Final Report

Project Title: "Increasing Awareness and Use of Iowa Specialty Crops" Research – Economic Impact Study of Farmers Market Sales

Project Summary: The project was initiated to gather statistically accurate information from both consumers and vendors relevant to the sales at farmers markets and to analyze that information to determine the economic impact farmers markets have on the Iowa economy. This information was expected to increase the public's awareness of farmers markets and provide information to vendors and managers to solicit additional market support.

No economic information specific to Iowa's farmers markets was available prior to a survey done in 2004. The Iowa Department of Agriculture and Land Stewardship (IDALS) tracked the increased in the number of farmers markets from 180 in 2004 to 228 in 2009 but we didn't know whether there was any corresponding increase in sales. This project was conducted five years after the initial 2004 study, which seemed a reasonable period of time to gauge any change in sales.

Project Approach: The department contracted with the National Agricultural Statistics Service (NASS) to ensure an unbiased and transparent collection and reporting of data. NASS does not provide economic analysis so an outside contractor was hired. A competitive bid process was used to determine the contractor for economic analysis. Strategic Economics Group (SEG) was chosen and met with both IDALS and NASS to determine the scope and content of the survey instrument and the format for surveying and collection of data.

The survey instrument was jointly developed by IDALS, NASS, and the SEG. It was based on the 2004 survey to assure data would be as comparable as possible. Markets were canvassed equally during early, mid, and late season to account for seasonal purchasing variations. Data was collected from more than 4,000 consumers (approximately 10%) at 163 selected markets and 1,212 vendors were surveyed from 154 different markets. All information was collected by trained NASS enumerators.

The 21 page report from Strategic Economics Group title "Consumers, Vendors, and the Economic Importance of Farmers Markets; An Economic Impact Analysis", along with the summaries of the NASS consumer data and vendor data follow this narrative.

Goals and Outcomes Achieved: The project proposal stated the economic impact study would increase statistical data about farmers market by 15% but no mention was made of baseline data or measurement activities. A USDA study titled "U.S. Farmers Markets – 2000 A Study of Emerging Trends" gave an indication of market sales but the

information was regionalized and not available on a state specific basis. The only economic data that was previously available about Iowa farmers markets was provided by the 2004 survey. The USDA National Farmers Market Manager Survey 2006 used market manager estimates to determine sales but was again reported on a regional, not state specific, basis. There was no economic data collected by Iowa between the 2004 and 2009 surveys. Consolidating all the baseline information provided from state and federal surveys prior to 2009, the 2009 Economic Impact Study has increased the statistical data about farmers markets by at least 25%.

The project proposal also stated the study would to increase farmers market awareness by 25% but without mention of baseline data or measurement activities. The IDALS distributed multiple press releases, initially to announce the results of the data collection by NASS and secondly to announce the results of the economic analysis by SEC. The press releases stimulated television coverage on all three primary networks, three radio interviews, newspaper articles in 28 separate newspapers, and two magazines articles. All of the media coverage focused on the dramatic increase in sales, the contribution to the state's economy, and the popularity of farmers markets. The survey highlights were also presented to the members for the Iowa Fruit and Vegetable Growers Association and the Iowa Farmers Market Association.

A summary of the data and the economic analysis was posted to the department's website. A one page color brochure highlighting the information was printed (included at the end of this narrative), along with a 28 page report of the entire survey data and analysis. Multiple copies of the one-page brochure and full report were sent to all vendors and markets throughout the state with a note that addition copies were available upon request. Seven requests for additional copies were received. Although there was no baseline or methodology to calculate an increase in farmers market awareness, the exceptional and extensive media attention given to the survey information brought Iowa farmers markets into the public spotlight for several weeks.

Beneficiaries: Farmers markets and their vendors were the primary beneficiaries of the survey information and its corresponding media attention. The increase in sales of 92% over the five-year period between surveys provided confirmation of the rising popularity of farmers markets and the $71 million contribution to the state's economy validated the importance of farmers markets. Personal conversations with market managers confirmed the survey information had been effectively used to garner support from local governments, businesses, and non-profit organizations. One market manager had used the survey information to document the markets importance to the local economy in their Specialty Crop Block Grant application.

Lessons Learned: One major question answered from the study was that the increase in the number of markets over the five year period did not just reallocate previously

existing sales but contributed to a significant increase in sales. The involvement of the National Agricultural Statistics Service kept the survey questions unbiased, provided qualified survey enumerators, and kept the integrity of the data collected beyond question. Although an increase an awareness of farmers markets and a corresponding increase in sales would be difficult to correlate to an economic impact survey, the value of confirming the popularity and economic impact of the farmers markets validates their importance and the department hopes to continue surveying the markets in 2014.

