

U.S. farmers market attendance and experiences: Descriptive results from a national survey

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Abstract

To provide farmers market leaders and researchers with new insights about farmers market attendees, given shifting consumer preferences and demographics, we conducted a nearly nationally representative survey in the United States. Among the 5,141 respondents, 38.51% reported attending

farmers markets infrequently (i.e., five or fewer times per year), and 41.78% reported attending with more regularity (i.e., six or greater times per year). In combination, this equated to 80.30% of the entire sample having at least some experience with farmers markets (i.e., attending once per year or more). Of note, farmers markets were defined as

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Author Note

There are references in this article to the Farmers Market Coalition (FMC), a national nonprofit dedicated to working with farmers market operators to strengthen farmers markets across the United States. The authors are either affiliated with or work closely with FMC.

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places to buy local food directly from more than one vendor. Top motivations for attending included getting fresh food, supporting local farmers, getting high-quality food, and doing something fun, suggesting that promoting farmers markets with those themes should resonate with audiences. The top challenge to attendance was forgetting about farmers markets, indicating that campaigns or strategies to remind individuals about markets could be beneficial. Additionally, the majority of attendees reported that they ate healthier because of farmers markets and that they did nonconsumer activities at farmers markets, such as socializing and learning, underscoring that farmers markets can be a shared community experience that goes beyond consumption. We recommend that future work build on our results to further investigate how to expand the customer base for farmers markets and help people access the many benefits they provide.

Keywords

farmers market, consumer, communication, electronic benefits transfer (EBT), food access, local food systems, marketing, national survey, scrip, Supplemental Nutrition Assistance Program (SNAP)

Introduction

For many people in the U.S., farmers markets play a role in how they experience and access food. There are over 8,700 farmers markets in the U.S., where some 40,000 farmers sell their products (U.S. Department of Agriculture [USDA] National Agricultural Statistics Service, 2016; USDA Economic Research Service, 2022). Although growth in the number of farmers markets in the U.S. has slowed in recent years, long-term growth has been dramatic; in 1970, there were only an estimated 340 farmers markets in the country (Brown, 2002). To put the scope of farmers markets in perspective: in the U.S., there are more farmers markets than the 5,206 Walmart and Sam's Club stores (Walmart, 2024).

The growth in farmers markets has benefited communities as farmers markets may offer fresh

food in locations lacking retail options (Larsen & Gililand, 2009; Sage et al., 2013). Moreover, thousands of farmers markets are sites for redeeming benefits from food assistance programs such as the Supplemental Nutrition Assistance Program (SNAP), with \$33 million¹ in SNAP benefits redeemed at farmers markets in 2020 (USDA Food and Nutrition Service, 2021). Many states classified farmers markets as essential services during the COVID-19 pandemic (Farmers Market Coalition [FMC], 2020), highlighting that farmers markets are critical for food access.

Farmers markets offer communities other kinds of benefits, too. Farmers markets can be a place for meaningful social interactions (Alkon & McCullen, 2011; Aucoin & Fry, 2015; Carson et al., 2016; Morales, 2021) and for civic engagement (Witzling & Shaw, 2022), as well as to access resources and information (Dollahite et al., 2005; Morales, 2021; Witzling & Shaw, 2022) and to celebrate cultures (Alkon, 2007; Meyers, 2015). Economically, farmers markets can benefit communities as they support the circulation of money locally (Sadler et al., 2013). Relatedly, they provide financial benefits to the small and medium-sized farms, and other businesses, that vend there. Vendors may receive higher profit margins at farmers markets compared to other marketing channels (Warsaw et al., 2021), and selling food locally through direct-to-consumer marketing channels, which include farmers markets, is associated with higher rates of business survival (Lowe et al., 2015).

Given the benefits farmers markets provide, there is a need to provide farmers market managers, vendors, community leaders, and food systems educators with new insights about market attendees. Such insights can help ensure that farmers markets remain relevant at a time when consumer preferences and demographics are shifting. Marketing research has identified online food shopping as a growing trend (Verdon, 2022), which potentially challenges farmers markets. Additionally, millennials are now the largest living generation, and research has found that they rely more on prepared food and snacks than other generations do (Kuhns & Saksena, 2017), which could present

¹ All currency in this article is in US\$.

further challenges to farmers markets. This generation may become more interested in cooking; research finds that as household sizes grow, more time is spent preparing food (Mancino & Newman, 2007).

With these consumer shifts in mind, a greater understanding of expectations and trends of farmers market attendance at the national level is needed. Much research about farmers markets attendance has been based on local studies, with some exceptions (e.g., Bir et al., 2019; Chen & House, 2022; Zepeda, 2009). To build on this prior work, our study focused on understanding farmers market attendance with a comprehensive set of questions related to farmers market shopping in addition to questions about other activities that take place at markets. We included novel survey questions to query understudied aspects of farmers market attendance, such as interest among attendees in the ability to preorder market products online, purchase meal kits, or pay with digital apps. We also included novel questions related to a broad range of activities that may take place at farmers markets, such as receiving a health service, making a new friend, or voting. We intend for this work to encourage new directions in farmers market research and to support research at local and regional levels, as our analysis provides a source of national-level benchmarks.

Levels of Farmers Market Attendance

National U.S. estimates of market attendance vary widely. Zepeda (2009) found among a national sample, 78.5% had access to farmers markets. Of those with access, 58.1% shopped at farmers markets at least once per month, which equates to 45.6% of the sample shopping at farmers markets at least once per month. One more recent study suggested higher levels of attendance. Bir et al. (2019) found that 63% of individuals surveyed using a national sample reported having previously purchased food from a farmers market, roadside stand, or U-pick operation. In contrast, Rossi (2024) found that across three national surveys, an average of 30% of respondents reported shopping at a farmers markets in the previous month. A research firm found only 12% of individuals from a national U.S. sample reported doing their “grocery

shopping” at a farmers market (Schmidt, 2016). The estimates may vary due to changing behavior over time or because farmers market attendance was measured differently in each study. Respondent sensitivity to question wording may also impact estimates (i.e., attending a farmers market vs. grocery shopping there).

Regional data provides another source of estimates. In one study, researchers surveyed individuals at food stores in San Luis Obispo County in California (Wolf et al., 2005). They found that 42% of those surveyed reported buying produce at a farmers market in the past month (Wolf et al., 2005), a figure similar to the Zepeda (2009) finding. Results suggestive of greater participation, more similar to the Bir et al. (2019) finding, were found in other regional studies. Jilcott Pitts et al. (2014) used representative samples of primary food shoppers in both North Carolina and Kentucky. In North Carolina, 49.2% of the sample had made a purchase at a farmers markets or through community supported agriculture more than “Never,” and in Kentucky, the corresponding figure was 74.2%. Results from a Michigan study and a Florida study landed between those estimates. In Michigan, 61% of respondents from a random telephone survey of residents reported that they had visited a farmers market in the past year (Conner et al., 2010). Similarly, in Florida, a survey of randomly sampled households found that 61.7% of those surveyed reported that they had purchased food from a farmers market, roadside stand, or U-pick operation in 2012, the year the survey took place (Shi & Hodges, 2016).

Seasonality may be an important component to understanding attendance as well, as some markets are available year-round whereas others are only seasonally available. Relatedly, some places may have markets year-round but with a reduced product selection during off-peak seasons, which may impact attendance. Given the range of estimates and the potential sensitivity to question wording, it remains unclear how many people in the United States attend farmers markets with regularity, leading to the first of our five research questions:

RQ1: How often, and in which seasons, do individuals attend farmers markets?

Farmers Market Shopping Behaviors and Preferences

Another primary objective of this study was to understand farmers market shopping behaviors. Recent work collected during the COVID-19 pandemic found typical spending per farmers market trip ranged from \$15 to \$28 (Rossi, 2022). Comparing these figures to data collected in more typical circumstances could be insightful, though the Rossi (2022) estimates do align with pre-pandemic regional work (Jilcott Pitts et al., 2014; Zepeda & Carroll, 2018). Regarding products purchased, Zepeda and Carroll (2018) reported most customers bought vegetables (81%), with many purchasing bakery items (59%), cheese (41%), and fruit (37%).

Less is known about relative interest in preferences for newer payment options, such as digital payment apps, at farmers markets. Research not specific to farmers markets finds that digital payment options such as Venmo and PayPal are popular with younger demographics, as 57% of individuals ages 18 to 49 reported using Venmo and 63% reported using PayPal (Anderson, 2022). Similarly, it is unclear whether farmers market attendees may have preferences for preordering farmers market products online to pick up on market day or to have them delivered. Nevertheless, research finds there is interest among consumers in shopping for food online. Greater proportions of consumers used online options to purchase food across numerous marketing channels in 2023 compared to 2022, though the proportion of consumers using online options to purchase food via direct-to-consumer channels (which includes farmers markets) remained steady at 6% in both years (Gill & Thilmany, 2024).

