connect consumers with local producers, support marketing associations and market managers, and improve the effectiveness and accessibility of federal nutrition programs at farmers markets. Federal funding from the Farmers Market Promotion Program, the Farmers Market Nutrition Program, and electronic benefits transfers (EBT) with food stamps has existed for several years, as have various efforts at state levels.

The number of FMs nearly doubled in the past decade (i.e., 4,385 to 8,687), but more recently growth has slowed considerably; e.g., between 2016 and 2017 the number of FMs increased by only 0.2% (AMS 2018). Further, based on recent Agricultural Census data, Low et al. (2015) found flattening trends of both farm participation and farm sales in direct-to-consumer (DTC) markets. They noted that between 2002 and 2007, the number of farms participating in DTC markets was up 17% and farm sales through those markets up 32%; but over the next five years, growth levels declined to only 6% and 8%, respectively. By 2017, the number of farms with DTC sales actually decreased by 10% from the 2012 level (NASS 2019).¹ On the customer side, farmers and FM managers are attesting to a marked decline in customer participation and sales at FMs, creating uncertainty regarding the viability of FMs to sustain farming operations in the long term (Eggert 2018).

So what's happening? Several hypotheses exist. First, farmers may be shifting to other channels (direct and/or wholesale) with relatively higher financial returns. While shifts to other DTC channels are accounted for in the DTC census statistics above, expanded wholesale opportunities are surfacing through restaurants, groceries, and institutions. Schmit & LeRoux (2014) demonstrated that on over 30 diversified vegetable farms, FMs were the worst performing channel in terms of sales per hour of marketing labor; specifically, FMs averaged \$32, while wholesale channels were \$51. If marketing channel reallocation away from FMs is occurring for this reason, financial impacts at the farm level may be ameliorated or improved. Further, if farmers are shifting away from FMs, changes in consumer purchasing patterns for local foods should coincide. Even so, that leaves considerable concern to FMs themselves, which often serve multi-purpose goals, including low entry barriers for new farm entrants and human and social capital benefits to the communities they operate in.

A second hypothesis asserts that a slowing growth rate in the number of FMs may indicate FMs are approaching market saturation (Bonanno et al. 2017). If true, further FM additions result in new FMs cannibalizing sales and customers from pre-existing ones. In that case, one would expect total FM sales (across all markets) to be level (all else constant) but declining sales per FM, on average. Such a distinction

¹ Comparing total DTC sales between 2012 and 2017 is problematic since the definition of DTC sales in the 2017 Census included "value added" or processed product sales, a component excluded in earlier versions of the Census.

requires additional information from consumers on changes in their consumption habits and FM participation, something, to the authors' knowledge, has not been directly assessed.

A third hypothesis relates to demographic and generational differences of shoppers; e.g., a lack of interest, appeal, or understanding by younger shoppers. Numerous studies have focused on FM customers using a variety of data; e.g., consumer telephone or online surveys, FM shopper surveys, and population demographics of communities where FMs are located. It is consistent across studies that quality and freshness of products are two of the most important characteristics for FM customers and the lack of a one-stop-shopping experience (i.e., like at supermarkets) is often noted as a barrier. Many customers also express concern about the economic (e.g., support for local farm businesses and retaining food dollars locally), social (e.g., sense of community, purchasing directly from a farmer) and environmental (e.g., growing practices, food miles traveled) impacts of their food choices. While a marketing emphasis on freshness, environmental benefits, and support for farmers resonates with existing customers, it may do little to bring in new customers (Zepeda 2009). Specific information on the values and barriers from all types of consumers is needed for such an assessment.

Demographic characteristics and preferences of FM shoppers show much variation in the literature. Some studies show shoppers tend to be female, older, and with higher incomes and education (Aguirre 2007, Kezis et al. 1998, Govindasamy et al. 2002), while others have found no significant differences in age, income, or employment status (Wolf et al. 2005; Eastwood et al. 1999). With respect to age of DTC shoppers, Abello et al. (2014), Blanck et al. (2011), Keeling Bond et al. (2009), and Stephenson and Lev (2004) found middle-aged shoppers have higher DTC purchases than other age cohorts, while Gumirakiza et al. (2014), Zepeda and Li (2006), Onianwa et al. (2005), and Brown (2003) found no significant differences across age groups. Further, some studies have found that FM shoppers tend to buy more organic foods, shop regularly at food co-ops and health food stores, have their own vegetable gardens, cook more frequently, and belong to health clubs (Wolf et al. 2005; Zepeda 2009).

If preferences of FM shoppers (and potential shoppers) are changing, marketing efforts and operational features of FMs need to evolve to retain customer participation and attract new ones. A recent study by Hamilton (2019) describes the life cycle of local food markets and their changing landscapes. Based on personal interviews conducted, they showed that what has worked in the past is insufficient today. Price and convenience were not the leading consumer priorities during earlier vestiges of DTC markets but they are now. Add to this the complexity of marketing efforts to address a wide range of customer preferences over income, race, and ethnicity characteristics to make the customer experience a welcoming one for all. For example, Conner et al. (2010) show that Latina women expressed feeling unwelcomed in a Michigan-based study, while persons who were white with higher incomes placed lower importance on value and convenience. Signage to explain product attributes is important, including additional languages for persons challenged by English as a second language. Furthermore, access issues commonly surfaced as a barrier to shopping at FMs, including travel to/from FMs and convenient and sufficient parking (Eastwood et al. 1999; Lockeretz 1986). For customers utilizing public transportation, there are scheduling issues and physical limitations to how much can reasonably be carried (Ragland et al. 2011). Low-income shoppers tend to rely on public transportation more, which is often less frequent on Saturdays (a popular market day), and also a day of work for those persons holding more than one job (Tropp and Barham 2008).

Of course, traditional retail grocers have not been ignorant of growing consumer preferences for locally-sourced products. Indeed, Guptill & Wilkins (2002) found that large grocers were marketing locally-produced food as early as the 1990s as a strategy to compete against FMs and other DTC alternatives.

Time constraints of customers, the ease of one-stop shopping, and more convenient hours of operation make the retail grocery store an attractive option for local food oriented consumers.

Shifting preferences and priorities for today's FM shoppers is a key focus of this research. The next generation of potential customers is emerging with different needs and expectations. In an increasingly competitive environment for local foods, FM managers and farmers need to evolve their marketing strategies to best match those changing needs and expectations. However, to understand the opportunities for growth, it is important to have a better understanding of who is shopping there, what their impetus to shop there is (or is not), and, importantly, how to improve the customer experience to keep them coming back. The objective of this research is to address these issues directly.

Using household survey data we differentiate households by their FM participation habits and examine the variety of reasons why people are interested (or not) in buying food at FMs and the barriers they face (real or perceived) to participating more. Delineating consumers in this fashion is important when considering targeted marketing strategies to: (1) maintain participation of those already active, (2) increase participation for those whose participation has declined, and (3) attract new customers. In order to do so, we must examine potential differences in demographic profiles of these consumer classes, their motivations for shopping at FMs, the characteristics they most value at them, and the barriers they face to participating more. To the degree they are similar, targeted strategies are less important, but where differences exist multiple strategies will be necessary.

We continue now with a description of the household survey data used to address our research objectives and the types of information collected. This is followed by a description of the methodology employed to assess differences across consumer types (i.e., by FM participation status) and demographic characteristics of the survey respondents (i.e., income, age, household composition, and location). The empirical results follow and we conclude with implications of the research, suggestions for targeted marketing strategies, and directions for ongoing research.

HOUSEHOLD DATA

In concert with our state-level partners, an online household survey was developed and administered targeting all consumers regardless of their FM shopping habits.² The survey focused on food sales at FMs by farm vendors. To improve clarity for respondents, we explained what food products they were to consider and what constitutes a FM.³ The limitation to farm sales is not meant to diminish the value nonfood or nonfarm vendors play in some FMs, but simply to focus on the underlying project goal aimed at improving farm financial performance at FMs. That said, we do include questions about the value customers ascribe to the availability of nonfood and ready-to-eat (RTE) prepared food vendors and whether their presence affects their frequency of participation and purchases from farm vendors.

² A Notice of Exemption was received from the Cornell University Office of Research Integrity and Assurance, Institutional Review Board for Human Participants (Protocol ID 1805007986) based on the intended involvement of human subjects and the potential risks they face by participating. Descriptions of the risks and benefits to participating are included as a preamble to the survey (see Appendix 1).

³ We asked respondents to consider local food products broadly; i.e., fruits and vegetables, meats, dairy products, baked goods, and other processed food products. As to what defines a FM, we instructed them to consider a FM as a public and recurring assembly of different farmers (or their representatives) selling the food that they produced or processed directly to consumers. FMs may be indoors or outdoors and typically consist of booths, tables, or stands where multiple farmers (or their representatives) directly sell their products.

Surveys were pre-tested with our state partners and revised based on their feedback.⁴ The survey went live on 20 June 2018 and marketed to consumers in the 4 project states (NY, VT, MA, and MD). A Facebook page was developed as a portal for persons to access and complete the survey, on either computers or smart phones. As awareness of the survey grew, FM organizations and agencies from other states requested that we expand its availability.⁵ Ultimately, the survey recorded the county and state of residence for each respondent. The survey closed 01 October 2018.