Contact information: Paul Ovrom, 515-242-6239, paul.ovrom@iowaagriculture.gov.

Additional Information:

Customer Survey Instrument

Vendor Survey Instrument

"Consumers, Vendors, and the Economic Importance of Farmers Markets; An Economic Impact Analysis"

2009 Farmers Market Customer Summary

2009 Farmers Market Vendor Summary

One- Page Survey Brochure

Iowa Farmers Market Study 2009 power point presentation

Study Press Release

2009 Iowa Farmers' Market Customer Survey

Farmers' Market Name & Location_____ Date_____

1. How many times do you expect to shop at a farmers' market during this season? _____*times*
2. What did you purchase today? (circle all that apply)
   a. fruit/vegetables
   b. meat/fish/poultry
   c. eggs
   d. crafts/art
   e. cut flowers/plants
   f. honey
   g. jam/jelly
   h. baked goods
   i. prepared foods or ready-to-eat food
   j. wine
   k. other _____
3. How much money did you spend today at the Farmers' Market?
   a. $0
   b. $1-10
   c. $11-20
   d. $21-30
   e. $31-40
   f. $41-50
   g. $51-75
   h. $76-100
   i. more than $100
4. What is the zip code of your residence? _____
5. How far did you travel to attend this market? _____ *miles*
6. What is your age? *(years)*
   a. < 20
   b. 21-35
   c. 36-50
   d. 51-65
   e. 65 >
7. What was the total household income in 2008?
   a. Less than $25,000
   b. $25,000 to $49,999
   c. $50,000 to $74,999
   d. $75,000 to $99,999
   e. $100,000 or more
8. How many local businesses other than the Farmers' Market did or will you shop at today? _____
9. How many of the local businesses from question 8 would you have shopped at today if you had not attended the Farmers' Market? _____

This completes the survey. Thank you for your help.

2009 Iowa Farmers' Market Vendor Survey

Farmers' Market Name & Location _____ Date _____

1. How many days does this operation expect to sell at any farmers' markets during the 2009 season?

   a. 0-24 days (1 day/week)
   b. 25-49 days (2 days/week)
   c. 50-74 days (3 days/week)
   d. 75-100 days (4 days/week)
   e. 101-124 days (5 days/week)
   f. 125-149 days (6 days/week)
   g. 150-168 days (7 days/week)
   h. more than 168 days

2. How many separate farmers' markets does this operation regularly attend during the market season?

   a. 1
   b. 2
   c. 3
   d. 4
   e. 5
   f. 6
   g. 7
   h. 8
   i. 9 or more

3. What percent of your ***farmers' market*** sales do you expect to derive from each of these categories in 2009?

	Items Sold	***Percent***
	a. fruit/vegetables	
	b. meat/fish/poultry	
	c. eggs	
	d. crafts/art	
	e. cut flowers/plants	
	f. jam/jelly	
	g. wine	
	h. honey	
	i. baked goods	
	j. prepared foods or ready-to-eat food	
	k. other _____	
		100%

4. What is your expected total gross sales through all farmers' markets for the 2009 season? *(includes cash, checks, credit/debit cards, WIC IFMNP checks, Seniors IFMNP checks, USDA Food Stamps, or other payment methods)*

   a. 0 - $1,000
   b. $1,001 – 2,500
   c. $2,501 – 5,000
   d. $5,001 – 7,500
   e. $7,501 – 10,000
   f. $10,001 – 15,000
   g. $15,001 – 20,000
   h. $20,001 – 30,000
   i. $30,001 – 50,000
   j. more than $50,000

5. Approximately what percent of your household or operation income is expected from the following sources?

   a. Farmers' Market Income _____%
   b. Other Farm Income _____%
   c. Income from off-farm work _____%
   d. Other Income (Retirement Pension, Business, etc) _____%

6. What is the zip code of your place of residence? _____

7. How many years have you participated in farmers' markets? _____ *years*

8. What is the age of this operation's owner/operator? *(years)*

   a. < 20
   b. 21-35
   c. 36-50
   d. 51-65
   e. 65 >

Your participation in this research project is highly appreciated.

In May of 2009, the Iowa Department of Agriculture and Land Stewardship (IDALS) entered into cooperative agreements with the USDA National Agricultural Statistics Service - Iowa Field Office (NASS IFO), and Strategic Economics Group, Incorporated. NASS IFO conducted surveys at farmers markets throughout the state to measure the economic impact of this industry in Iowa. The survey data collected were provided to Strategic Economics Group, Inc. for analyses of direct effects and estimated secondary impacts, and comparisons to information collected from a similar 2003/2004 study. The report that follows is a summation of those findings.