Similarly, less is known regarding interest in purchasing meal kits at farmers markets. Although meal kits may not be available at all farmers markets, understanding consumer interest in them could offer valuable insight to vendors considering whether to develop meal kit products. A survey of U.S. consumers by a market research firm found that 49% of adult consumers ages 18–34 reported meal kits were part of their routines, with the most interest from households with three or more people (Goldschmidt, 2022). Meal kits could be espe-

cially attractive to individuals seeking to learn more about cooking, given that commercial meal kits contain recipes that are easy to follow, though the kits can be more expensive compared to the cost of purchasing the same ingredients at a supermarket (McKay, 2023). Additionally, research has found that meal kits have the potential to increase cooking skills and self-efficacy in cooking (Horning et al., 2021), which may be important to younger consumers or others seeking to increase their skills and expand their culinary repertoire. As noted previously, interest in cooking may increase as household sizes grow (Mancino & Newman, 2007). With a goal of learning more about national trends and other understudied aspects of shopping at farmers markets, our second research question was:

RQ2: What are typical shopping behaviors and preferences at farmers markets among attendees?

Activities and Impacts

We also sought to investigate what people do at farmers markets beyond shopping and the impacts of farmers market attendance. In a survey of market attendees, Crompton et al. (2012) found that attendees reported eating more fruits and vegetables as a result of visiting a market. Research has also found a connection between attendance and an increase in nutritional knowledge (Dannefer, 2015). Furthermore, farmers markets are events that provide opportunities for social connections and civic engagement (Warsaw et al., 2021). As farmers market leaders in Wisconsin reported partnerships between farmers markets and numerous types of civic and social organizations, researchers concluded that farmers markets likely facilitate connections between residents and their communities (Wilson et al., 2018; Witzling & Shaw, 2022). With civic, educational, health, and social activities and impacts in mind, our third research question was:

RQ3: What activities do attendees report doing at markets beyond shopping, and what impacts from attendance do they perceive?

Motivations For and Challenges to Attending Farmers Markets

A comprehensive look at motivations for and challenges to attending farmers markets was offered by Byker et al. (2012), who reviewed 22 articles focused on farmers market consumer studies. Byker et al. (2012) found the primary motivations for attending farmers markets included obtaining fresh, high-quality, organic, and/or tasty food. Other reasons included to support local agriculture, obtain food perceived to be safer, or attend a social event. Although that study is over 10 years old, these results have been corroborated by more recent regional work (e.g., Zepeda & Carroll, 2018).

The relative importance of benefits likely varies at a local level. In one of the studies included in the Byker et al. (2012) review, Baker et al. (2009) asked attendees of two markets in Vermont to rank the importance of various reasons to attend markets. The results found that at both markets, obtaining local food was ranked first, followed by obtaining fresh food, and then supporting local agriculture. However, convenience was ranked in fourth place over social benefits at one market, whereas at the other, social benefits were ranked in fourth place over convenience. “Social benefits” were described as the market being “a good place to see friends and family, a good place to meet people, a good place to take visitors.”

Regarding challenges to attending farmers markets, Byker et al. (2012) described issues related to convenience, such as market hours and location, in addition to cultural barriers or feeling unwelcome, and product prices. Similarly, Zepeda and Carroll (2018) found that survey participants reported challenges related to price, payment options, and convenience, in addition to crowds, lack of product variety, and lack of space to store items at home. A systematic review by Maró et al. (2023) reported price as a primary obstacle. With the goal of understanding why people do (and do not) attend farmers markets at a national level, we posed the next research question:

RQ4: What motivations for and challenges to attending farmers markets do attendees perceive?

Differences in Background Characteristics of Farmers Market Attendees and Non-Attendees

Studies examining farmers market attendees in specific locations in the U.S. have noted that farmers market attendees are more likely to be women (Byker et al., 2012; Maró et al., 2023; Rice, 2015), more educated and/or affluent (Byker et al., 2012; Garner & Ayala, 2019; Maró et al., 2023; Rice, 2015; Zepeda & Carroll, 2018), white (Garner & Ayala, 2019; Maró et al., 2023; Rice, 2015; Zepeda & Carroll, 2018), and over 40 (Maró et al., 2023; Zepeda & Carroll, 2018). For example, a survey conducted in 1997 of farmers market shoppers in New Jersey found that 83% of attendees were women. In terms of age, that study found attendees trended older, with only 12% under the age of 35 (Govindasamy et al., 1998). Similarly, in a study of two Alabama farmers markets, only 12% of attendees were under the age of 35 at one market and 13% at the other (Brooker et al., 1993). In contrast, Bir et al. (2019) found that age and gender were not statistically significant explanatory variables for shopping at farmers markets.

Nevertheless, understanding more about the role of demographics is crucial as this information could help farmers market leaders enact strategies to attract a greater diversity of attendees, serve the needs of attendees better, and increase access to farmers markets. Lifestyle factors are also associated with market attendance (Witzling & Shaw, 2019), in particular enjoyment of cooking (Byker et al., 2012), which may be another key background characteristic of attendees. Therefore, for RQ5 we considered:

RQ5: How do the background characteristics of farmers market attendees and non-attendees differ?

Methods

To investigate these research questions, a survey was developed in the spring of 2023 by the study team. The team represented a partnership between the University of Wisconsin–Madison and FMC. Survey questions drew from previous studies (e.g., Brunso et al. 2021; Byker et al. 2012; Elepu & Mazzocco, 2010; Garner & Ayala 2019; Mesić et al.

2021; Jilcott Pitts et al. 2014; Witzling & Shaw, 2019, 2022; Zepeda & Carroll, 2018), and additional novel questions were added. Ten professionals affiliated with farmers market associations or who otherwise worked in the field of food systems provided feedback on the draft survey. The draft survey was piloted by the survey administrator, the National Opinion Research Center (NORC). NORC is an independent research organization affiliated with the University of Chicago. NORC staff provided additional feedback and translated the final survey into Spanish to provide a Spanish language option (3% of all respondents used the Spanish language option). The study protocol, which included a consent process, received Institutional Review Board (IRB) approval from the University of Wisconsin–Madison (IRB No. 2023-0759-CP00) in addition to undergoing an IRB review via NORC.

To ensure participants began the survey with a similar understanding of farmers markets, the survey included a definition of farmers markets “as places where you can buy food directly from more than one market vendor and where all or most of the items are locally grown, raised, or made.” This definition was written in consultation with the group of farmers market and food systems professionals who provided feedback on the survey. The survey questions with response options are available in the Appendix (Table A1). Because all participants had been part of NORC’s AmeriSpeak Panel, they had already provided information related to demographics and their backgrounds. Therefore, data related to age, education, gender, household income, household size, political ideology, and race and ethnicity were available for analysis, but questions related to those items were not included on the survey instrument.

The survey instrument included items related to community type (rural, suburban, urban), weekly food shopping budget, and food assistance program participation, as data related to those items was not available from NORC. The food assistance items inquired about participation in the following programs: SNAP; the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); the Commodity Supplemental Food Program (CSFP); and The Emergency Food

Assistance Program (TEFAP). SNAP is the largest food assistance program accepted at farmers markets. SNAP funds are held on a participant’s electronic benefits transfer card and must be processed, most commonly via scrip (e.g., paper coupons, tokens, or mobile wallet accounts) issued through a central terminal managed by a farmers market organization (Way & Edmonds, 2023). However, our survey included variables related to the additional programs as there are private funds available to particular markets, or funds available in certain states, through which coupons may be issued to qualifying individuals based on participation in those programs (e.g., based on WIC participant status). The survey also contained additional questions that were not used in this analysis.

NORC administered the survey between August 2 and August 11, 2023. NORC selected recipients from their national probability-based AmeriSpeak Panel to achieve a sample that was close to demographically representative of the U.S. population. This involved oversampling some demographic categories to achieve alignment with national targets, in particular to reach younger participants, less affluent participants, and people across racial and ethnic backgrounds. NORC achieves industry-leading response rates through intensive nonresponse follow-up methods with panelists and has a retention rate of panelists of approximately 85% (NORC, 2022). High panelist retention is an indicator of better-quality data, as low panelist retention may be a reflection of the trend for paid panelists to quickly move through surveys and quit panels, rather than provide accurate responses.

The survey was available to participants online or by phone with an interviewer. An incentive equivalent to \$3 was offered to panelists. We aimed to collect a large sample (5,000 completed surveys) given the low-end estimates of how many individuals attend farmers markets in the U.S. to ensure that enough data would be collected among attendees. This target was reached with 5,141 respondents in the final sample, including 4,996 who participated online and 145 by phone. Not included in the total were 179 participants whose responses were flagged by NORC staff due to data quality concerns such as skipping questions. With

24,455 individuals initially invited to take the survey, the survey completion rate was 21%.