Each of the state partners realized their goal of 500 completed surveys (NY = 925, VT = 775, MD = 576, and MA = 580) for a combined 4-state sample of 2,856 responses. Households participating from other states increased the total to 3,847. The distribution of respondents by FM participation status (discussed below) were nearly identical between the 4-state and all-state samples. Given the nature of our analysis (i.e., dividing the sample by level of FM participation), the results presented here are based on the all-state sample of respondents. Since nearly three-quarters of the sample is from the original four states, the metrics computed are weighted more heavily on respondents from the original four states.⁶

We recognize some inherent issues in our survey method that may bias the sample to some degree. In particular, the survey was available only online and only in English. This may bias downward the number of respondents where English is not their first language and for those whose online access is more limited, often lower income households. In addition, the survey is rather lengthy and some respondents may not complete it due to survey fatigue. Finally, it can be difficult for persons to remember their composite of FM activities across a two-year time span, but a general assessment is sufficient for our purposes. In any event, the convenience sample provides sufficient observations across consumer groups for statistical testing, something necessary to address the research objectives.

FM Participation Distribution

By design, we sought information from all types of consumers irrespective of their FM shopping habits. Use of Rapid Market Assessments at FMs is a common and useful way to collect information from customers quickly and efficiently; however, it is limited to customers already attending the FM on a particular day (Lev et al. 2008). It is relatively easy to get input on FMs from regular FM customers, but not so for non-attendees as the incentives to participate are likely to vary. Accordingly, additional efforts were made to enrich the sample. State partners promoted the survey not only through their networks of FMs and trade associations, but also more generally through local, regional, and state cooperative extension associations, chambers of commerce, and a variety of local government agencies. The importance of input from all types of shoppers was also emphasized in the preamble to the survey to further encourage participation (see Appendix 1).

Project partners were interested in learning about how to retain their current and active customer base, to entice persons whose shopping frequency has declined to return more frequently, and to get consumers who don't shop at FMs to participate. To sort responses on this dimension, a survey question asked participants to compare the number of shopping trips they made to FMs last year (2017) relative to the year prior (2016). The choice set included:

- I shopped more frequently at FMs last year than the year prior,
- I shopped about the same number of times at FMs last year relative to the year prior,

⁴ The full set of survey questions is included in Appendix 1.

⁵ Respondents from 28 additional states and the District of Columbia participated; on average, about 34 per state.

⁶ Smaller sample sizes for individual states prohibited completion of statistical analyses at the state level with any reasonable level of confidence. Since respondents are not uniquely identifiable (only their county and state of residence is known), customer data by state are available upon request, with approval of the project partners.

- I shopped less frequently at FMs last year than the year prior, or
- I didn't shop at FMs either year.

We combined the first two categories resulting in three “buckets” of consumer participation: those with the same or growing level of FM participation (B1), those with decreasing participation (B2), and those that did not attend FMs (B3). A similar question was asked relative to “total dollars spent” at FMs, with a very similar distribution of respondents by bucket. The empirical results to follow are based on FM shopping trips, but are robust to either metric. In addition, two similar questions were asked regarding shopping for local foods at “any outlet” rather than at FMs specifically.

Distributions of respondents by consumer bucket are shown in Table 1. Notice the difference in distributions based on local foods trips at any outlet versus at FMs. The percentage of respondents classified as B1 for any outlet (88%) is greater than for FMs (74%); the reverse is true for B2 (7% and 20%, respectively). These differences are indicative of consumers shifting some from FMs to other outlets for local food purchases (hypothesis 1). The same direction of differences follows for total spending. While the differences are lower in magnitude for B3 consumers (particularly on total purchases), it does suggest that those that aren't shopping specifically for local foods end up buying some anyway; e.g., at a grocery store.

Also consider that for any bucket, the percentage of respondents for trips to and dollars spent at FMs is very similar; i.e., for B1: 74% and 75%, for B2: 20% and 19%, and for B3: 6% and 6%, respectively. While an indirect measure, this does provide some evidence that cannibalization across FMs is relatively small, at least in the aggregate for this sample (hypothesis 2). In the case of a growing number of FMs and more prevalent cannibalization, we would expect further disparity between the percentages of respondents classified by trips than by total purchases (i.e., we would expect the trip percentage to be less (more) than purchase percentage for B1 (B2)).

Table 1. Distribution of Respondents on Trips and Purchases for Local Foods, by Bucket (N = 3,847).^a

Bucket	No. of Trips, Any Outlet	No. of Trips, Farmers Markets	Total Spending, Any Outlet	Total Spending, Farmers Markets
B1	88%	74%	90%	75%
B2	7%	20%	9%	19%
B3	5%	6%	1%	6%

^a % = percentage of respondents defined in a particular bucket.

Demographic Characteristics

Demographic characteristics of the sample, by FM bucket, are shown in Table 2. Respondents were limited to those at least 18 years old and designated as the primary food shopper for the household. Age cohorts were determined based on general life stages. That is, those 18 to 24 might be in early careers, enrolled in college, or living at home. Those 25 to 34 are more likely to have children and those over 60 might be nearing retirement and/or are empty-nesters. The distributions by age are very similar across buckets, although those with declining levels of FM participation were more prevalent in the middle-aged category (35-44) and less so for respondents age 60 or above. For those attending FMs (B1 and B2), the results are consistent with the literature showing higher participation levels for those 45 years of age or older. However, irrespective of bucket, the three (two) age categories under (over) 45 years of age are less than (more than) U.S. population estimates (Howden and Meyer 2011).

Table 2. Demographic Summary of Consumer Sample, by FM Bucket (N = 3,847).^a

Characteristic	B1	B2	B3
Percent of Respondents	74.3	19.4	6.3
Percent by Age:			
18-24	2.1	2.4	4.7
25-34	13.2	13.9	14.0
35-44	16.6	21.0	17.0
45-59	29.5	31.5	28.1
Greater than or equal to 60	38.5	31.2	36.2
Percent by Household Income:			
Less than \$25,000	8.7	7.4	11.0
\$25,000 to 49,999	18.6	18.4	14.4
\$50,000 to \$99,999	35.8	35.6	44.0
\$100,000 to \$149,999	20.6	22.8	12.0
\$150,000 or more	16.4	15.8	18.7
Percent by Household Size:			
One	17.6	15.9	17.3
Two	49.3	44.1	47.6
Three	15.8	18.0	12.6
Four	11.8	14.6	15.6
Five or more	5.5	7.4	6.9
<i>Average household size (No.)</i>	<i>2.4</i>	<i>2.6</i>	<i>2.5</i>
Percent by Household Structure:			
Single (no partner)	23.2	22.9	27.0
Married or Single w/partner	71.3	70.8	68.2
Children (under 5 years old)	8.4	11.5	10.3
Children (5 to 17 years old)	15.0	21.7	18.9
Multi-generational (3 or more)	4.5	5.1	3.9
Percent by Racial/Ethnic Composition			
White	90.7	89.3	90.0
Hispanic or Latino	0.8	1.1	0.9
Black or African American	1.3	1.1	0.4
Native American/Hawaiian/OPI	0.2	0.1	0.9
Asian	1.0	1.6	1.3
Other	6.1	6.7	6.5
Percent by Gender:			
Male	15.3	13.8	20.7
Female	83.6	85.5	78.9
Nonbinary	1.1	0.7	0.4
Percent by Work Status:			
Unemployed or Disabled	2.5	2.4	3.4
Part Time	14.9	16.1	15.3
Full Time or Self-employed	51.0	55.1	50.2
Retired	23.6	18.8	23.0
Other	8.0	7.6	8.1
Percent by County of Residence:			
Metro	71.8	72.1	70.0
NonMetro	28.2	27.9	30.0

^a Survey respondents were classified into buckets by their level of participation in FMs over the last two years. Bucket 1 (B1) consumers had constant or growing levels of participation, Bucket 2 (B2) consumers had decreasing levels of participation, and Bucket 3 (B3) consumers did not attend FMs either year.

Distributions of B1 and B2 consumers by household income are also very similar. Consistent with the literature (and relative to the U.S. population), higher income households are more likely to shop at FMs (U.S. Census Bureau 2017). That said, the percentage of respondents for the highest income category drops for B1 and B2 and increases for B3, perhaps reflective of a FM participation limitation at the upper income extreme. Relatedly, most respondents, regardless of bucket were employed full time, albeit at levels less than indicative of the U.S. population as a whole, even when accounting for the higher representation by retirees in our sample (BLS 2018). That said, there were relatively less retirees classified as B2 shoppers, consistent, with the age result above.

The average household size of respondents was around 2.5, consistent with the U.S. population, and a mode of 2. Distributions across buckets are similar, although larger household sizes (four and above) are more prevalent in B2 and B3. The higher percentages are likely due to children in the household and are consistent with the distributions for household structure where more households with children were in the B2 and B3 cohorts. Single person households were also more likely to be in B3. Combining the age, household size, and household structure results demonstrates consistency with the literature that younger, single consumers are less likely to shop at FMs. Relative to the U.S. population, the percentage of respondents for single (two) person households is lower (higher) (Lofquist et al. 2012). The combined percentage of households with children (regardless of age) is consistent with the U.S. population; however, the relatively higher percentage of households with young children (under age 5) may imply that those households find the FM environment more amenable than those with older children.

Clearly the sample is not racially or ethnically diverse; however, it is consistent with the literature that generally shows white, non-Hispanic consumers participate more in FMs. This appears particularly so in this sample, weighted heavily by consumers in NY, VT, MA and MD. Consistent with the FM literature, the majority of FM customers (B1 and B2) were female. However, a similar distribution follows for B3, since primary food shoppers in households tend to be women.

Finally, the distributions of respondents by metro or nonmetro county of residence were very similar, with only a small increase in the percentage of B3 respondents for nonmetro areas.⁸ While the distribution of metro and nonmetro counties in the United States is roughly the inverse of our respondent sample (i.e., 38% metro, 62% nonmetro), of the counties with at least one FM, 64% are metro, similar to our sample (Singleton et al. 2015). This makes sense since higher population concentrations provide a larger customer base. Assuming respondents shop at FMs in their county of residence, we expect a similar distribution of FMs by metro and nonmetro to be represented.