Funds for this project were provided by the USDA-AMS Specialty Crops Block Grant Program from the Iowa Department of Agriculture and Land Stewardship.

IDALS welcomes comments and feedback on this economic impact study. Please contact us at 515-242-5043 or write to: Horticulture Bureau, IDALS, Wallace Building, Des Moines, Iowa, 50319.

Consumers, Vendors, and the Economic Importance of Iowa Farmers Markets: An Economic Impact Survey Analysis

Dr. Daniel Otto[1], Strategic Economics Group,
January 2010

Summary

The results of a 2009 survey of Iowa farmers markets are presented and contrasted with results from an earlier survey of farmers markets conducted in 2004.[2] The goal of this study is to recognize the continued success of these popular markets through an assessment of market participation and the resulting overall economic impact. The Iowa Department of Agriculture and Land Stewardship collected demographic and market participation information from more than 4,000 consumers and more than 1,200 vendors during the 2009 market season.

This study identifies the total sales resulting from Iowa's busy 2009 market season through an analysis of the survey data. This study then estimated the economic impact associated with the total statewide sales activities at farmers markets using the IMPLAN Input-Output (I-O) model.

The analysis estimates approximately $38.4 million in sales based on what the consumer reported, while the vendors reported a more conservative estimate of $11.2 million in 2009. The 2009 consumer estimate represents 92% growth in the five-year period - an $18 million increase from the $20 million estimate in 2004 using a comparable methodology.

Although the consumer estimate may be somewhat liberal due to the nature of consumer reports and market attendance estimates, this estimate ($38.4 million in sales) was based on a larger sample and is taken as the more accurate estimate of the two. This $38.4 million in sales was used to assess the overall economic impact of Iowa farmers markets.

Because there is a greater motivation for vendors to underestimate sales information possibly to reduce their sales tax liability, this analysis is based on the consumer estimate.

Applying the I-O model to that number yields an estimated $59.4 million of gross sales in the Iowa economy as a result of the indirect and induced effects. In addition, $12.2 million

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[1] Dr. Daniel Otto, Professor of Economics, Iowa State University, serves as a Principal Associate with Strategic Economics Group of West Des Moines, Iowa.

[2] Otto, Daniel and Theresa Varner, "Consumers, Vendors, and the Economic Importance of Iowa Farmers Markets: An Economic Impact Survey Analysis", March 2005. See http://www.iowaagriculture.gov/Horticulture_and_FarmersMarkets/pdfs/FarmMarketReportMarch2005.pdf.

of personal income effects were directly or indirectly related to farmers market activity, according to the I-O model. Based on these estimates, the calculated multipliers were 1.55 and 1.59, respectively. In addition to the 374 direct jobs attributed to farmers markets, over 200 jobs within the economy were indirectly attributed to the activity.

Though findings regarding consumer and vendor characteristics may be no surprise, they do reveal opportunities for increased marketing toward certain participants.

On average, approximately 99,000 consumers and 1,500 vendors gathered for at least one weekly market session. The typical market consumer was 51-65 years of age, buying mostly fruits, vegetables, and baked goods. Evidence suggested that consumers patronizing the largest markets were slightly younger, traveled farther, and spent more.

Markets benefited from much repeat business with the average consumer making approximately 11 market visits per season. The average vendor was also 51-65 years of age and received the most revenue from the sale of produce and baked goods.

Evidence also suggested that market participation might be increased through the targeting of urban consumers and participants approaching retirement age, as well the development of new strategies to attract younger consumers and those who have little experience with farmers markets.

According to the consumer reports, farmers markets in Iowa's five largest urban areas generated approximately 72 percent of all sales. Evidence that Iowa farmers markets are largely an urban phenomenon is further provided by mapping of markets and market participants which indicates that within Iowa, as within other states, these markets are an important place for rural producers and urban consumers to come together to exchange goods and information.

Background

Interest in farmers market activity has continued to increase in the past few years as consumers' apparent desire for fresh, locally-produced food has led them to shop the markets in increasing numbers. Within the state of Iowa alone, the number of farmers markets has increased more than 75 percent over the past 15 years.[3] With over 200 markets in operation in 2009, Iowa still boasts the greatest number of markets per capita in the nation.[4]

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[3] A 1994 Iowa Farmers Market Directory, compiled by the Iowa Department of Agriculture and Land Stewardship (IDALS), listed 116 operating markets for that year. The current directory lists 203 operating markets for 2009.[2]

[4] This estimate was cited in [2]: Farmers Market Survey Report, July 1996, but may have originated earlier. The methods used to calculate this sales figure are unknown.