NORC provided descriptive data (see Table A2 in the Appendix) that shows how the survey sample compared to NORC's key U.S. demographic benchmarks. Some but not all of these benchmarks were reached. Those in the youngest age categories, those with less education, and respondents who selected "Other" for race and ethnicity appear to be proportionally underrepresented. A closer examination of race and ethnicity data revealed that Asian respondents were underrepresented, and this is a limitation of this study. However, the sample is still more demographically representative of the U.S. than is typical in survey research given NORC's unique AmeriSpeak Panel and the scope of the data collection.

Analysis

For some questions, a "Don't know" option was available, and these responses were subsequently coded as missing data. We excluded missing data from the reported proportions as it was minimal for any single item given NORC's quality control measures. In tables displaying percentages, we arranged the items starting with the item that had the highest percentage in the top scale category. We used chi-square tests for independence (with a Bonferroni correction applied) for comparisons to address RQ5. Data were analyzed in SPSS (IBM SPSS Statistics Version 29.0.2.0).

For our analysis, we needed to designate which respondents among the entire sample were farmers market attendees. We designated respondents as attendees if they affirmed their attendance across three questions. The survey first asked about general attendance when markets were seasonally available with response choices of "Never," "Rarely," "Sometimes," "Frequently," and "Very frequently." Respondents who indicated they "Never" went to farmers markets and people who did not respond were removed from consideration as farmers market attendees. The survey next asked about attendance using a time-specific, but broad, scale. The response choices were "Never," "Just a few times each year," "About once a month," "About once every other week," and "About once a week." Respondents who stated they generally attend the

markets more than "Never" on this item remained in consideration as attendees. The third question asked specifically how many times per year respondents attended. To be categorized as attendees, respondents needed to select more than zero times to be included in our analysis as attendees.

For our comparison of attendees to non-attendees (RQ5), we categorized respondents who selected "Never" to that first general question about attendance as non-attendees. With the survey logic we used, those respondents were not presented with the other two questions about attendance. Some respondents were not categorized as attendees or non-attendees, and therefore not part of the RQ5 analysis, either due to their inconsistent responses on the three attendance items or because they skipped some or all of these questions. For example, individuals who responded in the affirmative to the first general question about attendance (i.e., more than "Never"), but then responded otherwise or skipped the other attendance questions, were not classified as attendees or non-attendees.

Some of the analysis examined responses from individuals who participated in a food assistance program. Respondents were classified as food assistance program participants if they indicated that they participated in at least one of the programs listed (SNAP, WIC, CSFP, or TEFAP).

Results

RQ1 explored how often and in which seasons individuals attend farmers markets. Of the nearly nationally representative sample, 1,980 respondents (38.51%) reported attending infrequently, five or fewer times per year. We found that 2,148 respondents (41.78%) attended farmers markets with more regularity, at six or more times per year. Note all of these respondents also selected more than "Never" on the two more general attendance questions to check for consistency in responses. Taken together, 80.30% of the sample (4,128 respondents) were classified as attendees. In contrast, there were 662 respondents (12.88% of the sample) that reported never attending farmers markets and were classified as non-attendees, and another 351 (6.83%) that had inconsistent responses regarding attendance or were missing

data and were not classified as attendees or non-attendees.

When considering just the 4,128 respondents we classified as attendees, we found that among them, the most common frequency for attending farmers markets with one of the more general frequency questions was “Just a few times per year,” which was selected by nearly half of the attendees (48.01%), followed by about once a month (25.46%), about once every other week (17.08%), and about once a week (9.45%). Among attendees, the proportions for the number of visits per year were as follows: one to five times per year (47.97%), six to 10 times (20.86%), 11–15 times (11.19%), and 16–20 times (6.06%). The remainder of the attendees (13.93%) selected choices greater than 20 times per year.

Among those classified as attendees, we found that summer was the most common season for attendance, at least once per month (70.57%), followed by fall (44.84%), spring (40.67%), and winter (9.81%). Taken together, these assessments show that though attending farmers markets more occasionally is typical, there is a wide range in how often individuals attend, and in what seasons, as seasonal attendance appears to vary widely.

For RQ2, related to typical shopping behaviors and preferences at farmers markets, attendees most commonly described the market they typically attend as along a main street (40.11%), followed by a market in a neighborhood (18.47%), a market that attracts tourists and has a festival atmosphere (17.11%), a market outside or inside of a building like a library or a hospital (14.77%), and a market

in a location without buildings or development (9.54%).

Nearly all attendees reported commonly purchasing fruits and vegetables (92.13%). Over a quarter of attendees also reported commonly purchasing packaged items (38.59%), bakery items (38.20%), and eggs (25.22%). Under a quarter of attendees reported commonly purchasing garden plants (22.80%), arts and crafts (18.14%), dairy products (16.96%), cut flowers (16.96%), beverages (16.23%), meals to eat at the market (15.50%), meat (12.31%), meal kits (2.81%), and other items (2.52%).

We also asked about interest in nontraditional or convenience-focused options that may not be available at many markets (Table 1), finding 23.02% of attendees were either “Quite” or “Very” interested in buying prepared meals at farmers markets. By comparison, 20.46% of attendees were either “Quite” or “Very” interested in buying a meal kit, whereas only 16.63% were either “Quite” or “Very” interested in preordering products online for pickup at the market, and only 15.63% expressed similar levels of interest in preordering products for home delivery.

We found that most attendees typically patronized between two and five vendors (72.88%). There were 10.04% that selected one vendor, 11.40% that selected between six and 10 vendors, and 4.33% that selected more than 10 vendors. Few reported patronizing no vendors (1.36%).

Few attendees (4.69%) spent less than \$10 on a typical trip. More commonly, they reported spend-

Table 1. Interest in Convenience-Focused Options at Farmers Markets

Option	N	Not at all interested (%)	Slightly interested (%)	Somewhat interested (%)	Quite interested (%)	Very interested (%)
Buying prepared meals	4,101	22.43	24.02	30.53	15.53	7.49
Buying a meal kit	4,096	31.30	22.24	26.00	13.09	7.37
Preordering farmers market products online for home delivery	4,089	48.35	17.02	19.00	8.83	6.80
Preordering farmers market products online to pick up at the market	4,094	41.38	19.52	22.47	10.89	5.74

Note: The proportions displayed reflect only the responses from farmers market attendees.

ing between \$10 and \$25 (31.81%), or more than \$25 but less than \$50 (39.76%). About 20% reported spending more than this typically, with 15.13% selecting more than \$50 but less than \$75, 5.72% selecting more than \$75 but less than \$100, and 2.89% spending more than \$100 per trip.

We also examined interest in payment types (Table 2). There were greater proportions of attendees who were “Very” interested in using cash (28.40%) or a credit card (20.37%), as opposed to other options such as paying with gift cards or through digital apps such as Venmo or PayPal. We further examined interest in food assistance payment options just among the subset of attendees who also participate in food assistance programs (Table 3) and saw strong interest among them in using SNAP or WIC at farmers markets.

RQ3 considered activities done at farmers markets and the perceived impacts of farmers market attendance. Nearly half of attendees reported spending time with family and friends at a farmers

market (47.65%), with many also learning new things about food (40.50%). Over a quarter met a new person (29.41%) or learned new things about the community (25.41%). Nearly a quarter learned about growing food (24.52%). Less frequently, attendees reported that they learned about cooking (14.34%), made a connection with a new organization (13.76%), made a friend (12.35%), took a photo and posted it to social media (10.73%), got ideas about new business opportunities (8.96%), received information about voting (4.36%), received a health service such as a blood pressure check (3.13%), or registered to vote (1.72%). Only 18.77% of attendees reported doing none of the listed activities.

We also investigated whether attendees had done several things as a result of their past trips to farmers markets (Table 4). More than three quarters of attendees reported eating healthier at levels of “Somewhat” or higher because of farmers markets. Many attendees also reported economic bene-

Table 2. Interest in Payment Options at Farmers Markets

Option	N	Not at all interested (%)	Slightly interested (%)	Somewhat interested (%)	Quite interested (%)	Very interested (%)
Cash	4,095	6.25	11.70	27.28	26.37	28.40
Credit card	4,105	21.73	13.69	23.78	20.44	20.37
Paying digitally with apps like Venmo or PayPal	4,086	47.04	13.61	17.52	12.51	9.32
Gift cards or certificates	4,075	46.50	16.69	19.34	10.63	6.85

Note: The proportions displayed reflect only the responses from farmers market attendees.