In general, the representativeness of our sample of FM shoppers is consistent with the literature, but for a somewhat overstated sample of retiree and under-stated sample of non-white and Hispanic participants. Differences relative to the U.S. population ascribe to the types of consumers more likely to shop at FMs. It is interesting that the distributions for most demographics were consistent across all buckets and implying that such demographics are not as strongly correlated to the participate/non-participate decision as one may have hypothesized. Accordingly, differences in the evaluative FM metrics we discuss below (e.g., average ratings on important characteristics or barriers to participation) across

⁸ USDA's Rural-Urban Continuum Codes (RUCCs) distinguish metropolitan counties by the population size of the metro area and nonmetropolitan counties by degree of urbanization and adjacency to metro areas (USDA ERS 2016). Metro counties were assigned as those with RUCCs of 1 through 3, while nonmetro counties were assigned as those with RUCCs 4 and higher.

buckets cannot as easily be ascribed to demographic differences, providing support to the overall evolution of local food markets and customers mentioned above (Hamilton 2019).

METHODOLOGY

A better understanding of the importance assigned by consumers to various characteristics of FMs is invaluable in (re)designing FM operations, locations, vendor composition, and vendor displays to attract customers and maximize customer sales. The same can be said for FM managers and farm vendors in addressing the primary barriers consumers face in participating more. However, characteristic values and barriers may differ by type of consumer (i.e., B1, B2, and B3). Accordingly, we assess these characteristics and barriers by FM bucket and determine if they are different from one another in a statistical sense.

For each question, we compute average scores or frequencies of the responses (i.e., the magnitude) and rank responses by bucket. Both the rank and the magnitudes are important in interpreting the results. The magnitudes are then compared across buckets to determine if they are statistically different from one another. Note, both statistical and non-statistical differences can be informative.

We conducted means difference tests across samples to analyze statistical differences. This procedure involved computing differences between means and calculating a significance value using the *t*-test. The associated *p* value is the probability of obtaining the observed differences between the samples if the null hypothesis were true. The null hypothesis was that the difference in means is zero, with $N_1 + N_2 - 2$ degrees of freedom. Statistical significance was defined as a *p* value less than 0.05.

RESULTS

The empirical results are presented from general to specific. We first describe general food shopping characteristics of consumers in our sample. We follow with particular attention to FMs by describing consumers' primary motivations for shopping at them and the feelings they have when attending. We conclude this section by assessing the importance of various FM characteristics and the primary barriers consumers face in participating more – elements particularly relevant to operational and marketing implications for FM managers and farm vendors. Distinction by FM cohort (i.e., B1, B2, and B3) and key demographic characteristics inform targeted marketing strategies to alternative types of consumers.

Food Shopping Characteristics

Table 3 shows the allocation of total food spending purchases, on average, for nine different food outlets. The outlets are ordered from highest to lowest spending levels based on the B1 results.⁹ As expected, the outlet where most food purchases occur is the retail grocery store and, with the exception of FMs, purchases at remaining outlets fall in reasonably consistent rank order across FM buckets. The FM flagbearers (B1) stand up to their name by indicating that nearly 19% of total food expenditures, on average, occur at FMs. Most of the drop in FM purchases by B2 and B3 consumers are accounted for by increased purchases at grocery stores. B3 consumers also purchase more at super centers (e.g., Walmart).

Combined purchases at other DTC channels (i.e., farm stands, CSAs, and farm stores) are reasonably similar across buckets (11-12%), as well as at cooperative groceries (10%), which often focus on sourcing local food products. Given so, there appears to be reasonable support for local food purchases irrespective of FM bucket, but for FMs themselves (by definition).

⁹ By definition, the percentage of food dollars spent at FMs for B3 consumers is zero. We report the actual average spending profiles given by respondents that reveal a very small, but not exactly zero, percentage.

Table 3. Distribution of Total Food Spending Dollars, Local and Nonlocal, by FM Bucket.^a

Food Outlet	B1 Rank	B1 %	B2 Rank	B2 %	B3 Rank	B3 %	B2 v B1 Different ^b	B3 v B1 Different ^b
Retail grocery store	1	47.4	1	54.0	1	57.0	+	+
Farmers markets (DTC)	2	18.7	3	9.0	9	0.7	-	-
Cooperative grocery store	3	10.0	2	11.1	3	9.7	Nsd	Nsd
Super centers	4	5.4	4	5.9	2	10.7	Nsd	+
Farm stands at the farm (DTC)	5	5.2	5	4.7	5	3.6	Nsd	-
Community Supported Agriculture (DTC)	6	4.3	6	4.5	4	4.5	Nsd	Nsd
Farm store (DTC)	7	3.0	7	3.1	6	2.8	Nsd	Nsd
Convenience stores	8	1.3	8	1.7	7	2.4	+	+
Meal delivery services	9	0.7	9	0.8	8	1.0	Nsd	Nsd

^a % = percentage of total food spending in a particular outlet. Farm direct-to-consumer market channels are indicated by DTC. For ease of exposition the “Other” category is excluded. As such, the sum of percentages for each bucket will be less than 100% (i.e., by 3.9%, 5.1%, and 7.6% for B1, B2 and B3, respectively).

^b Nsd = Not statistically different, + = statistically different and greater than B1, - = statistically different and less than B1. Statistical significance was defined as a *p* value less than 0.05.

General support for local food purchasing is also evident when comparing the likelihood consumers shop at various outlets specifically for local foods (Table 4). Scores here represent the average likelihood ratings on a scale from zero to four. The scores for FMs are as expected given to how the buckets were defined and where for B3 consumers all other DTC outlets rank relatively higher. It is clear that retail grocery stores are the primary outlet for local foods by B2 and B3 consumers, and significantly higher than B1. Super centers are also significantly higher for both B2 and B3, but at far lower likelihood scores.

While not shown, no statistical differences were found across FM buckets in how “local food” was defined. In terms of geography, local was most commonly defined as a multi-county region followed closely by state of residence. In terms of miles, 100 miles was most common for B1 and B2 consumers, while 50 and 100 miles were reported equally by B3 consumers. Significant variation in responses within buckets, however, precluded any statistical differences across them. For comparison, the 2008 Farm Bill defined local food as food that will be transported no more than 400 miles from its point of origin or within the state, while other organizations concerned about environmental impacts, namely food miles, suggest 100 miles or within the state.

Since the decision to shop at FMs is strongly linked to consumer motivations for purchasing local foods, it is useful to understand how important purchasing local foods is to consumers across FM buckets (Table 5). The distribution of responses for B1 consumers is not surprising, nor is the drop in average importance rating from B1 to B3 (Table 5). However, the (statistically significant) drop in average ratings from B1 to B2 consumers is arguably larger than to be expected given that B2 consumers are attending FMs, just less than they have previously. While the ‘local’ messaging is still important, it is statistically less important for these consumers. That said, 65% and 45% of B2 and B3 consumers, respectively felt buying local foods was “very” or “extremely” important to them, giving support to marketing strategies directed towards these cohorts in continuing to emphasize local. The relatively high level for B3 consumers provides support to possible FM participation in the future.

Table 4. Likelihood of Shopping at Outlets for Local Foods, by FM Bucket.^a

Food Outlet	B1 Rank	B1 Score	B2 Rank	B2 Score	B3 Rank	B3 Score	B2 v B1 Different ^b	B3 v B1 Different ^b
Farmers markets (DTC)	1	3.13	2	2.41	7	0.85	-	-
Retail grocery store	2	2.69	1	2.91	1	3.12	+	+
Farm stands at the farm (DTC)	3	1.94	3	1.87	2	1.47	Nsd	-
Farm store (DTC)	4	1.64	5	1.62	5	1.15	Nsd	-
Cooperative grocery store	5	1.56	4	1.65	4	1.19	Nsd	-
Community Supported Agriculture (DTC)	6	1.28	6	1.28	6	1.05	Nsd	-
Super centers	7	0.81	7	0.92	3	1.30	+	+
Convenience stores	8	0.42	8	0.51	8	0.51	+	Nsd
Meal delivery services	9	0.19	9	0.25	9	0.23	+	Nsd

^a Consumers were asked how likely they were to shop at each location for locally grown/produced food, with available choices as: not likely (0), somewhat likely (1), likely (2), very likely (3), and extremely likely (4). The Score is the average rating across responses. Farm direct-to-consumer market channels are indicated by DTC. For ease of exposition the “Other” category is excluded.

^b Nsd = Not statistically different, + = statistically different and greater than B1, - = statistically different and less than B1. Statistical significance was defined as a *p* value less than 0.05.

Table 5. Importance of Purchasing of Local Foods, by FM Bucket.^a

Level (Rating)	B1 Rank	B1 %	B2 Rank	B2 %	B3 Rank	B3 %	B2 v B1 Different ^b	B3 v B1 Different ^b
Extremely Important (4)	1	44.5	2	30.5	5	23.5	-	-
Very Important (3)	2	34.7	1	34.4	3	21.4	Nsd	-
Important (2)	3	15.3	3	24.5	4	24.0	+	+
Somewhat Important (1)	4	4.7	4	9.0	2	18.9	Nsd	+
Not Important (0)	5	0.8	5	1.7	1	12.2	Nsd	Nsd

^a % = percentage of responses with that level of importance.

^b Nsd = Not statistically different, + = statistically different and greater than B1, - = statistically different and less than B1. Statistical significance was defined as a *p* value less than 0.05.