Various reasons, both social and economic, for increased market participation may exist. For instance, in a 1999 survey of Iowa farmers market vendors, over 85 percent of surveyed vendors assigned much importance to the satisfaction derived from providing quality foods and interacting with consumers and fellow vendors [3]. More than half of surveyed vendors assigned at least some importance to the net profits earned through market participation with almost half indicating that the closure of the surveyed market would mean a significant loss to their businesses. Consumers benefit from interaction with food producers, engaging in an out-of-the ordinary shopping experience [1, 2, 4], as well as enjoying the availability of locally-produced food.

The goal of this study was to assess both market participation and the local economic impact that can be credited to market activity. Some of the many relevant questions that this study addresses include:

- Who is the typical market consumer, and what do consumers buy?
- What characterizes the typical Iowa vendor, and how far and how often do vendors travel to sell goods at these markets?
- What are the overall economic benefits of farmers market activity, and what factors determine market success?
- How have marketing patterns changed since 2004?

The importance of farmers markets as a link between rural, production-centered areas and urban centers has been noted [2]. The evidence from this report suggests that Iowa markets are no exception.

Both market consumers and market vendors were the subject of the statewide survey. The following discussion aims to characterize both consumers and vendors at these markets using the resulting data. Included are estimates of the total statewide farmers markets sales, as well as estimates of the impacts of Iowa farmers market activity on the local economy, based on total market sales estimated from consumer reports.

Few previous estimates of the total dollar sales from Iowa's lively farmers market scene are available. A widely known estimate of Iowa farmers market sales was produced about 15 years ago. At that time, an extension estimate put total statewide sales at $5 to 5.5 million. Another useful indicator of Iowa farmers market sales is the Census of Agriculture report of direct sales to consumers. The 2002 Census of Agriculture puts this value at approximately $11.7 million of sales by 2,455 farmers [5]. In the 2007 Census of Agriculture, the numbers increased to $16.5 million of direct sales by 2,987 famers [6]. Vendors need to be classified as farmers in order to have been included in that census. However, not all these sales are likely to take place at farmers markets.

In contrast, this study uses a direct survey of actual farmers markets. Estimates of farmers market sales using market participant reports may be problematic. Consumers were asked

to estimate the value of their purchases within a general range and may not be reliable, while vendors may underreport sales for strategic reasons.

Because of these acknowledged concerns, collection of sales information from both consumers and vendors, and two separate estimates of Iowa farmers market sales using each of these two data sets, were performed. Discrepancy between the two estimates is not unexpected.

Methods

Consumer Survey

As in 2004, the 2009 statewide survey of Iowa farmers market consumers was conducted by the USDA, National Agriculture Statistics Service, Iowa Field Office. A large sample of markets was selected from a list of all operating markets which was provided by the Bureau of Horticulture and Farmers Markets for IDALS. The method of survey was interview by trained enumerator. The interview was based on a set of questions suggested by the author and sponsors.

Interviews were conducted during three points of the 2009 market season: early-season, mid-season, and late-season. Interviews were conducted during all three seasonal periods with equal representation across all seasonal periods. Because consumers may spend differing amounts of money per seasonal period, this equal representation across seasonal periods helps ensures greater accuracy when dollar purchases are averaged for the entire season.

Vendor Survey

The 2009 statewide survey of Iowa farmers market vendors was also conducted by the USDA, National Agriculture Statistics Service, Iowa Field Office. The markets selected for customer interviews were also selected for the vendor survey. The managers of the selected markets were given copies of paper surveys to distribute to the vendors who had been in regular attendance at the market. The survey was based on a set of questions suggested by the author and sponsors. The vendors were asked to return the survey to the manager for submission.

The surveys were distributed once at the end of the 2009 season to allow respondents to accurately estimate income and expense information for the entire season. It was possible for a vendor who attends more than one Iowa market to receive more than one survey; however, it is assumed that vendors took, at most, one opportunity to respond.

Estimation of Total Farmers Markets Sales

One estimate of Iowa farmers markets sales involved the use of consumer survey information, estimates of the average per session consumer attendance at each of the markets, and information on the number of sessions per season for each market. The estimate of total 2009 sales per market for markets where all the information was available was simply a product of the midpoint of the average range of dollar purchase per session reported by consumers interviewed at that market, the average number of consumers per session, and the number of sessions during 2009.