Table 3. Interest in Food Assistance Payment Options at Farmers Markets

Option	N	Not at all interested (%)	Slightly interested (%)	Somewhat interested (%)	Quite interested (%)	Very interested (%)
Using SNAP or WIC	793	16.27	11.85	21.31	20.05	30.52
Using matching incentive dollars offered to those using SNAP at the farmers market	789	20.03	12.55	23.57	17.49	26.36
Using coupons issued by the farmers market or a state agency	786	17.94	13.10	28.63	19.08	21.25

Note: SNAP = Supplemental Nutrition Assistance Program, WIC = the Special Supplemental Nutrition Program for Women, Infants, and Children. The proportions displayed reflect only the responses from farmers market attendees who also participate in food assistance programs.

fits such as saving money or community economic benefits such as patronizing nearby stores or restaurants on market day or looking for locally grown products in stores. Many attendees also connected with others in the community and community

organizations at least “Somewhat.”

For RQ4, regarding the motivations for and challenges to attending farmers markets, we found that the top motivations (Table 5) were to buy fresh food, support local farmers, get high-quality

Table 4. Perceptions of Farmers Market Impacts

Perception	N	Not at all (%)	Very little (%)	Somewhat (%)	Quite a bit (%)	A great deal (%)
Have eaten healthier	4,112	8.78	16.15	45.89	20.89	8.29
Looked at locally grown products at the grocery store based on experience at farmers markets	4,093	13.58	19.79	41.90	19.08	5.64
Saved money by shopping at the farmers market	4,091	21.12	30.41	33.02	10.36	5.08
Connected with others in the community	4,108	25.15	26.75	32.04	11.73	4.33
Gotten information from organizations in the community	4,105	27.87	26.92	29.72	11.62	3.87
Shopped or visited nearby retail stores on market day	4,087	21.16	29.88	35.28	10.74	2.94
Have eaten at a nearby restaurant on market day	4,080	28.75	28.92	30.86	8.87	2.60

Note: The proportions displayed reflect only the responses from farmers market attendees.

Table 5. Motivations for Attending Farmers Markets

Motivation	N	Not at all (%)	Very little (%)	Somewhat (%)	Quite a bit (%)	A great deal (%)
To buy fresh food	4,112	1.95	4.38	21.26	34.87	37.55
To support local farmers	4,117	3.04	6.22	27.88	31.67	31.19
To get high-quality food	4,102	3.24	5.39	26.55	35.96	28.86
To do something fun	4,094	3.98	8.06	34.78	31.39	21.79
To eat healthier	4,100	5.88	10.93	35.17	27.15	20.88
To find products that are hard to find elsewhere	4,099	10.17	18.10	34.72	21.59	15.42
To buy environmentally sustainable food	4,090	15.45	14.40	36.87	22.18	11.10
To reduce your use of food packaging	4,083	23.34	18.44	31.79	16.63	9.80
To save money	4,086	26.55	25.40	28.76	10.99	8.30
To talk to people who grow or make your food	4,091	21.41	22.12	33.12	15.57	7.77
To feel like you're part of the community	4,093	20.67	19.11	35.99	16.57	7.67
To learn new things about food	4,089	23.70	22.94	32.80	13.65	6.92
To shop in a way that feels traditional	4,097	24.73	21.63	35.34	12.06	6.25

Note: The proportions displayed reflect only the responses from farmers market attendees.

food, or do something fun. We separately examined motivations that would only be relevant to individuals who also participate in food assistance programs (Table 6). Over 25% of those attendees reported the ability to use SNAP at a farmers market as a motivation for attendance either “Quite a bit” or “A great deal.” Among the 19 challenges to attending more often (Table 7), the top challenges were forgetting about farmers markets, high prices, and crowds.

To examine RQ5, we considered whether background characteristics differed among farmers market attendees compared to non-attendees using chi-square tests for independence with a Bonferroni correction applied. Results indicated that farmers market attendees and non-attendees did not differ relative to community type, education, food assistance program participation, political ideology, or weekly food budget. We did find significant differences regarding a number of other variables. Being female was associated with being a farmers market attendee ($\chi^2 [1, N = 4733] = 12.18, p = .008$). Among attendees, 52.29% were female, whereas only 44.92% of non-attendees were female. Note for this particular comparison, we only compared respondents that specified their gender as male or female due to low numbers of individuals who selected other options for gender.

Two of the race and ethnicity variables were significant. There were greater proportions of white respondents among attendees ($\chi^2 [1, N = 4790] = 15.15, p = .002$). Among attendees, 65.65% were white, whereas 57.85% of non-attendees were white. There was a reduced proportion of Black respondents among attendees ($\chi^2 [1, N = 4790] = 11.23, p = .013$). Among attendees, 10.93% were

Black, whereas among non-attendees, 15.41% were Black. There were no significant differences in the other race and ethnicity categories.

With age ($\chi^2 [4, N = 4790] = 44.65, p < .001$), there were smaller proportions of the younger age categories among attendees. Among attendees, 8.41% were Gen Z (ages 18 to 26) and 29.34% were millennial (ages 27 to 42), compared to non-attendees, where 9.67% were Gen Z and 38.67% were millennial (Table 8). For descriptive purposes, we also report on the distribution of ages for the attendees: The first quarter were ages 18 to 34, the second quarter were ages 35 to 51, the third quarter were ages 52 to 64, and the fourth quarter were above age 65.

Regarding the frequency of cooking or preparing fresh food ($\chi^2 [4, N = 4772] = 152.02, p < .001$), greater proportions of attendees reported cooking more frequently compared to non-attendees (Table 9). Among attendees, 26.33% reported that they cooked about once a day, compared to only 20.52% of non-attendees. Regarding household income ($\chi^2 [3, N = 4790] = 29.34, p < .001$), there were greater proportions of attendees in the highest income category relative to non-attendees (Table 10). Specifically, 27.52% of attendees had annual household incomes of \$100,000 or more, compared to 22.96% of non-attendees. At the other end of the scale, only 21.17% of attendees had household incomes less than \$30,000 annually, compared to 28.10% of non-attendees. Regarding household size ($\chi^2 [5, N = 4790] = 22.33, p = .007$), among attendees, there was a smaller proportion of single-person households (18.92%) compared to non-attendees (25.98%), as shown in Table 11.

Table 6. Motivations for Attending Farmers Markets Related To Food Assistance Programs

Motivation	N	Not at all (%)	Very little (%)	Somewhat (%)	Quite a bit (%)	A great deal (%)
To use SNAP	801	32.83	12.61	26.22	12.98	15.36
To use the matching incentive dollars offered to those using SNAP at the farmers market	796	38.44	13.69	23.74	11.31	12.81
To use coupons issued to you for local food	799	40.68	12.39	25.53	10.89	10.51

Note: SNAP = Supplemental Nutrition Assistance Program. The proportions displayed reflect only the responses from farmers market attendees who also participate in food assistance programs.

Discussion

We found that a substantial number of people in our national sample—80.30%—had some exposure to farmers markets, attending at least once per year. This highlights how farmers markets are a shared, though occasional, cultural experience for many individuals (RQ1). This finding potentially contrasts with prior national work that characterized farmers market attendance as reaching a smaller proportion of individuals. For example, Rossi (2024) found only 30% of respondents had

shopped at farmers markets in the last month, and a research firm found only 12% of individuals from a national U.S. sample reported doing their “grocery shopping” at a farmers market (Schmidt, 2016).

However, our findings are also generally consistent, although still somewhat higher, with other studies that used more inclusive measurements of attendance. For example, Jilcott Pitts et al. (2014) found that 74.2% of their Kentucky sample had made a purchase at a farmers market or CSA. In

Table 7. Challenges to Attending Farmers Markets More Often

Challenge	N	Not at all (%)	Very little (%)	Somewhat (%)	Quite a bit (%)	A great deal (%)
You forget about farmers markets.	4,079	23.68	16.99	33.24	18.07	8.02
The prices are too high.	4,079	25.79	23.63	30.94	12.50	7.13
There are crowds.	4,071	28.45	23.43	28.15	13.22	6.76
The location isn't convenient.	4,096	35.55	16.82	30.64	11.04	5.96
The parking isn't convenient.	4,086	39.35	18.06	26.11	10.67	5.80
You don't know where or when the farmers markets are.	4,092	41.84	19.04	23.80	9.70	5.62
The hours at the farmers market aren't convenient.	4,083	41.61	18.52	26.11	8.79	4.97
The day of the farmers market isn't convenient.	4,078	43.31	19.05	25.06	8.09	4.49
There aren't convenient public transportation options.	4,081	67.46	10.66	12.25	5.54	4.09
You prefer to shop in stores.	4,068	47.17	16.72	24.31	8.53	3.27
It takes too much time to shop.	4,086	41.36	24.38	23.50	8.05	2.72
You don't feel welcome at the farmers market.	4,100	77.15	9.51	8.10	3.12	2.12
The payment options aren't convenient.	4,067	60.54	17.56	15.93	3.93	2.04
The products at farmers markets are not what you want.	4,077	42.88	28.26	22.57	4.39	1.91
Few people at the farmers market speak your language.	4,085	80.44	7.08	7.83	2.94	1.71
You don't see people like you at the farmers market.	4,089	75.96	9.54	9.20	3.72	1.59
You don't trust that the food is local.	4,054	70.25	14.18	10.95	3.03	1.58
The farmers market is lacking accommodations for physical accessibility	4,070	77.81	8.82	9.09	2.70	1.57
There aren't vendors from the same background as you.	4,077	78.64	8.83	8.19	2.80	1.55

Note: The proportions displayed reflect only the responses from farmers market attendees.