FM Motivations and Perceptions

While consumers in our sample are assigned to buckets based on how their attendance at FMs has **changed** over the last two years, it says little about their motivations (or not) in attending FMs in the first place, nor how they feel while at these markets. Understanding these subtleties is important in developing targeted marketing strategies. The results are presented here based on the average response of all consumers, by FM bucket. For ease of exposition, we do not provide tables for each demographic breakdown; rather, we summarize the differences from the average results for particular demographics (where they exist) in the implications section of the paper below.

Perhaps related to earlier vestiges of the local foods movement, the most common primary motivation for B1 consumers to shop at FMs was to support local farmers and vendors, followed closely by purchasing fresh food (Table 6). The top two categories for B2 and B3 consumers are the same, but in reverse order. Indeed, support for local farmers and vendors, while relatively high for all buckets as a primary motivating factor, was statistically lower in importance for B2 and B3 consumers. Focusing more on freshness in marketing efforts than on local farmers may well appeal more to decreasing and nonparticipating FM consumers.

Table 6. Primary Motivations for Shopping at Farmers Markets, by FM Bucket.^a

Primary Motivation	B1 Rank	B1 %	B2 Rank	B2 %	B3 Rank	B3 %	B3 %A ^b	B2 v B1 Different ^c	B3 v B1 Different ^c
Support local farmers and vendors	1	42.0	2	37.7	3	16.5	30.0	-	-
Purchase fresh food	2	38.7	1	42.4	2	22.9	41.5	Nsd	Nsd
Keep food dollars in local economy	3	8.6	3	8.1	5	6.4	11.5	Nsd	Nsd
Other	4	6.4	4	6.0	4	6.8	12.3	Nsd	+
Participate in social/community setting	5	4.1	5	5.3	6	2.5	4.6	Nsd	Nsd
I don't shop at FMs	6	0.2	6	0.6	1	44.9		Nsd	N/A

^a % = percentage of responses selected as primary motivation. N/A = not applicable.

^b %A = percentage of responses selected as primary motivation, excluding observations with “I don't shop at FMs” selected.

^c Nsd = Not statistically different, + = statistically different and greater than B1, - = statistically different and less than B1. Statistical significance was defined as a *p* value less than 0.05. For tests on B3, %A percentages were used.

Note that nearly 45% of B3 consumers responded that they do not shop at FMs, presumably ever. While B3 consumers are defined as not shopping at FMs in the previous two years, over half of B3 consumers selected one of the other categories likely implying that they have shopped at FMs previously. Both full (%) and adjusted (%A) percentages are shown, where the latter excludes observations where “I don't shop at FMs” was selected. Statistical tests used the adjusted values. For all buckets, the remaining categories fall well short of the top two choices. Only the “other” category for B3 consumers demonstrated a statistical difference (relative to B1). For these consumers, “other” responses included exploring the markets, introducing children to healthier food choices, buying plants for gardening, and searching for lower prices, and perhaps are messaging areas worthy of attention.

Marketing efforts focused on “keeping food dollars local”; i.e., increasing total regional economic impacts through higher local spending, has little appeal customers as a primary motivating reason to shop at FMs, even though it is strongly related to supporting local farmers. Given increasing competition and availability to purchase local foods, this is reasonable; i.e., it is not a differentiating factor. Further, understanding what the concept really means is perhaps beyond most consumers in motivating participation. Opportunities to participate in a social or community setting at FMs ranks even lower (for all consumers). While educational and entertainment events are popular at many FMs, they clearly do not motivate most consumers to attend and purchase food from farmers.

Understanding feelings customers have when attending FMs are important and, particularly for negative feelings, can inform changes in FM operations and marketing efforts to improve the customer experience. Consumers were asked to select all feelings that apply to them when attending FMs. As above, we provide full and adjusted percentages for B3 consumers. The top three categories in Table 7 represent “good” feelings and the next four represent “indifferent or bad” feelings.

It is encouraging that the rankings are identical across buckets (with the “I don't shop at FMs” category excluded), whereby the good feelings rank above the bad. However, there are clear differences for both B2 and B3 consumers relative to B1. In particular, the percentage of consumers with good (bad) feelings are consistently below (above) those for B1. The large drop off from the good feelings to the bad for B1 and B2 consumers should not be overlooked and was expected as most persons do not conscientiously choose to participate in a negative experience. The drop in percentages from B1 to B2 for the good feelings is consistent with declining levels of participation.

Table 7. Perceptions when Attending Farmers Markets, by FM Bucket.^a

Customer Feeling	B1 Rank	B1 %	B2 Rank	B2 %	B3 Rank	B3 %	B3 %A ^b	B2 v B1 Different ^c	B3 v B1 Different ^c
Proud to support local vendors	1	84.8	1	71.4	2	32.2	56.2	-	-
Happy, it's a fun place to be	2	77.1	2	63.1	3	26.7	47.7	-	-
Welcomed and appreciated	3	63.3	3	42.6	4	16.9	30.8	-	-
Nothing in particular	4	6.2	4	13.9	5	13.1	23.1	+	+
Pressured obligated to purchase	5	4.1	5	10.1	6	9.3	15.4	+	+
Intimidated to talk to the farmers	6	3.8	6	6.9	7	5.9	10.0	+	+
Confused, too much going on	7	2.1	7	5.7	8	5.1	6.9	+	+
I don't shop at farmers markets	8	0.4	8	0.6	1	44.9		Nsd	N/A

^a % = percentage of responses selected. Respondents were asked to check all that apply, N/A = not applicable.

^b %A = percentage of responses selected, excluding observations with "I don't shop at FMs" selected.

^c Nsd = Not statistically different, + = statistically different and greater than B1, - = statistically different and less than B1.

Statistical significance was defined as a *p* value less than 0.05. For tests on B3, %A percentages were used.

Reducing the perceptions of feeling pressured or obligated to purchase can likely shift the scales, as are ways that farm vendors could be more proactive in initiating conversations with potential customers to reduce the intimidation factor. While conversations with farmers, producers and vendors as seen as a positive means to build trust and elicit sales, customers can have a different perspective. For example, the customer may not want to purchase the product from the farmer following the conversation, but does so because of feeling obligated at that point to make a purchase. Other shoppers may be shy, may not be fluent in a language, or may be embarrassed by asking a "stupid" question and thus are intimidated to talk to farmers. Some shoppers may be overwhelmed by all the conversations going on between farmers and customers, crowded spaces, and pets on leashes, etc. Educational programs for vendors focused on soft skills development may be one avenue for improvement.

Finally, note that nearly one-quarter of B3 customers feel "nothing in particular" when attending a FM; in other words, this is a shopping trip and nothing more. Indeed, nearly one-half of B3 consumers do not even feel "happy" at a FM or consider it a "fun to place to be." This may be less a reflection of the FM itself, but how they feel about shopping for food in general. Even so, what are ways to preserve the fun and social characteristics of FMs that some value (B1 and B2), while having market operations efficient enough for a traditional shopping experience (B3)?

A summary of written comments provided by responses is shown in Table 8; either from "other: please describe" options in some questions or open-ended questions available in the survey. While we leave a detailed exposition to the interested readers, they support the main findings presented thus far.

Important Characteristics of FMs

The five most important characteristics for each sub-sample are shown in Table 9. The characteristics are in rank order for B1 consumers. Consumers ranked characteristics on scale from not important (0) to very important (4). Scores in excess of 3 (important) are bolded. While the top five are reasonably similar across buckets, two additional characteristics were added beyond those for B1 to fill out the top five for B2 (food products efficiently organized) and B3 (prices clearly displayed) consumers. All consumers want quality, local food at FMs and in a clean environment, although availability of local foods is rated lower for B2 and, particularly, B3 consumers, likely tied to convenience factors and the 1-stop shopping food outlets.

Table 8. Positive and Negative Aspects of Shopping at Farmers Markets, by FM Bucket.^a

Positive	Negative
Appreciate social interactions with friends and neighbors. (B1)	Pressure to buy as they are very nice and friendly; I feel bad to not buy from them. (B1)
Appreciate the knowledgeable staff. They help me try new foods. (B1)	Where is the real farmer? Most are hired help and can't answer questions. (B1)
Like the experience of shopping, bargaining, differing moods & feel of the FM across the seasons. (B1)	Can't carry everything! (B1)
Love building relationships with farmers and supporting them. I can shake their hand. (B1)	Perturbed to find FM more of a flea/craft market, and people reselling from produce companies. (B1)
Important to expose kids to different foods & learn about benefits of farming and buying local. (B1)	People like to chat and I run out of time. (B1)
It's not just fresh food, but food of superior quality and variety grown by people I know. (B1)	Not having prices out! (B1)
Like to be educated & reminded about the importance of eating local food every chance I get. (B1)	I have several young children and no guarantee of close parking or vendors who accept credit cards (B1)
With EBT food stamp assistance I am able to pay more attention to buying local and high quality food. (B1)	I feel pressure to buy as they are very nice and friendly and I feel bad to not buy from them. (B2)
Much more access and ability to intentionally spend my food dollars on local products from good farms. (B1)	It's gotten to expensive. I worry about price. (B2)
I guess the word is integrity of the FM participants - standards are upheld. (B1)	It's a very elite atmosphere and very expensive. I'm an outsider (B2)
Hybrid of willing to pay more for local, wanting fresh food, & enjoying participation in the community. (B1)	Too many former clients who just want to chat. The farmer doesn't move to the next customer. (B2)
Sense of community with vendors & fellow shoppers. (B1)	Unpriced goods, staff not helpful. (B2)
Important to purchase high-quality, different, and inspiring foods. (B1)	More geared to out-of-towners and not the locals, including price and entertainment. (B2)
Knowing that I am supporting local agriculture. (B1)	More for elites, than average working person. (B2)
Feel very close to the farmers I support and miss them when they leave. (B1)	Cannot afford the luxury of FM prices (B2)
A community run market provides unique social benefits. (B2)	People running the stand can't answer questions about production, variety, or use. (B2)
Community outreach to make product available to ALL community members, regardless of financial, cultural, physical abilities and age. (B2)	Purchasing products during the middle of the work day that must be refrigerated until I get home. (B2)
A reliable, predictable group of vendors. (B2)	Too much emphasis on social events, live music, and non-food or prepared food distracts from the fresh food and makes it hard to shop for produce. (B2)
Several produce vendors to choose from. (B2)	Farm markets take too much time. (B3)
Able to talk to a farmer. (B2)	Cost, it's too expensive. (B3)
Being able to select my fruits and veggies. (B2)	Can't get to FM during miniscule time it's open. (B3)
Child-friendly. (B2)	Inconvenient times, limited selection, and small so I feel pressured to make a purchase. (B3)
A pleasant shopping experience. (B2)	More craft vendors than fresh food vendors. (B3)
Ability to explore and try new things. (B3)	The market does not have enough variety and limited time to shop. (B3)

^a Responses summarized from several questions in the survey where an "other, please describe" option was available or was an open-ended question. Some answers were edited for brevity, but without any loss in meaning or interpretation.