Two points regarding this estimation should be noted: (1) the range of dollar purchase per consumer per session was averaged across three different points in the season to account for any variation in purchasing, and (2) the use of a single estimate of per session consumer attendance may result in a liberal estimate of overall sales if this estimate does not account for relatively low consumer numbers during early season market sessions.

To estimate consumer purchases for the markets not included in the survey or markets for which average attendance was not available (41 markets or 20 percent of all markets, were not surveyed), total sales per market for 2009 were estimated by interpolating average per capita sales values from markets in similar-sized communities that had been surveyed. Total Iowa farmers market sales for 2009 are a summation of the market sales estimates from all Iowa farmers markets.

A second method for estimating total farmers market sales involved the use of vendor survey information and estimates of the average vendor attendance per market provided, as well as other market and market locale information. For markets with vendor survey information and an estimate of the average vendor attendance, the estimate of total revenue for 2009 was simply a product of the midpoint of the average range of dollar sales reported by vendors surveyed at that market and the average vendor attendance at that market.

For markets not included in the survey, markets for which there were no responses, or markets for which average vendor attendance was not available, total revenue per market for 2009 was estimated by interpolating average per capita sales values based on market performance in similar sized communities that had been surveyed. Total Iowa farmers market sales are a summation of the sales estimates from each of the individual farmer markets.

Two points regarding this estimation should be noted: (1) vendors may tend to underreport sales for strategic reasons, and (2) although estimation of total statewide sales using vendor reports was accomplished by tying vendor sales to markets (because the use of market locale variables was instrumental in estimating sales), this method was complicated by the finding that half of vendors do not obtain their revenue from one market exclusively.

Findings

Total Sales, Participants, and the 2009 Iowa Farmers Markets

During the 2009 Iowa farmers market season, thousands of consumers visited both new and established outdoor markets which averaged over a dozen vendors. Iowa markets (for which information is available) were open an average of 1.4 days per week for an average of 21 weeks[5] and featured an average of 17 vendors. Fourteen new markets emerged since 2004, while over half of the established markets had been in business more than ten years. In a typical week during the market season an average of nearly 99,400 Iowans attended at least one weekly session of these numerous markets. Approximately 2.2 million consumer visits occurred at Iowa farmers markets at some point during the season, receiving goods and information from approximately 1,500 vendors.[6]

All this commerce adds up. According to the analysis previously described, a little over $38.4 million in sales occurred during the 2009 market season as reported by market consumers. A more conservative estimate of $11.2 million originated from vendor reports for the 2009 market seasons. Based on reported distances travelled, both consumers and vendors appeared to participate in mostly local markets. Iowa's urban centers accounted for much of the statewide market activity. Appendix I is a map showing the location of the markets included in the survey along with consumer participants and the vendors by their zip code of residence.

Tables 1a (for 2004) and 1b (for 2009) show estimates of the total and per capita sales for the major Iowa urban areas. For 2009, nearly $27.7 million, or 72 percent of the $38.4 million in total sales estimated with consumer reports, was generated by those markets in urban centers. Although dollar value of sales for 2009 in these five urban center markets had increased 92 per cent, their relative share of statewide farmers market sales has stayed at about 72 percent. This implies that non-metro farmers markets increased their dollar value of sales as well. Sales at rural farmers markets increased through increasing the number of markets as well as increased sales volumes.

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[5] Information gathered from market directories and estimates compiled by the Bureau of Horticulture and Farmers Markets. Estimates include three markets open six days a week, three markets open year-round, and the Downtown Des Moines Farmers Market, which features approximately 175 vendors.

[6] Rough approximations based on the estimated per session consumer and vendor attendance at farmers markets, the length of the **market season, the finding that 15% of vendors attended more than three markets and the finding that consumers visited markets an average of 10 times per season. Number of sessions was obtained from current market directories provided by the Bureau of Horticulture and Farmers** Markets for IDALS.

Table 1a: Market Sales per City or Urban Center, 2004

City	Estimated Sales ($1000's)	Population	Per Capita Sales ($)
Cedar Rapids	$480	120,758	$3.97
Davenport/Bettendorf	$3,300	129,634	$25.46
Des Moines Area	$9,500	274,157	$34.65
Sioux City	$340	85,013	$4.00
Waterloo	$760	68,747	$11.06
Total	$14,380	678,309	$21.20

Des Moines Area includes West Des Moines and Urbandale

Table 1b: Market Sales per City or Urban Center, 2009

City	Estimated Sales ($1000's)	Population 2008	Per Capita Sales ($)
Cedar Rapids	$4,788	128,056	$37.39
Davenport/Bettendorf	$2,394	133,411	$17.94
Des Moines Area	$19,178	290,847	$65.94
Sioux City	$574	82,807	$6.93
Waterloo-Cedar Falls	$736	104,721	$7.03
Total	$27,670	739,842	$37.40