Michigan and Florida studies, approximately 60% of respondents had visited or made a purchase at a farmers market in the last year (Conner et al., 2010; Shi & Hodges, 2016). Similarly Bir et al. (2019) found that, nationally, 63% of individuals reported previously having purchased food from a farmers market, roadside stand, or U-pick operation. It may be that our large sample, with a focus on collecting representational data, helped uncover the commonality of farmers market attendance. It may also be that our measurements for attendance were more inclusive, as we were able to quantify levels of both infrequent and frequent attendance with our survey instrument. In fact, we found infrequent attendance was common, with nearly half (48.01%) of attendees reporting that they go to farmers markets just one to five times per year. This finding is consistent with a systematic review by Maró et al. (2023), which found that many attendees visit

farmers markets just a few times per year. The fact that many people attend only a few times per year suggests that rather than focus on new customer acquisition, which can be resource intensive, farmers market managers might focus on increasing the frequency of attendance and dollars spent per visit among individuals who already attend their markets.

Regarding more frequent attendance, we found that 41.78% of our entire sample attended farmers markets six or more times per year. This aligns with the Zepeda (2009) finding that among a national sample, 45.6% of individuals shopped at farmers markets at least once per month. Similarly, Wolf et al. (2005) found that 42% of individuals surveyed in their California sample had made a purchase at farmers markets in the previous month.

Regarding shopping behaviors and preferences at farmers markets (RQ2), we identified the most

Table 8. Ages of Attendees and Non-Attendees

Attendance category	N	Gen Z = 18 to 26 (%)	Millennial = 27 to 42 (%)	Gen X = 43 to 58 (%)	Baby Boomer = 59 to 77 (%)	Silent Generation = 78 and over (%)
Attendees	4,128	8.41	29.34	22.75	34.86	4.65
Non-attendees	662	9.67	38.67	24.77	22.51	4.38

Table 9. Frequency of Cooking or Preparing Fresh Food Among Attendees and Non-Attendees

Attendance category	N	Cook less than monthly (%)	Cook a few times a month (%)	Cook a few times a week (%)	Cook about once a day (%)	Cook more than once a day (%)
Attendees	4,114	3.60	13.08	36.02	26.33	20.98
Non-attendees	658	13.68	18.85	32.98	20.52	13.98

Table 10. Income Among Attendees and Non-Attendees

Attendance category	N	Less than US\$30,000 (%)	US\$30,000 to under US\$60,000 (%)	US\$60,000 to under US\$100,000 (%)	Over US\$100,000 (%)
Attendees	4,128	21.17	25.02	26.28	27.52
Non-attendees	662	28.10	29.00	19.94	22.96

Table 11. Household Size Among Attendees and Non-Attendees

Attendance category	N	1 person (self) (%)	2 people (%)	3 people (%)	4 people (%)	5 people (%)	6 or more people (%)
Attendees	4,128	18.92	37.04	15.75	12.82	7.83	7.66
Non-attendees	662	25.98	30.63	14.80	13.29	7.25	8.31

“typical” farmers market experience as an individual attending a market along a city’s main street, purchasing fruits and vegetables, patronizing two to five vendors, and spending more than \$25 but less than \$50. The most common spend per trip reported in our study was on the high end, but still in the ballpark, of the Rossi (2022) finding of \$15 to \$28 spent per trip. It may be that the Rossi (2022) average was less because that survey was administered when farmers markets were substantially impacted by COVID-19 protocols.

We also note the variety in the farmers market shopping experience in terms of the number of vendors patronized. Although patronizing two to five vendors was most commonly reported, we found that 10.04% of the sample only shopped with one vendor; these individuals may always shop with a specific vendor or seek a particular product. On the other hand, 15.73% of responding attendees shopped with six or more vendors; these individuals may seek a more diverse array of interactions with vendors, buy a broader selection of products, or buy more of their groceries at farmers markets.

Regarding products most commonly purchased, only 15.50% of attendees reported commonly purchasing meals to eat at markets, and 2.81% reported commonly purchasing meal kits. These types of items may not be available to purchase at many farmers markets, so the fact that these items were not commonly purchased does not necessarily mean they would not be purchased if available. In fact, the data pointed toward interest in buying prepared meals to eat at the market and buying meal kits. For younger attendees desiring to learn more about cooking, offering farmers market meal kits could be a promising strategy to attract or retain them.

We also saw a lack of interest in online ordering, suggesting that even though online shopping is a consumer trend, it may not apply to farmers markets. Such an option could run counter to the experiential benefits of attendance such as socializing, engaging with community organizations, or learning at farmers markets. With the other payment questions, the preference for cash was noteworthy, as it contrasts the Zepeda and Carroll (2018) finding that nearly half of

attendees at a large summer market indicated that they would have spent more had vendors accepted credit cards. This warrants more investigation, and it may be the case that preferences at individual markets vary substantially. However, our results do suggest that markets should continue to focus on cash and be prepared to do so (i.e., to have ample change) given that we found that cash was a preferred payment method. Accepting credit cards and using machines to accept app payments can be expensive for individual vendors and may not necessarily be worth adopting at this time if many customers prefer cash.

Regarding activities done at farmers markets and perceived impacts of farmers markets (RQ3), we found that most attendees did at least one activity not directly related to shopping while at farmers markets. This finding highlights how farmers markets can be viewed in terms other than a consumer experience. Attendees commonly reported that they socialized and learned new things at farmers markets. Over 10% had made a friend at a farmers market, an important statistic given recent reports of isolation among Americans (Office of the Surgeon General, 2023). We found that less common activities at farmers markets included receiving health services or receiving information about voting. Such opportunities may not be available at many farmers markets, but there may be potential for expansion when applicable. Given our finding that a broad cross-section of individuals attend markets, markets appear to be promising spaces for sharing resources and services. Further, we found that because of farmers markets, attendees reported eating healthier and connecting with community organizations. Our results also suggest that attendees may benefit communities economically as they spend money at nearby businesses.

With motivations for and challenges to attending farmers markets (RQ4), we found that top motivations to attend were to buy fresh food, to support local farmers, to get high-quality food, and to do something fun. These motivations largely align with previous research and would likely be wise to emphasize in promoting farmers markets. Regarding challenges, the top challenge was forgetting about farmers markets. This is not a challenge that has been widely investigated before, and it

highlights that promoting markets in a way to make attending them a more habitual practice could be beneficial. Some strategies for managers include ensuring that farmers market days are listed in community event calendars, running campaigns focused on encouraging individuals to add the farmers market day to their personal calendars, posting regular reminders on social media about the farmers market before and on the market day, or encouraging social media users to receive reminders about attending the market. For example, this is an option available through Facebook Events. Additionally, recruiting attendees to help remind others about the farmers market by posting on social media could be a worthwhile strategy. Although only a modest proportion of attendees (10.73%) reported that they had posted a photo from the farmers market to social media, there could be potential for attendees and market managers to promote farmers markets collaboratively.

Another highly rated challenge was perceived higher prices at farmers markets, which aligns with previous research. Relatedly, we found that using SNAP and WIC at farmers markets was of strong interest to current food assistance program participants. These findings underscore the need to continue work that allows markets to accept benefits from SNAP or other food assistance programs, as such programs are key to making markets more accessible to those with lower incomes. Also key are efforts to make farmers markets more convenient for food assistance program participants, such as varying times and locations of operation, encouraging more products eligible to be purchased with food assistance program dollars, and examining potential deterrents in the area in which the market is sited. A related recommendation is to ensure that the greatest number of vendors are able to accept payment via food assistance programs by continuing systems that place the responsibility for issuance at the market level—rather than relying on individual vendors to accept SNAP, which can be cumbersome and cost prohibitive for individual vendors given the current available technology. The practice of accepting SNAP at a central market terminal is currently far more common (Way & Edmonds, 2023).