Table 9. Most Important Characteristics for Shoppers at Farmers Markets, by FM Bucket.^a

Characteristic	B1 Rank	B1 Score	B2 Rank	B2 Score	B3 Rank	B3 Score	B2 v B1 Different ^b	B3 v B1 Different ^b
Quality of food products	1	3.45	1	3.42	1	3.27	Nsd	-
Availability of local foods	2	3.40	2	3.33	3	2.83	-	-
Cleanliness	3	3.10	4	3.11	2	3.12	Nsd	Nsd
Environmentally friendly products	4	2.80	7	2.66	12	2.18	-	-
Reasonable travel time	5	2.68	5	2.78	4	2.74	+	Nsd
Food products efficiently organized	10	2.34	3	3.19	10	2.34	+	Nsd
Prices clearly displayed	8	2.51	6	2.67	5	2.73	+	+

^a Consumers rated characteristics of FMs on a scale from not important (0) to very important (4). For those that don't currently shop at FMs (B3), they were to indicate the level of importance if they were to do so. The Score is the average rating across responses, with those greater than or equal to 3 (important) bolded.

^b Nsd = Not statistically different, + = statistically different and greater than B1, - = statistically different and less than B1. Statistical significance was defined as a *p* value less than 0.05.

Interestingly, only environmentally friendly products (e.g., organic, minimal packaging) shows up in the top 5 for the B1 consumer, with lower values ascribed by B2 and, even more so, B3. Efficient organization of food products is a key characteristic for B2 consumers, and a lack thereof a likely contributing factor to their reduction in attending FMs. Similarly, prices need to be clearly displayed for B2 and B3 consumers, arguably consistent with a grocery store setting, and consistent with the higher frequencies of which these consumers felt pressured to purchase and intimidated to talk to farmers.

The least important characteristics of FMs for consumers are shown in Table 10. The low scores for availability of non-local foods scores are consistent with the local food rankings in Table 9. To be sure, the presence of non-food product vendors and ready-to-eat (RTE) food vendors is of little importance in getting food shoppers to the market to buy food from farmers, as are special events and entertainment activities. Surprisingly, availability by public transportation was not important for any group, although it is related to reasonable travel times (Table 9) and, for metro areas, was rated higher (see differences by demographics in the conclusions and implications section below).

In considering other characteristics where statistically significant differences existed across consumer groups, day-weekend hours are preferred by all consumer groups; but scores for evening hours are higher for B2 and B3 shoppers (Table 11). Higher scores for adequate parking, accepting debit/credit cards, and attention to prices for B2 and B3 consumers were also evident, while SNAP/EBT availability and establishing relationships with farm vendors were less important. While often an important message in marketing efforts for FMs, the value of these relationships was rated in about the middle of the 24 characteristics (for all groups). An average score of 2.2 implies only moderate importance for B1 consumers (on average), with values dropping off precipitously for B2 and (particularly) B3 consumers.

How consumers define "relationship" is open to interpretation. In any case, having relationships with farmers is not a differentiating factor for FM relative to other DTC channels. Indeed, one may argue that the operational features of CSAs promote stronger relationships between customers and farmers. In terms of demographic distinctions, values for relationships with farmers were modestly higher for low income, no-children, older, and nonmetro consumers (more below).

Table 10. Least Important Characteristics for Shoppers at Farmers Markets, by FM Bucket.^a

Characteristic	B1 Rank	B1 Score	B2 Rank	B2 Score	B3 Rank	B3 Score	B2 v B1 Different ^b	B3 v B1 Different ^b
Availability of non-local foods	24	0.57	24	0.47	22	0.74	-	+
Availability of non-food products	23	0.70	23	0.62	23	0.58	-	-
Special events (entertainment)	22	0.84	22	0.75	24	0.49	-	-
Coupons, sales, discounts available	21	0.94	20	0.96	17	1.11	Nsd	+
Available by public transportation	20	0.95	21	0.87	20	0.85	Nsd	Nsd
RTE prepared foods available	19	0.96	19	1.03	21	0.83	Nsd	-

^a Consumers rated characteristics of FMs on a scale from not important (0) to very important (4). For those that don't currently shop at FMs (B3), they were to indicate the level of importance if they were to do so. The Score is the average rating across responses, with those less than or equal to 1 (only somewhat important) bolded.

^b Nsd = Not statistically different, + = statistically different and greater than B1, - = statistically different and less than B1. Statistical significance was defined as a *p* value less than 0.05.

Table 11. Other Selected of Characteristics for Shoppers at Farmers Markets, FM Bucket.^a

Characteristic	B1 Rank	B1 Score	B2 Rank	B2 Score	B3 Rank	B3 Score	B2 v B1 Different ^b	B3 v B1 Different ^b
Open during day	12	2.23	13	2.11	14	2.12	-	Nsd
Open during evening (after work)	15	1.63	15	1.81	13	2.12	+	+
Open on the weekend	6	2.66	8	2.62	8	2.48	Nsd	-
Adequate parking	11	2.26	11	2.35	7	2.55	+	+
Wide selection of kinds of food	7	2.61	10	2.49	11	2.25	-	-
Accepts debit/credit cards	14	2.03	12	2.17	9	2.36	+	+
Accepts SNAP/EBT benefits	17	1.41	17	1.25	19	1.04	-	-
Price level	9	2.35	9	2.56	6	2.56	+	+
Relationship with farmer vendor	13	2.20	14	1.95	15	1.45	-	-

^a Consumers rated characteristics of FMs on a scale from not important (0) to very important (4). For those that don't currently shop at FMs (B3), they were to indicate the level of importance if they were to do so. The Score is the average rating across responses, with characteristics with statistical differences shown.

^b Nsd = Not statistically different, + = statistically different and greater than B1, - = statistically different and less than B1. Statistical significance was defined as a *p* value less than 0.05.

Barriers to Increasing FM Participation

Understanding the most and least important characteristics of FMs to consumers is useful in identifying changes in FM operations and marketing efforts, particularly when considering changes by type of FM consumer. However, this does not directly address the barriers consumers face in participating more. Accordingly, we asked consumers to rate the size of barriers to increasing their participation at FMs, on a scale from 0 (not a barrier) to 4 (a very large barrier). Used in context with the FM characteristic values, this will provide more precise strategies to operational reforms and marketing changes. Tables 12 and 13 respectively show the five largest and five smallest barriers consumers face to attending FMs more frequently. It is interesting to observe that for even the highest ranked barriers, the average scores are just over 1; i.e., a "minor" barrier. This may be due difficulties in consumers assessing how "large a barrier" is. In any event, we assess the average size of barriers here and then highlight differences by demographic characteristics (where they exist) in the implications section later. For consumers that didn't shop at FMs (B3), they were asked to indicate the size of the barrier if they were to. Barriers scored above 2 (a modest barrier), on average, are denoted in bold. Notice that for all barriers but one in Tables 12 and Table 13, the average scores for B2 and B3 consumers are statistically above those for B1 consumers. In short, barriers to consumers increase as their level of FM participation declines.

Table 12. Five Largest Barriers to Attending Farmers Markets More Often, by FM Bucket.^a

Barrier	B1	B1	B2	B2	B3	B3	B2 v B1 Different ^b	B3 v B1 Different ^b
	Rank	Score	Rank	Score	Rank	Score		
It is only open part of the year	1	1.07	6	1.22	7	1.28	+	+
Market time conflicts with schedule	2	1.03	1	1.67	2	1.86	+	+
Prefer convenience of 1-stop shopping	3	0.92	4	1.43	1	2.10	+	+
Prices not competitive w/other options	4	0.91	2	1.55	4	1.61	+	+
Purchase LF @ other retail outlets already	5	0.89	3	1.51	3	1.64	+	+
Purchase LF @ other D2C outlets already	6	0.85	5	1.32	6	1.34	+	+
Hard for me to get to the FM	11	0.48	10	0.90	5	1.39	+	+

^a Consumers rated barriers preventing them from shopping at FMs more frequently, on a scale from not a barrier (0) to a very large barrier (4). For those that don't currently shop at FMs, there were to indicate the size of the barriers if they were do so. The Score is the average rating across responses, with those greater than or equal to 2 (modest barrier) bolded.

^b Nsd = Not statistically different, + = statistically different and greater than B1, - = statistically different and less than B1. Statistical significance was defined as a *p* value less than 0.05.