Des Moines Area includes West Des Moines and Urbandale

Consumer Summary

Iowa farmers market consumers were asked for demographic characteristics as well as market participation information. Consumer observations resulting from this survey totaled 4,031 and represented 152 different markets (75 percent of the estimated 203 operating markets). Responses from markets that are held year round and from markets that feature bulk sales were eliminated although these observations were used in determining the above sales estimate. The following is a summary of the survey results based on these categories of products:

- Fruits/Vegetables
- Meat/Fish/Poultry/Dairy/Eggs
- Crafts
- Flowers
- Baked Goods
- Honey/Jam/Wine/Prepared Foods

Consumers reported they expected to shop at farmers markets on average 10 times per season (Figure 1) and reported traveling an average of nine miles to get to a market. In 2009, consumers reported spending an average of $17.12 per market visit (Figure 2).

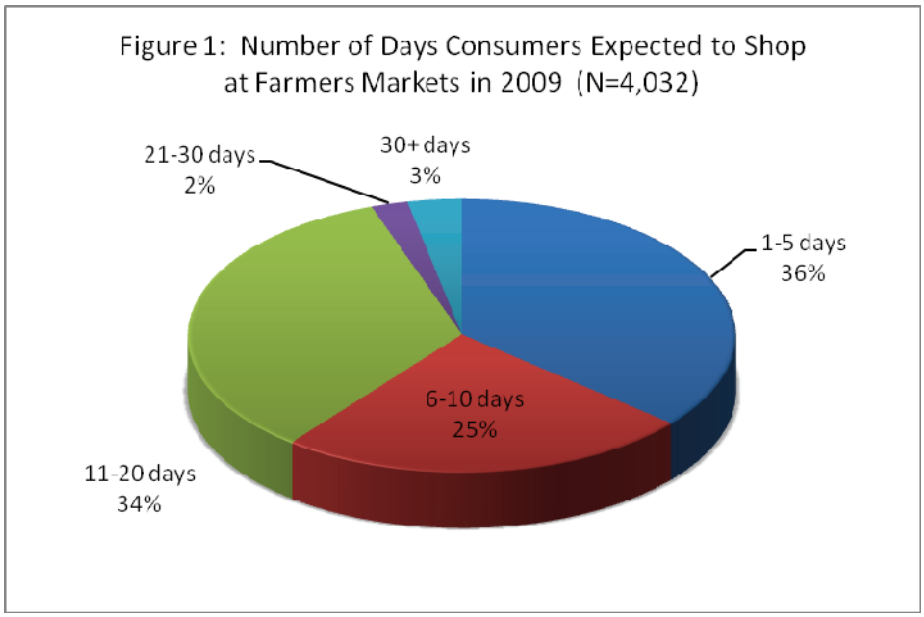
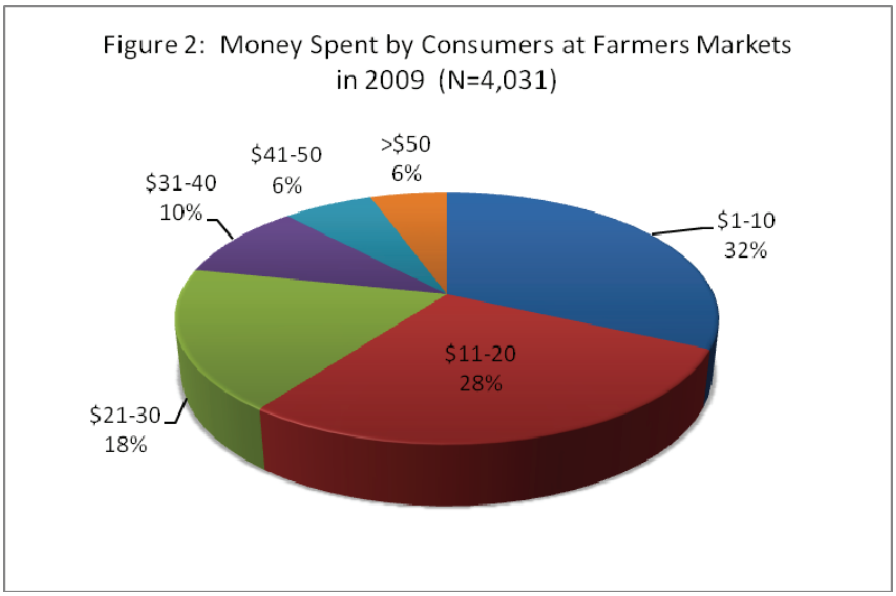


Figure 1

The average age of shoppers is about 53 with the most frequently reported age range of market consumers being 51-65 years (Figure 3).