RQ5 considered the background characteristics

of farmers market attendees versus non-attendees. We found some patterns similar to those prior studies have identified, as we had significant results for variables such as age, gender, household income, and some race and ethnicity categories. However, the data did not support that farmers market attendees are overwhelmingly white, middle-aged women who are highly educated and affluent. These results suggest a shift from findings in earlier studies. Govindasamy et al. (1998) and Brooker et al. (1993) found only 12–13% of attendees were under the age of 35, but in our study, 25% of attendees were ages 34 or younger. We also found a substantial portion of attendees were male and that attendees came from a variety of racial and ethnic backgrounds and had incomes across the spectrum. Past efforts to expand the reach of farmers markets may have resulted in progress toward encouraging attendance at markets among a broad cross-section of society. Nevertheless, more work remains to be done to make farmers markets inclusive (Freedman et al., 2016; Russomanno & Jabson Tree, 2021). We suggest that farmers markets collaborate with community members to understand ways to promote interest in and access to farmers markets at a local level. In particular, we see an opportunity to expand attendance and include more Gen Z and millennial individuals, given their relatively lower representation among attendees (though we found their presence was still stronger than in former studies). We also note the importance of ongoing efforts to implement antiracist strategies at farmers markets. As an example, to respond to such needs, the FMC funded a working group of Black food systems experts who developed the Anti-Racist Farmers Market Toolkit (Jalal et al., 2022).


As a limitation to this work, we note that while we defined farmers markets broadly, our definition would not include mobile markets (e.g., Mobile Market Coalition, 2024). Our survey was also limited to a U.S. sample, and these results may not be applicable to farmers markets attendees in other countries. Another limitation is that although our sample appeared to be generally representative, the 21% response rate suggests the possibility that people with certain characteristics may have been more likely to fill out the survey, and as previously men-

tioned, Asian respondents were proportionally less represented in the data. An additional limitation is that the survey administrator did not provide a race/ethnicity category or sample benchmarks for Indigenous or Native American individuals. While our national dataset enabled us to identify broad trends related to race and ethnicity, we acknowledge the significance of studies that take place at a local level. These studies help amplify the experience of or initiatives involving individuals who have traditionally been underrepresented at farmers markets or in related literature (e.g., Alkon & Vang, 2016; Meyers, 2015; Martin & Vold, 2018).

We further recommend that future research about participation at farmers markets consider some of the novel variables we used in our questionnaire, such as the challenge of forgetting about farmers markets, and focus on activities at farmers markets other than shopping. As we found responses were sensitive to wording in questions about attendance, we also encourage future researchers to use multiple measures for such items and to develop questions with scales that are sensitive enough to capture the participation of individuals who attend farmers markets but do so infrequently. As described in our results, we were not able to classify 6.83% of the sample as “attendees” or “non-attendees” because these respondents had inconsistent responses regarding attendance or were missing data. For example, some of the respondents who could not be classified selected a response option greater than “Never” to the question, “Which of the following describes how often you attend farmers markets when they are seasonally available to you?” (i.e., they selected “Rarely,”

“Sometimes,” “Frequently,” or “Very frequently”). However, these individuals subsequently selected “0” to the question, “How many times would you estimate that you go to a farmers market in a year?” It may be that some respondents interpreted the question asking generally about attendance differently than the question asking about a specific number of visits. Future work might also compare the performance of variables asking attendees to specify attendance at markets within a specific past time period (e.g., in the last year, in the last season, in the last month) to our more general approach to better understand potential sensitivities to question wording.

Relatedly, we see an opportunity for future regional work to compare findings to highlight regional differences, which may be particularly relevant to data regarding seasonality and attendance, differences based on market type, and more consideration of how motivations for and challenges to market attendance may differ based on demographics.

Most strongly, we recommend that future work continue to investigate how farmer markets are integrated into society and can support community-building. One finding that stands out most strongly in our study is that farmers markets attract extensive and diverse participation, indicating that farmers markets are a shared community experience. As a physical place for a broad cross-section of individuals to gather, at a time when such civic opportunities appear to be otherwise in decline, the potential of farmers markets to foster community-building should be further explored and supported. 

References

- Alkon, A. H. (2007). Growing resistance: Food, culture and the Mo' Better Foods Farmers' Market. *Gastronomica*, 7(3), 93–99. <https://doi.org/10.1525/gfc.2007.7.3.93>
- Alkon, A. H., & McCullen, C. G. (2011). Whiteness and farmers markets: Performances, perpetuations ... contestations? *Antipode*, 43(4), 937–959. <https://doi.org/10.1111/j.1467-8330.2010.00818.x>
- Alkon, A. H., & Vang, D. (2016). The Stockton Farmers' Market: Racialization and sustainable food systems. *Food, Culture & Society*, 19(2), 389–411. <https://doi.org/10.1080/15528014.2016.1178552>
- Anderson, M. (2022, September 8). *Payment apps like Venmo and Cash App bring convenience – and security concerns – to some users*. Pew Research Center. <https://www.pewresearch.org/short-reads/2022/09/08/payment-apps-like-venmo-and-cash-app-bring-convenience-and-security-concerns-to-some-users/>
- Aucoin, M., & Fry, M. (2015). Growing local food movements: Farmers' markets as nodes for products and community. *The Geographical Bulletin*, 56, 61–78. <https://digitalcommons.kennesaw.edu/thegeographicalbulletin/vol56/iss2/1>

- Baker, D., Hamshaw, K., & Kolodinsky, J. (2009). Who shops at the market? Using consumer surveys to grow farmers' markets: Findings from a regional market in northwestern Vermont. *Journal of Extension*, 47(6), Article 2. <https://open.clemson.edu/joe/vol47/iss6/2>
- Bir, C., Lai, J., Widmar, N. O., Thompson, N., Ellett, J., & Crosslin, C. (2019). "There's no place like home": Inquiry into preferences for local foods. *Journal of Food Distribution Research*, 50(1), 29–45. <https://doi.org/10.22004/ag.econ.292181>
- Brooker, J. R., Eastwood, D. B., & Gray, M. D. (1993). Direct marketing in the 1990s: Tennessee's new farmers' markets. *Journal of Food Distribution Research*, 24(1), 127–138. <https://doi.org/10.22004/ag.econ.26564>
- Brown, A. (2002). Farmers' market research 1940–2000: An inventory and review. *American Journal of Alternative Agriculture* [Now published as *Renewable Agriculture and Food Systems*], 17(4), 167–176. <https://doi.org/10.1079/AJAA200218>
- Brunso, K., Birch, D., Memery, K., Temesi, Á., Lakner, Z., Lang, M., Dean, D., & Grunert, K. G. (2021). Core dimensions of food-related lifestyle: A new instrument for measuring food involvement, innovativeness and responsibility. *Food Quality and Preference*, 91, Article 104192. <https://doi.org/10.1016/j.foodqual.2021.104192>
- Byker, C., Shanks, J., Misyak, S., & Serrano, E. (2012). Characterizing farmers' market shoppers: A literature review. *Journal of Hunger & Environmental Nutrition*, 7(1), 38–52. <https://doi.org/10.1080/19320248.2012.650074>
- Carson, R. A., Hamel, Z., Giarrocco, K., Baylor, R. & Matthews, L. G. (2016). Buying in: The influence of interactions at farmers' markets. *Agriculture and Human Values*, 33, 861–875. <https://doi.org/10.1007/s10460-015-9675-y>
- Chen, L. A., & House, L. (2022). Food lifestyle patterns among contemporary food shoppers. *International Journal of Consumer Studies*, 46(3), 944–963. <https://doi.org/10.1111/ijcs.12739>
- Conner, D., Colasanti, K., Ross, R. B., & Smalley, S. B. (2010). Locally grown foods and farmers markets: Consumer attitudes and behaviors. *Sustainability*, 2(3), 742–756. <https://doi.org/10.3390/su2030742>
- Crompton, D., Cheadle, A., Solomon, L., Maring, P., Wong, E., & Reed, K. M. (2012). Kaiser Permanente's farmers' market program: Description, impact, and lessons learned. *Journal of Agriculture, Food Systems, and Community Development*, 2(2), 29–36. <https://doi.org/10.5304/jafscd.2012.022.010>
- Dannefer, R., Abrami, A., Rapoport, R., Sriphanlop, P., Sacks, R., & Johns, M. (2015). A mixed-methods evaluation of a SNAP-Ed farmers' market-based nutrition education program. *Journal of Nutrition Education and Behavior*, 47(6) 516–525. <https://doi.org/10.1016/j.jneb.2015.08.021>
- Dollahite, J. S., Nelson, J. A., Frongillo, E. A. & Griffin, M. R. (2005). Building community capacity through enhanced collaboration in the farmers market nutrition program. *Agriculture and Human Values*, 22, 339–354. <https://doi.org/10.1007/s10460-005-6050-4>
- Elepu, G., & Mazzocco, M. A. (2010). Consumer segments in urban and suburban farmers markets. *International Food and Agribusiness Management Review*, 13(2), 1–18. <https://doi.org/10.22004/ag.econ.93352>
- Farmers Market Coalition. (2020, March 9). *Farmers markets respond to COVID-19—Daily updates and announcements*. Retrieved November 1, 2024, from <https://farmersmarketcoalition.org/farmers-markets-covid19/>
- Freedman, D. A., Vaudrin, N., Schneider, C., Trapl, E., Ohri-Vachaspati, P., Taggart, M., Cascio, M. A., Walsh, C., & Flocke, S. (2016). Systematic review of factors influencing farmers' market use overall and among low-income populations. *Journal of the Academy of Nutrition and Dietetics*, 116(7), 1136–1155. <https://doi.org/10.1016/j.jand.2016.02.010>
- Garner, B., & Ayala, C. (2019). Regional tourism at the farmers' market: Consumers' preferences for local food products. *International Journal of Culture, Tourism, and Hospitality Research*, 13(1), 37–54. <https://doi.org/10.1108/IJCTHR-07-2018-0095>
- Gill, M., & Thilmany, D. (2024). *Consumers' online shopping part 1: An overview of online shopping trends (LFS-CFI-3.03)*. Local Food Systems Response to COVID. *Consumer Food Insights 3.0*. The Local and Regional Food System Recovery and Resilience Project. USDA Agricultural Marketing Services. <https://lfscovid.localfoodeconomics.com/consumer-food-insights/>
- Goldschmidt, B. (2022, May 6). Meal kits moving to the mainstream. *Progressive Grocer*. <https://progressivegrocer.com/meal-kits-moving-mainstream>