Table 13. Five Smallest Barriers to Attending Farmers Markets More Often, by FM Bucket.^a

Barrier	B1	B1	B2	B2	B3	B3	B2 v B1 Different ^b	B3 v B1 Different ^b
	Rank	Score	Rank	Score	Rank	Score		
Not enough entertainment/special events	21	0.08	21	0.16	21	0.08	+	Nsd
Don't know where FM is near me	20	0.14	20	0.24	15	0.66	+	+
I find it intimidating to shop at a FM	19	0.15	18	0.40	16	0.53	+	+
Prefer FM to be indoors or under cover	18	0.23	19	0.36	18	0.52	+	+
Walking around FM is difficult	17	0.28	15	0.49	14	0.66	+	+
Food quality does not meet my standards	16	0.28	17	0.46	17	0.52	+	+
Food prodn methods do not meet my stds	14	0.35	16	0.47	20	0.49	+	+
Vendors are not friendly or helpful	15	0.34	14	0.53	19	0.51	+	+

^a Consumers rated barriers preventing them from shopping at FMs more frequently, on a scale from not a barrier (0) to a very large barrier (4). For those that don't currently shop at FMs, there were to indicate the size of the barriers if they were do so. The Score is the average rating across responses, all averages are less than 1 (a minor barrier).

^b Nsd = Not statistically different, + = statistically different and greater than B1, - = statistically different and less than B1. Statistical significance was defined as a *p* value less than 0.05.

Given how the FM buckets were defined, it is not too surprising that the highest rated barrier for B1 consumers was that FMs are only open part of the year. These consumers are strong FM supporters and would likely participate and buy more if the market seasons were longer. The remaining largest barriers are fairly consistent across buckets, albeit in slightly different rank order. Timing conflicts, the convenience of 1-stop shopping at other outlets, noncompetitive pricing (real or perceived), and purchasing local foods at other outlets readily summarize the primary barriers. The latter again emphasizes the increasingly competitive marketplace for local foods. The one-stop-shopping element is particularly the case for B3 shoppers, as is more difficulty in getting to FMs. Overall, convenience and competition are the overriding factors for all consumer groups.

The lowest barriers are all well below 1, the minor barrier level, albeit higher (statistically at least) for B2 and B3 consumers (Table 13). Consumers tend to know where the markets are, they need not be under cover nor have entertainment/special events, and most do not find walking around at them difficult. Food quality and production methods meet consumer standards. Vendors, on average, are friendly and helpful to the shopping experience.

It is generally accepted that increasing the number of trips consumers make FMs leads to higher total spending, although likely not of equal proportion. Accordingly, we asked consumers specifically about their barriers to spending more (Table 14). In this case, the top five rated barriers are identical, and statistically higher for B2 and B3 consumers relative to B1 consumers. Prices are perceived to be too high and consumers don't carry enough cash with them. The variety of products and of farm vendors also comes into play (consistent with the literature) and likely relates to a range of food products consumers are looking for during their shopping trip. Interestingly, and in particular for B2 and B3 consumers, simply not posting prices leads to less total purchases. This is in support of the results on important characteristics (above) and to the relative convenience and simplicity of the shopping experience.

Table 14. Five Largest Barriers to Spending More at Farmers Markets, by FM Bucket.^a

Barrier	B1	B1	B2	B2	B3	B3	B2 v B1	B3 v B1
	Rank	Score	Rank	Score	Rank	Score	Different ^b	Different ^b
Prices too high	1	1.19	1	1.81	1	2.01	+	+
I don't carry enough cash with me	2	1.06	2	1.43	2	1.71	+	+
Limited variety of local products	3	0.89	4	1.22	3	1.39	+	+
Limited no. of farmers to choose from	4	0.88	3	1.28	5	1.29	+	+
Prices are not posted by the vendors	5	0.71	5	1.09	4	1.38	+	+

^a Consumers rated barriers preventing them from buying more at FMs, on a scale from not a barrier (0) to a very large barrier (4). For those that don't currently shop at FMs, there were to indicate the size of the barriers if they were do so. The Score is the average rating across responses, with those greater than or equal to 2 (modest barrier) bolded.

^b Nsd = Not statistically different, + = statistically different and greater than B1, - = statistically different and less than B1. Statistical significance was defined as a *p* value less than 0.05.

IMPLICATIONS & CONCLUSIONS

Everyone highly values food quality, clean markets, reasonable travel times, and adequate parking at or access to FMs. When compared to general food outlets, the availability of local foods is relatively more important at FMs, even for B3 consumers. Having a wide selection of different kinds of food (fruits, vegetables, meats, and dairy) is important for both kinds of outlets, but consumers, on average, accept that it is less likely to exist at FMs. That said, improvements in this characteristic, like others involving convenience of food shopping, will likely improve FM attendance by those whose attendance has diminished or is recently nonexistent.

B2s and B3 consumers need food products to be more efficiently organized and prices clearly displayed to improve participation. While B3 consumers may not be able to get all they want at the market, knowing that they can productively get in and out quickly will go a long way in supporting their return. While the availability of nonlocal and out-of-season foods at FMs is often a complex and emotional topic. Thinking creatively about involving local grocery stores to offer such products at FMs or locating FMs close to grocery stores may well be amenable to consumers and farm vendors since the products are not directly competing with their own products for sale.

While many FMs have special events, entertainment, craft and RTE food product vendors, none of these characteristics are likely to increase sales of farm vendors to any significant degree. In addition, timing conflicts with consumer schedules are unavoidable, but perhaps can be investigated further to better allow all types of consumers access to the markets. In particular, the growth in competition for local food product sales cannot be overlooked. Indeed, purchasing of local foods was seen as important even for B3 consumers, and all consumers found availability at other marketing channels a sizable barrier to increasing FM attendance.

B2 and B3 consumers were relatively more price conscious and consider prices at FM competitor outlets closely. Further, while not shown above, all consumer types ranked price levels as a larger barrier at FMs than at other outlets for local foods in general. Messaging on prices is often not included in marketing efforts and perhaps should be, where conditions warrant. On the plus side, consumers ranked the importance of having a relationship with the seller higher at FMs than at other outlets when shopping for local foods. While overall rankings for this characteristic at FMs were not as high as one may have expected, the relative gain over other food outlets in general is an encouraging sign. Whether the ranking at FMs is above those at other farm DTC outlets is unknown, but worthy of further study given the competitive marketplace for local foods.

To further inform targeted marketing efforts aimed at increasing customer attendance and farm sales at FMs, we summarize the distinguishing characteristics of FM consumers by type of consumer (Table 15) and differences by demographic factors (Table 16). To be clear, Table 15 represents a summary of the results based on the average consumer in each FM bucket. Where particular differences resonate within those buckets by demographic characteristic, they are highlighted in Table 16. We expect such an exposition will serve as a useful guide to marketing efforts to ensure priority elements are considered in promotion and marketing efforts, operational parameters at FMs, and farm vendor presentation.

Similar efforts in other regions will allow for more variation in demographic profiles of consumers and the kinds of FMs operated. Doing so will provide additional information on marketing strategy and, perhaps, inherent regional differences. Finally, including specific questions about potential cannibalization effects at markets; i.e., asking about customer transaction size per market, will provide more direct data in testing the influence (or not) of this area of concern.

To be sure, FMs are unique in their levels and types of farms participating, customers attending, and the geographic areas and consumer demographic profiles from which they operate. For more productive use of the results presented here, FM managers and farm vendors should consider what the primary objectives of their own targeted marketing strategies are and the resources available from which to employ them. From an economic perspective, the type of customer to target will be for whom the marginal returns of their participation gain is the highest. That said, understanding the true benefits and costs from alternative strategies is difficult and strategies will necessarily differ by market, community, and strategic goals. In addition, unintended consequences of not targeting a particular segment may result in diminished sales from that group, if promotional messaging is unique and distinct. In short, a holistic approach is advised whereby strategies are multiple and varied, depending on the targeted consumer. We expect the information presented here will be useful in aligning those strategies to improve FM performance for farm vendors.

Table 15. Primary Considerations for Marketing Strategies to Improve Attendance and Purchases.

Bucket	Marketing Consideration		
B1 Farmers Market Customers	<ol style="list-style-type: none"> 1. Highlight quality products, clean markets, and ease of travel to and from 2. Prioritize support for local farms, then fresh food products 3. Reinforce appreciation for attending 4. Keep the food shopping experience fun and friendly 5. Only local and own-farm products, with reasonable variety in products and farmers 6. Environmentally friendly products (organic, minimal packaging) increase purchases 7. Minimally (but not zero) price conscious 8. Variable operating hours will reduce time conflicts 9. Increase SNAP/EBT availability and use of debit/credit cards 10. Relationship with farm vendor moderately important 11. Market season extension will increase purchases 12. Recognize competition with other outlets (particularly other DTC outlets) 		
	B2 Farmers Market Customers	<ol style="list-style-type: none"> 1. Highlight quality products, clean markets, and ease of travel to and from 2. Prioritize fresh food products, then support for local farms 3. Reinforce appreciation for attending 4. Keep the food shopping experience fun and friendly, but organizationally efficient 5. Only local and own-farm products, with variety in products and farms important 6. Clearly display product prices; reduce need to talk to farmers and pressure to purchase 7. Moderately price conscious 8. Variable operating hours will reduce time conflicts, including addition of evening hours 9. Increase SNAP/EBT availability and use of debit/credit cards 10. Adequate parking important 11. Relationship with farm vendor minimally important 12. Address competition with other outlets (including retail grocery and other DTC outlets) 	
		B3 Farmers Market Customers	<ol style="list-style-type: none"> 1. Highlight quality products, clean markets, and ease of travel to and from 2. Prioritize fresh food products, then support for local farms 3. Introduce strongly appreciation for attending (incentives?) 4. Double down on an efficiently organized shopping experience 5. Only local and own-farm not required, must have sufficient variety in products and farmers. Common non-local/off season goods would improve attendance. 6. Clearly display product prices; reduce need to talk to farmers and pressure to purchase 7. Very price conscious 8. Variable operating hours reduce time conflicts, particularly addition of evening hours 9. Prioritize SNAP/EBT availability and use of debit/credit cards 10. Adequate and convenient parking required 11. Relationship with farm vendor not important 12. Address competition with other outlets (including retail grocery and other DTC outlets)

Table 16. Emphases for Marketing Strategies, by Demographic Characteristics.