The average reported number of visits to a market, miles traveled, expenditure per visit, and age range of consumers varied by the size of the farmers market at which interviews were conducted (Table 2).



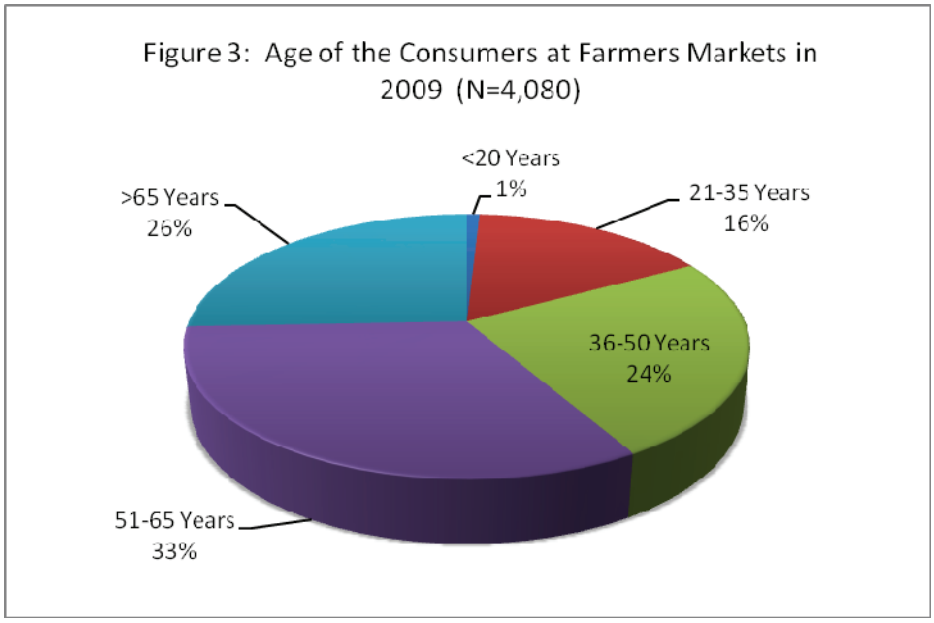
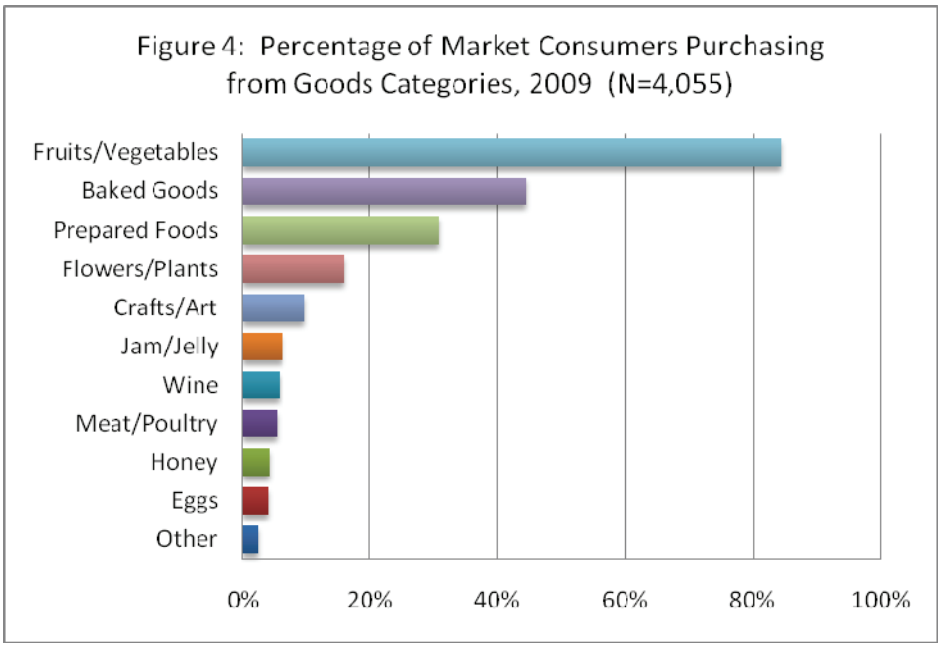


Table 2: Consumer Characteristics by Market Size , 2009

Market Size	N	Visits	N	Miles	N	Expenditure	N	Age
1-9 Vendors	1,404	11	1,387	5	1,357	$11-$20	1,395	51-65 Years
10-20 Vendors	379	12	375	7	356	$21-$30	377	51-65 Years
21-40 Vendors	633	9	625	8	597	$21-$30	633	51-65 Years
>40 Vendors	1,115	7	1,101	16	1,050	$21-$30	1,103	36-50 Years

Consumer Purchasing

The most common farmers market purchasing by consumers are fruits and vegetables by 84.4 percent of attendees followed by purchased baked goods at about 45 percent (Figure 4).