- Govindasamy, R., Zurbriggen, M., Italia, J., Adelaja, A. O., Nitzsche, P., & VanVranken, R. (1998). *Farmers markets: Consumer trends, preferences, and characteristics*. Rutgers University. <https://doi.org/10.22004/ag.econ.36722>
- Horning, M. L., Hill, T., Martin, C. L., Hassan, A., Petrovskis, A., & Bohem, L. (2021). The East Side Table Make-at-Home Meal-Kit Program is feasible and acceptable: A pilot study. *Appetite*, 160, Article 105087. <http://doi.org/10.1016/j.appet.2020.105087>
- Jalal, S., Deadwyler, N., Flanary, S., Jackson, T., Mikie, Q., Harris, J., Forrest-Hewitt, K., Walker, J., Whilby, C., Embry, A., Jones, A., & Whitney, S. (2022). *The anti-racist farmers market toolkit*. Farmers Market Coalition. <https://farmersmarketcoalition.org/the-anti-racist-farmers-market-toolkit/>
- Jilcott Pitts, S. B., Gustafson, A., Wu, Q., Mayo, M. L., Ward, R. K., McGuirt, J. T., Rafferty, A. P., Lancaster, M. F., Evenson, K. R., Keyserling, T. C., & Ammerman, A. S. (2014). Farmers' market use is associated with fruit and vegetable consumption in diverse southern rural communities. *Nutrition Journal*, 13, Article 1. <https://doi.org/10.1186/1475-2891-13-1>
- Kuhns, A., & Saksena, M. (2017). *Food purchase decisions of millennial households compared to other generations* (Economic Information Bulletin No. 186). USDA Economic Research Service. <https://www.ers.usda.gov/publications/pub-details?pubid=86400>
- Larsen, K., & Gilliland, J. (2009). A farmers' market in a food desert: Evaluating impacts on the price and availability of healthy food. *Health & Place*, 15(4), 1158–1162. <https://doi.org/10.1016/j.healthplace.2009.06.007>
- Low, S. A., Adalja, A., Beaulieu, E., Key, N., Martinez, S., Melton, A., Perez, A., Ralston, K., Stewart, H., Suttles, S., Vogel, S., & Jablonski, B. B. R. (2015, January). *Trends in U.S. local and regional food systems: Report to Congress* (Administrative Publication No. 068). USDA Economic Research Service. <https://www.ers.usda.gov/publications/pub-details?pubid=42807>
- Mancino, L., & Newman, C. (2007, May). *Who has time to cook? How family resources influence food preparation* (ERR-40). U.S. Department of Agriculture, Economic Research Service. <https://www.ers.usda.gov/publications/pub-details/?pubid=45800>
- Maró, Z.M., Maró, G., Jámor, Z., Czine, P., & Török, Á. (2023). Profiling the consumers of farmers' markets: A systematic review of survey-based empirical evidence. *Renewable Agriculture and Food Systems*, 38, Article e53. <https://doi.org/10.1017/S1742170523000467>
- Martin, W., & Vold, L. (2018). Building capacity through urban agriculture: Report on the askîy project. *Health Promotion and Chronic Disease Prevention in Canada*, 38(1), 29–35. <https://doi.org/10.24095/hpcdp.38.1.06>
- McKay, F. H. (2023). What's in a commercial meal kit? Structured review of Australian meal kits. *Public Health Nutrition*, 26(6), 1284–1292. <https://doi.org/10.1017/S1368980023000265>
- Mesić, Ž., Petljak, K., Borović, D., & Tomić, M. (2021). Segmentation of local food consumers based on altruistic motives and perceived purchasing barriers: A Croatian study. *Economic Research – Ekonomska Istraživanja*, 34(1), 221–242. <https://doi.org/10.1080/1331677X.2020.1782243>
- Meyers, G. P. (2015). Decolonizing a food system: Freedom Farmers' Market as a place for resistance and analysis. *Journal of Agriculture, Food Systems, and Community Development*, 5(4), 149–152. <https://doi.org/10.5304/jafscd.2015.054.025>
- Mobile Market Coalition. (2024). *Veggie Van toolkit*. <https://www.mobilemarketcoalition.org/toolkit.html>
- Morales, A. (2021). On farmers markets as wicked opportunities. *Sustainability*, 13(11), Article 6108. <https://doi.org/10.3390/su13116108>
- National Opinion Research Center [NORC]. (2022, February 8). *Technical overview of the AmeriSpeak® Panel: NORC's Probability-Based Household Panel*. <https://amerispeak.norc.org/content/dam/amerispeak/research/pdf/AmeriSpeak%20Technical%20Overview%202019%2002%2018.pdf>
- Rice, J. S. (2015). Privilege and exclusion at the farmers market: Findings from a survey of shoppers. *Agriculture and Human Values*, 32, 21–29. <https://doi.org/10.1007/s10460-014-9513-7>

- Rossi, J. (2022). *Changes in expenditures at local food market channels in different sized communities (LFS-CFI-2.03)*. *Local Food Systems Response to COVID. Consumer Food Insights 2.0*. The Local and Regional Food System Recovery and Resilience Project. USDA Agricultural Marketing Services.
<https://lfscovid.localfoodeconomics.com/consumer-food-insights/>
- Rossi, J. (2024). *Changes in expenditures at local food market channels (LFS-CFI-3.07)*. *Local Food Systems Response to COVID. Consumer Food Insights 3.0*. The Local and Regional Food System Recovery and Resilience Project. USDA Agricultural Marketing Services. <https://lfscovid.localfoodeconomics.com/consumer-food-insights/>
- Russomanno, J., & Jabson Tree, J. M. (2021). Assessing sense of community at farmers markets: A systematic review. *Journal of Agriculture, Food Systems, and Community Development*, 10(2), 489–506.
<https://doi.org/10.5304/jafscd.2021.102.032>
- Sadler, R. C., Clark, M. A. R., & Gilliland, J. A. (2013). An economic impact comparative analysis of farmers' markets in Michigan and Ontario. *Journal of Agriculture, Food Systems, and Community Development*, 3(3), 61–81.
<https://doi.org/10.5304/jafscd.2013.033.009>
- Sage, J. L., McCracken, V. A. & Sage, R. A. (2013). Bridging the gap: Do farmers' markets help alleviate impacts of food deserts? *American Journal of Agricultural Economics*, 95(5), 1273–1279. <https://doi.org/10.1093/ajae/aat031>
- Schmidt, S. (2016, October 27). *New survey reveals where consumers shop for groceries*. MarketResearch.com.
<https://blog.marketresearch.com/new-survey-reveals-where-consumers-shop-for-groceries>
- Shi, R., & Hodges, A. W. (2016). Shopping at farmers' markets: Does ease of access really matter? *Renewable Agriculture and Food Systems*, 31(5), 441–451. <http://doi.org/10.1017/S1742170515000368>
- U.S. Department of Agriculture [USDA] Economic Research Service. (2022, August 10). *Growth in the number of U.S. farmers markets slows in recent years*.
<https://www.ers.usda.gov/data-products/charts-of-note/chart-detail?chartId=104402>
- USDA Food and Nutrition Service. (2021, March). *Comparison of SNAP authorized farmers and markets FY 2013 and FY 2020* [Table]. <https://fns-prod.azureedge.us/sites/default/files/resource-files/FY2013-20combinedFM-DMFauthredemptions.pdf>
- USDA National Agricultural Statistics Service. (2016). *Direct farm sales of food. Results from the 2015 Local Food Marketing Practices Survey* (ACH12-35). <https://doi.org/10.22004/ag.econ.338296>
- U.S. Office of the Surgeon General. (2023). *Our epidemic of loneliness and isolation*.
<https://www.hhs.gov/sites/default/files/surgeon-general-social-connection-advisory.pdf>
- Verdon, J. (2022, March 15). The pandemic changed how we shop for groceries, Adobe report shows. *Forbes*.
<https://www.forbes.com/sites/joanverdon/2022/03/15/the-pandemic-changed-how-we-shop-for-groceries-adobe-report-shows/?sh=5f9dda3c4bb1>
- Walmart. (2024). *Location facts*. Retrieved December 27, 2024, from <https://corporate.walmart.com/about/location-facts>
- Warsaw, P., Archambault, S., He, A., & Miller, S. (2021). The economic, social, and environmental impacts of farmers markets: Recent evidence from the US. *Sustainability*, 13, 3423. <https://doi.org/10.3390/su13063423>
- Way, L., & Edmonds, A. M. (2023). *2023 report on EBT technology at farmers markets*. Farmers Market Coalition.
<https://farmersmarketcoalition.org/resource/2023-report-on-ebt-technology-at-farmers-markets/>
- Wilson, M., Witzling, L., Shaw, B., & Morales, A. (2018). Contextualizing farmers' markets needs: Assessing the impact of community type on market management. *Journal of Food Distribution Research*, 49(2), 1–18.
<https://doi.org/10.22004/ag.econ.292173>
- Witzling, L., & Shaw, B. R. (2019). Lifestyle segmentation and political ideology: Toward understanding beliefs and behavior about local food. *Appetite*, 132, 106–113. <https://doi.org/10.1016/j.appet.2018.10.003>
- Witzling, L., & Shaw, B. R. (2022). Building a bridge between civic agriculture and civic engagement: Farmers' markets as communication infrastructure. *International Journal of Sociology and Social Policy*, 42(7/8), 743–759.
<https://doi.org/10.1108/IJSSP-09-2021-0231>
- Wolf, M. M., Spittler, A., & Ahern, J. (2005). A profile of farmers' market consumers and the perceived advantages of produce sold at farmers' markets. *Journal of Food Distribution Research*, 36(1), 192–201.
<https://doi.org/10.22004/ag.econ.26768>