Demographic Characteristic and Marketing Emphases
Higher Income Households: <ol style="list-style-type: none">1. Prioritize support for local farms over fresh food characteristics (B1, B2, B3)2. Higher preference for weekend hours and adequate parking (B1, B2, B3)3. Lower valuation for special events, RTE food vendors, and SNAP/EBT availability (B3)4. Want more variety of products and farmers (B2, B3)5. More strongly desire 1-stop shopping, but less price conscious (B1, B2, B3)
Lower Income Households: <ol style="list-style-type: none">1. More intimidated to talk to farmers (B3)2. Value higher SNAP/EBT benefit availability (B1, B2) and having prices clearly displayed (B2, B3)3. More strongly value relationship with farmer (B1, B3),4. More amenable to nonlocal foods (B3) and concern for reasonable travel times (B3)5. Inconvenient/limited parking problematic (B3), as is the ease of getting to/from FMs (B2, B3)6. More price conscious, prices not competitive (B2, B3)7. More often have own garden (B1, B2, B3) and time conflicts with FM hours (B2, B3)
Younger shoppers: <ol style="list-style-type: none">1. Prioritize support for local farms over fresh food characteristics (B1, B2, B3)2. Feel more intimidated, pressured, or confused (B1, B2, B3)3. Less importance on weekend hours (B3) and quality of food products (B3)4. Stronger values for SNAP/EBT and debit/credit card availability (B1, B2, B3)5. Purchases restricted more by short market season (B1, B2, B3)
Older shoppers: <ol style="list-style-type: none">1. Prioritize fresh food characteristic over support for local farms (B1, B2, B3)2. Less intimidated and confused (B1, B2, B3)3. Less interested in selection of different forms of food (fresh, canned, frozen) (B1, B2, B3)4. Stronger association to relationship with farmer (B1, B3)5. More often have own garden (B3) and more sensitive to food production methods (B2, B3)6. Find parking more inconvenient (B2, B3)
Households with Children: <ol style="list-style-type: none">1. Prioritize support for local farms over fresh food characteristics (B2)2. Less intimidated confused and pressured (B2, B3) and more happy and appreciated (B2, B3)3. Higher valuations for weekend hours (B1, B2) and debit/credit cards (B3).4. Want more variety of products and farmers; prefer convenience of 1-stop shopping (B2, B3)5. More likely to shop at other D2C outlets (B2, B3)
Metro Counties: <ol style="list-style-type: none">1. Higher values on weekend hours, public transportation, and SNAP/EBT benefits (B1, B2)2. Find FMs harder to get to (B2, B3) and higher preference to 1-stop shopping (B2, B3)
Nonmetro Counties: <ol style="list-style-type: none">1. More sensitive to prices (B2) but value relationship with farmer more (B1, B2)2. Find variety of products and farmers lacking and more often have own garden (B2, B3).

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APPENDIX 1: CONSUMER SURVEY

We are asking you to participate in a research survey on consumer participation and farmer sales at farmers markets. The survey is being organized by Todd M. Schmit, Charles H. Dyson School of Applied Economics and Management at Cornell University, in association with the Farmers Market Federation of New York, Cornell Cooperative Extension – Broome County (NY), Community Involved in Sustaining Agriculture in Massachusetts, Northeast Organic Farming Association of Vermont, Maryland Farmers Market Association, and University of Maryland Extension.

What the study is about

Food choices are an integral part of our health and well-being. Interest in purchasing food sourced from nearby farmers and growers has gained interest and appeal in recent years. Due to a variety of reasons, some people are very interested in purchasing local foods while others are not. This survey focuses on the purchasing habits by **all types of consumers** for local foods in general, and specifically at local farmers markets, as well as the barriers to participating in and purchasing local foods at farmers markets.

What we will ask you to do

We value everyone's opinion, whether you shop at farmers markets a lot, a little, or not at all, and whether you shop for local food specifically or not. Opinions of all types of food consumers are critical to the success of this work. By consenting to participate in this study, we will ask you to complete an online survey about your food purchasing habits overall, for local foods, and at farmers markets. The survey will take approximately 15 minutes to complete. However, only one survey per household should be completed, by the household's primary food purchaser. You must also be at least 18 years of age to participate.

Risks and discomforts

We do not anticipate any risks from participating in this research.

Benefits

While participating in the survey will not benefit you directly, we hope to learn more about consumers' interest in purchasing local foods, where they like to buy them, and the barriers to expanding local food sales, particularly through farmers markets. Accordingly, the results will be useful to us in identifying specific solutions that farmers markets managers and vendors can take to reduce the barriers consumers face in more fully participating.

Compensation for participation

None.

Privacy/Confidentiality/Data Security

We anticipate that your participation in this online survey presents no greater risk than everyday use of the Internet. The surveys will be completely anonymous; no personal identifiers (e.g., name, address) will be asked for or recorded. However, we do ask for your county and state of residence to allow us to do state-level analyses, where appropriate.

Data Sharing

Data from this study may be shared with the research community at large to advance science and health. As personal identifiers will not be collected, other researchers, by current scientific standards and known methods, will be unable to identify you from the information we share. Despite these measures, we cannot guarantee anonymity of your personal data.

Taking part is voluntary

Taking part in this study is voluntary. You may refuse to participate before the survey begins, discontinue at any time, or skip any questions that make you feel uncomfortable. If you decide not to take part or to skip some of the questions, it will not affect your current or future relationship with Cornell University or with any of the collaborators mentioned above.

If you have questions

The main researcher conducting this survey is Todd M. Schmit, an Associate Professor at Cornell University. If you have any questions regarding the survey you may contact Todd at tms1@cornell.edu or at 607-255-3015. You should also feel free to reach out to any of the collaborating organizations listed above. If you have any questions or concerns regarding your rights as a subject in this study, you may contact the Institutional Review Board (IRB) for Human Participants at 607-255-5138 or access their website at <http://www.irb.cornell.edu/>. You may also report your concerns or complaints anonymously through Ethicspoint online at <http://www.hotline.cornell.edu/> or by calling toll free at 1-866-293-3077. Ethicspoint is an independent organization that serves as a liaison between the University and the person bringing the complaint so that anonymity can be ensured.

Statement of Consent

Once you have read the above information and received answers to any questions you have. Please click on the "I APPROVE" box below to proceed to the online survey. Thanks!

I APPROVE

Before you begin, please read the two simple definitions below to assist you in answering questions for the survey.

What food products are included in "local foods"? Please consider local food products broadly to include fruits and vegetables, meats, dairy products, baked goods, and other processed food products. You will be asked how you define "local" as part of the survey.

What's a farmers market? Please consider a farmers market as a public and recurring assembly of different farmers (or their representatives) selling the food that they produced or processed directly to consumers. Farmers markets may be indoors or outdoors and typically consist of booths, tables, or stands where multiple farmers (or their representatives) directly sell their products.

1. How important is it to you to purchase local foods?

- Extremely important
- Very important
- Important
- Somewhat important
- Not important

2. In terms of geography, what is your definition of local food?

- Grown and/or made within my county of residence
- Grown and/or made within a multi-county region that I live in
- Grown and/or made within my state of residence
- Other (please describe)

3. In terms of distance, what do you think is the maximum distance food can travel in order to be considered local?

- 50 miles
- 100 miles
- 250 miles
- 500 miles
- Other (please describe)

3. Comparing the number of shopping trips for local foods (in any outlet) last year relative to the year prior, would you say:

- I shopped more frequently for local foods last year than the year prior
- I shopped less frequently for local foods last year than the year prior
- I shopped about the same number of times for local foods last year relative to the year prior
- I didn't shop specifically for local foods either year

4. Comparing the total volume of purchases (dollars) of local foods last year (from all outlets) relative to the year prior, would you say:

- I purchased more local foods (in dollars) last year than the year prior
- I purchased less local foods (in dollars) last year than the year prior
- The level of my purchases on local foods were about the same (in dollars) last year relative to the year prior
- I didn't purchase local foods either year

5. Comparing the number of shopping trips to farmers markets last year relative to the year prior, would you say:

- I shopped more frequently at farmers markets last year than the year prior
- I shopped less frequently at farmers markets last year than the year prior
- I shopped about the same number of times at farmers markets last year relative to the year prior
- I didn't shop at farmers markets either year

6. Comparing your total farmers market shopping purchases (dollars) last year relative to the year prior, would you say:

- I purchased more at farmers markets (in dollars) last year than the year prior
- I purchased less at farmers markets (in dollars) last year than the year prior
- My overall purchases at farmers markets were about the same last year relative to the year prior
- I didn't purchase anything at farmers markets either year

7. What is the importance of each of the following characteristics when you are shopping for food (local or not)?

Characteristic of outlet when shopping for food	Not Important (0)	Somewhat Important (1)	(2)	Important (3)	Very Important (4)
Open during the day					
Open during the evening (i.e., after work)					
Open on the weekends					
Reasonable travel time to and from shopping outlet					
Adequate parking					
Available by public transportation					

Characteristic of outlet when shopping for food	Not Important (0)	Somewhat Important (1)	(2)	Important (3)	Very Important (4)
Wide selection of different kinds of foods (e.g., fruits, vegetables, meats, eggs, dairy)					
Wide selection of different forms of foods (e.g., fresh, frozen, canned, deli)					
Quality of food products					
Availability of local foods					
Availability of non-local foods					
Availability of non-food products					
Accepts credit/debit cards					
Accepts SNAP/EBT food stamp benefits					
Other incentives for low-income persons					
Offers & accepts coupons, sales, other discounts					
Price level					
Prices clearly displayed					
Relationship with seller					
Availability of particular brands (company or farmer)					
Environmentally friendly products (e.g., organic practices, minimal packaging)					
Special events (e.g., entertainment, fundraising)					
Availability of ready-to-eat, prepared foods					
Cleanliness					
Food products efficiently organized					
Other (please describe:)					

8. What is the importance of each of the following characteristics when you are shopping at a farmers market? If you don't currently shop at farmers markets, indicate the level of importance of each if you were to do so.

Characteristic of farmers market	Not Important (0)	Somewhat Important (1)	(2)	Important (3)	Very Important (4)
Open during the day					
Open during the evening (i.e., after work)					
Open on the weekends					
Reasonable travel time to and from farmers market					
Adequate parking					
Available by public transportation					
Wide selection of different kinds of foods (e.g., fruits, vegetables, meats, eggs, dairy)					
Wide selection of different forms of foods (e.g., fresh, frozen, canned, deli)					
Quality of food products					
Availability of local foods					
Availability of non-local foods					
Availability of non-food products					
Accepts credit/debit cards					
Accepts SNAP/EBT food stamp benefits					
Other incentives for low-income persons					
Offers & accepts coupons, sales, other discounts					
Price level					
Prices clearly displayed					
Relationship with vendor					

Characteristic of farmers market	Not Important (0)	Somewhat Important (1)	(2)	Important (3)	Very Important (4)
Availability of particular brands (company or farmer)					
Environmentally friendly products (e.g., organic practices, minimal packaging)					
Special events (e.g., entertainment, fundraising)					
Availability of ready-to-eat, prepared foods					
Cleanliness					
Food products efficiently organized					
Other (please describe:)					

9. Last year how many times did you go to a farmers market during the market season of May through October?

- Never
- Less than once a month during the market season
- Once a month during the market season
- Two to three times each month during the market season
- Once a week during the market season
- More than once a week during the market season

10. When shopping at a farmers market, what is your primary motivation? (select one)

- To support the local farmers and vendors
- Keeping my food dollars in the local economy
- To participate in a social/community setting
- To purchase fresh food
- Other (please describe)
- I don't shop at farmers markets

11. When shopping for local foods other than at a farmers market, what is your primary motivation? (select one)

- To support the local farmers and vendors
- Keeping my food dollars in the local economy
- To participate in a social/community setting
- To purchase fresh food
- Other (please describe)
- I don't shop specifically for local foods

12. When I go to a farmers market, I feel (check all that apply):

- Happy, it's a fun place to be
- Proud to support local vendors
- Welcomed and appreciated
- Nothing in particular, it's about shopping and moving on with my day
- Pressured or obligated to purchase
- Confused, too much going on
- Intimidated to talk to the farmers
- Other (please describe)
- I don't shop at farmers markets

13. How large are the following barriers in preventing you from shopping at farmers markets more frequently? If you don't shop at farmers markets now, how effective are the following barriers in preventing you from shopping at them?

Barrier of shopping more at farmers markets	Not a barrier to me (0)	A minor barrier to me (1)	A modest barrier to me (2)	A large barrier to me (3)	A very large barrier to me (4)
I have my own garden or my neighbors share produce from their garden with me					

Barrier of shopping more at farmers markets	Not a barrier to me (0)	A minor barrier to me (1)	A modest barrier to me (2)	A large barrier to me (3)	A very large barrier to me (4)
I prefer the convenience of a grocery store for one-stop buying					
I don't know where a farmers market is located near me					
The time of the market conflicts with my schedule (e.g., work, sleep, school, family care, community responsibilities)					
There is not enough variety of food or farmers at my local farmers market					
Food quality does not meet my standards					
Food production methods do not meet my standards (example organic, cage-free, grass fed, food miles)					
I purchase local foods at other direct marketing channels (example, CSA, farmstands, farm store) already					
I purchase local foods at other retail outlets (example grocery store, convenience store) already					
I find prices are not competitive with other options					
I find it intimidating to shop at a farmers market					
I am unsure if vendors are selling their own products					
I am unsure if vendors are selling locally-sourced products					
Vendors are not friendly or helpful					
It is hard for me to get to the farmers market					
The market is too far away					
I prefer the market to be indoors or undercover					
Parking is inconvenient or limited					
I find walking around the market difficult (example too crowded, poor lighting, uneven surfaces)					
It is only open part of the year					
Not enough entertainment or special events					
Other (please describe)					

14. How large are the following barriers in preventing you from buying more at farmers markets when you attend one? If you don't shop at farmers markets now, how effective would the following barriers be in preventing purchases by you if you were to attend one?

Barrier of buying more at farmers markets	Not a barrier to me (0)	A minor barrier to me (1)	A modest barrier to me (2)	A large barrier to me (3)	A very large barrier to me (4)
I have my own garden or my neighbors share produce from their garden with me					
I prefer the convenience of a grocery store for one-stop buying					
I don't know where a farmers market is located near me					
The time of the market conflicts with my schedule (e.g., work, sleep, school, family care, community responsibilities)					
There is not enough variety of food or farmers at my local farmers market					
I don't carry enough cash with me					

Barrier of buying more at farmers markets	Not a barrier to me (0)	A minor barrier to me (1)	A modest barrier to me (2)	A large barrier to me (3)	A very large barrier to me (4)
Limited number of farmers to choose from					
Limited variety of local products					
Poor quality of local products					
Limited to no access to non-local products					
Prices too high					
I am unsure if vendors are selling their own products					
I am unsure if vendors are selling locally-sourced products					
I have a language barrier between me and the vendors					
Prices are not posted by the vendors					
Products not labeled with growing methods					
Other (please describe)					

15. What percent of your total food dollars (local and nonlocal) are spent at the following food outlets? (Note, total of percentages must equal 100%)

- Farm stands at the farm
- Farm store
- Community Supported Agriculture (CSA)
- Farmers markets
- Convenience stores
- Cooperative grocery store
- Retail grocery store
- Super centers
- Meal delivery services
- Other (please describe)

16. How likely are you to shop at the following locations for locally grown/produced food?

Location	Not likely (0)	Somewhat likely (1)	Likely (2)	Very likely (3)	Extremely likely (4)
Farm stand at the farm					
Farm store					
Community Supported Agriculture (CSA)					
Farmers markets					
Convenience stores					
Cooperative grocery store					
Retail grocery store					
Super centers					
Meal delivery services					
Other (please describe)					

17. What state and county do you live in?

- State:
- County:

18. Please check the age bracket in which you fall.

- 18-24
- 25-34
- 35-44
- 45-59
- 60+

19. What category or categories best describe you (check all that apply)?

- White
- Hispanic, Latino, Spanish origin
- Black or African American
- Native American, American Indian or Alaska Native
- Native Hawaiian or Other Pacific Islander
- Asian
- Middle Eastern or North African
- Other (describe)

20. What is the number of persons living in your household?

- **Number of persons:**

21 How do you describe your household? (Check all that apply.)

- Single
- Married or single with significant other/partner/roommate
- Children (under 5 years old)
- Children (between 5 and 17 years of age)
- Multi-generational (3 to 4 generations)

22. Please describe your work status:

- Unemployed
- Employed part time
- Employed full time
- Retired
- Other (please describe)

23. What is your gender?

- Male
- Female
- Other (please describe)

24. What was your total household income before taxes last year?

- Less than \$25,000
- \$25,000 to 34,999
- \$35,000 to \$49,999
- \$50,000 to \$74,999
- \$75,000 to \$99,999
- \$100,000 to \$149,999
- \$150,000 or more

25. Feel free to provide any additional comments about your local food purchasing habits and how they've changed in the text box below (optional)

SURVEY COMPLETE!

[CLICK ON THE ARROW BELOW TO SUBMIT YOUR RESPONSES!](#)

THANK YOU FOR YOUR TIME AND ATTENTION!

OTHER A.E.M. EXTENSION BULLETINS

EB No	Title	Fee (if applicable)	Author(s)
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2019-04	Crop Budgets and Cost & Return Studies for Organic Grain in Western New York		Li, J., Gómez, M. & Murphy, J.
2019-03	2018 New York State Berry Market Analysis: Pricing Information of Local Berries		Davis, T., Gomez, M. & Pritts, M.
2019-02	The State of the USDA Inspected Red Meat Harvest & Processing Industry in New York & New England		Waro, M., Kalaitzandonakes, M., Baker, M., Peters, C., Gomez, M. & Conard, M.
2019-01	The State of the Agricultural Workforce in New York		Stup, R., Ifft, J. & Maloney, T.
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2018-06	Dairy Business Summary New York State 2017		Karszes, J., Christman, A., Howlett, A. & Knoblauch, W.
2018-05	Business Summary New York State 2016		Karszes, J., Christman, A., Howlett, A., Windecker, K. & Knoblauch, W.
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2018-03	Economic Contributions of the Apple Industry Supply Chain in New York State		Schmit, T.M., Severson, R.M., Strzok, J. & Barros, J.
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