Zepeda, L. (2009). Which little piggy goes to market? Characteristics of US farmers' market shoppers. *International Journal of Consumer Studies*, 33(3), 250–257. <https://doi.org/10.1111/j.1470-6431.2009.00771.x>

Zepeda, L., & Carroll, K. A. (2018). Who shops at a mature farmers market? *Choices*, 3.

<http://www.choicesmagazine.org/choices-magazine/theme-articles/engaging-consumers-in-the-dynamic-local-foods-marketplace/who-shops-at-a-mature-farmers-market>

Appendix

Table A1. Survey Questions and Response Options for Each Research Question (RQ) (all currency in US\$)

RQ1: How often, and in which seasons, do individuals attend farmers markets?

Which of the following describes how often you attend farmers markets when they are seasonally available to you?

- Response options: Never, Rarely, Sometimes, Frequently, Very frequently

How often do you generally attend the farmers market when it is seasonally available to you?

- Response options: Never, Just a few times each year, About once a month, About once every other week, About once a week.

How many times would you estimate that you go to a farmers market in a year?

- Response options: 0, 1–5, 6–10, 11–15, 16–20, 21–25, 26–30, 31–35, 36–40, 41–45, 46–50, 51–55

Which seasons do you attend farmers markets at least once a month? Select all that apply.

- Response options: Winter, Spring, Summer, Fall
-

RQ2: What are typical shopping behaviors and preferences at farmers markets among attendees?

All farmers markets are a little different, but for the farmers market you go to most frequently, which of the following is the description that best fits where it takes place?

- Response options: Outside or inside of a building like a library or hospital, In a neighborhood, Along a town or city's main street, Somewhere in an area that attracts tourists and has a festival atmosphere, In a location without buildings or development

Which products do you commonly purchase at the farmers market? Select all that apply.

- Response options: Fruits and vegetables; Meat; Bakery; Dairy, including cheese; Eggs; Packaged products like jams, syrups, and sauces; Beverages to drink at the farmers market like coffee or smoothies; Meals to eat at the farmers market, like hot food in takeout containers or on paper plates; Cut flowers; Plants for your garden or yard; Arts and craft products like soap, candles, or jewelry; Meal kits to prepare at home; Other

How interested are you in these features of farmers markets?

- Items in the question matrix: Buying prepared meals or snacks to eat at the farmers market, Buying a meal kit at the farmers market to take home and make, Pre-ordering farmers market products online and picking them up at the market, Pre-ordering farmers market products online and having them home delivered
- Response options: Not at all interested, Slightly interested, Somewhat interested, Quite interested, Very interested

How many vendors do you shop with on an average trip to the farmers market?

- Response options: 0, 1, Between 2 and 5, Between 6 and 10, More than 10

How much do you spend on an average trip to the farmers market?

- Response options: Less than \$10, Between \$10 and \$25, More than \$25, less than \$50, More than \$50, less than \$75, More than \$75, less than \$100, More than \$100

Farmers markets offer different kinds of payment options. How interested are you in the following payment options at farmers markets?

- Items in the question matrix: Using a credit card, Using cash, Using gift cards or certificates, Paying digitally with apps like Venmo or PayPal, Using food assistance benefits such as SNAP or WIC, Using matching incentive dollars offered to those using SNAP at the farmers market, Using coupons issued by the farmers market or a state agency.
 - Response options: Not at all interested, Slightly interested, Somewhat interested, Quite interested, Very interested
-

(continued)

Table A1 continued

RQ3: What activities do attendees report doing at markets beyond shopping, and what impacts from attendance do they perceive?

Because of past trips to farmers markets, have you done the following things?

- Items in the question matrix: See Table 4
- Response options: Not at all, Very Little, Somewhat, Quite a bit, A great deal

At the farmers market, have you ever done the following? Select all that apply.

- Response options: Learned about cooking, Learned about growing food, Learned new things about food, Gotten ideas about new business opportunities, Learned new things about the community, Made a connection with a new organization, Spent time with friends or family, Met a new person, Made a friend, Gotten information about voting, Registered to vote, Received a health service such as a blood pressure check, Taken a photo and posted it to social media, None of these activities

RQ4: What motivations for and challenges to attending farmers markets do attendees perceive?

Are these reasons you shop at a farmers market?

- Items in the question matrix: See Tables 5 and 6
- Response options: Not at all, Very Little, Somewhat, Quite a bit, A great deal

Are the following reasons you don't shop at farmers markets more often?

- Items in the question matrix: See Table 7
- Response options: Not at all, Very Little, Somewhat, Quite a bit, A great deal

RQ5: How do the background characteristics of farmers market attendees and non-attendees differ?

The following demographic and background characteristic items were either included on the survey instrument or provided by NORC:

- Age: Reported in years and categorized as Gen Z = 18 to 26; Millennial = 27 to 42; Gen X = 43 to 58; Baby Boomer = 59 to 77; Silent Generation = 78 and over
 - Community type: Urban, Suburban, or Rural
 - Cook or prepare fresh food: Less than monthly, A few times a month, A few times a week, About once a day, More than once a day
 - Education: Less than high school, High school graduate, Some college or associate's degree, Bachelor's degree, Post-graduate or professional degree
 - Food assistance program participant status: Collapsed into categories of participant or nonparticipant
 - Gender: Male, Female, Transgender, Other
 - Household income (annual): Collapsed into categories of less than \$30,000; \$30,000 to under \$60,000; \$60,000 to under \$100,000; Over \$100,000
 - Household size: 1 person (self), 2 people, 3 people, 4 people, 5 people, 6 or more people
 - Political ideology: Very liberal, Somewhat liberal, Moderate, Somewhat conservative, Very conservative
 - Race and ethnicity: Asian, Black, Hispanic/Latino, Multiracial, Other, White. Note that individuals who identified as Hispanic/Latino in addition to another category were coded as Hispanic/Latino per NORC's procedures.
 - Weekly food shopping budget: Less than \$100, \$100 to \$200, \$201 to \$300, \$301 to \$400, Over \$400
-

Table A2. Comparison of the Survey Sample to U.S. Benchmarks for Key Demographics, as Supplied by the National Opinion Research Center (NORC)

Demographic category	N	Survey sample (%)	Benchmark for U.S. (%)
Age			
18–34	319	6.2	11.7
25–29	380	7.4	8.4
30–39	1,044	20.3	17.5
40–49	807	15.7	15.9
50–59	751	14.6	15.9
60–64	597	11.6	8.2
65 Plus	1,249	24.3	22.4
Education			
Less than high school	288	5.6	9.0
High school equivalent	946	18.4	29.0
Some college/associate degree	2,010	39.1	26.4
More than college	1,892	36.8	35.6
Gender			
Male	2,504	48.7	48.8
Female	2,637	51.3	51.2
Race			
White	3,301	64.2	61.4
Black	601	11.7	12.1
Hispanic/Latino	884	17.2	17.4
All other	355	6.9	9.0