About 30 percent of consumers reported buying only fruits and vegetables in 2009 compared to 37 percent in 2004. Another nine (9) percent also reported buying exclusively from one of the other categories in 2004 compared to about five percent in 2009 (Table 3).

Table 3: Percent of Purchases by Consumers from Single Categories

Groups	2004	2009
Fruits/Vegetables	37	29
Meats/Fish/Poultry/Eggs	<1	1
Crafts	<1	<1
Flowers	1	<1
Baked Goods	5	<1
Honey/Jam/Wine/ Prepared Foods	2	3.5

However, most consumers reported purchasing goods from more than one of the categories during their visit to a farmers market. The mix of purchases by consumers is displayed in Table 4. Nearly 85 percent of the consumers reported purchasing fruits and

vegetables. The share of consumers purchasing from the fruits and vegetables and/or baked goods categories increased the share to 92.8 percent. Including purchases from the honey/wine and jam category raises the share of consumers buying from at least one of the categories to 93.6 percent. Expanding the option to at least one of three categories (baked goods and/or the honey/wine and jam, and/or fruits and vegetables) accounted for 98.1% of the purchasers.

Table 4: Consumer Purchasing by Product Categories, 2009

Consumers who bought goods from the following categories*	Number of consumers	Share of consumers surveyed
Consumers who bought from any category	4,092	100.0%
Consumers who bought Fruits/Vegetables	3,456	84.5%
Consumers who either bought Fruits/Vegetables and/or Baked Goods	3,797	92.8%
Consumers who either bought Fruits/Vegetables and/or Honey/Jam/Wine	3,830	93.6%
Consumers who either bought Fruits/Vegetables and/or Honey/Jam/Wine and/or Baked Goods	4,014	98.1%

* irrespective of whether they also bought goods from any other category

Vendor Summary

Vendors were surveyed through questionnaires covering demographic and market participation information. Vendor observations resulting from this survey totaled 1,231 and represented 152 different markets (75 percent of the estimated 203 operating markets). For all markets surveyed, vendor response rate was approximately 58 percent.[7] For some markets included in the sample, vendor response rate was zero (0). Responses from markets that are held year round or featured bulk sales were eliminated although these observations were used in determining the overall sales estimates. The following is a summary of the survey results.[8] For the following analysis, market goods were assigned to one of the same five categories that were used for the consumer analysis:

[7] Using estimates of average vendor attendance per market provided by the Bureau of Horticulture and Farmers Markets for IDALS and the finding that 15 percent of all vendors attend more than three markets. Estimates of vendor attendance originated with market managers.

[8] A similar summary of the 2004 vendor survey data was released by the USDA, National Agriculture Statistics Service, Iowa Field Office URL: http://www.nass.usda.gov/ia/misc/2004VendorSummary.pdf Results are very similar to some of those reported in [3]: The Experiences and Views of Iowa Farmers Market Vendors: Summary of Research Findings

- Fruits/Vegetables
- Meat/Fish/Poultry/Eggs
- Crafts
- Flowers
- Baked Goods
- Honey/Jam/Wine/Salsa/Prepared Foods

Market vendors reported selling at a market an average of 2 days per week or in the range of 25-49 days during the 2009 season (Table 5).

Table 5: Vendors by Frequency of Vendor Attendance

Attendance	Percentage of Vendors, 2004 (N=754)	Percentage of Vendors, 2009 (N=1,179)
0-24 days/1 day per week	48	52
25-49 days/2 days per week	31	26
50-75 days/3 days per week	10	11
75-100 days/4 days per week	11	5
More than 100 days	0	6

Market vendors indicated they attend two different markets during the season, on average (Figure 5). Vendors reported participating for an average of eight years in farmers markets and most frequently reported an average age range of 51-65 years. Evidence suggested that the average age, years of participation, revenues and expenses varied by the size of market for which the survey was completed (Table 6). The largest markets tended to have younger vendors with higher average levels of sales.

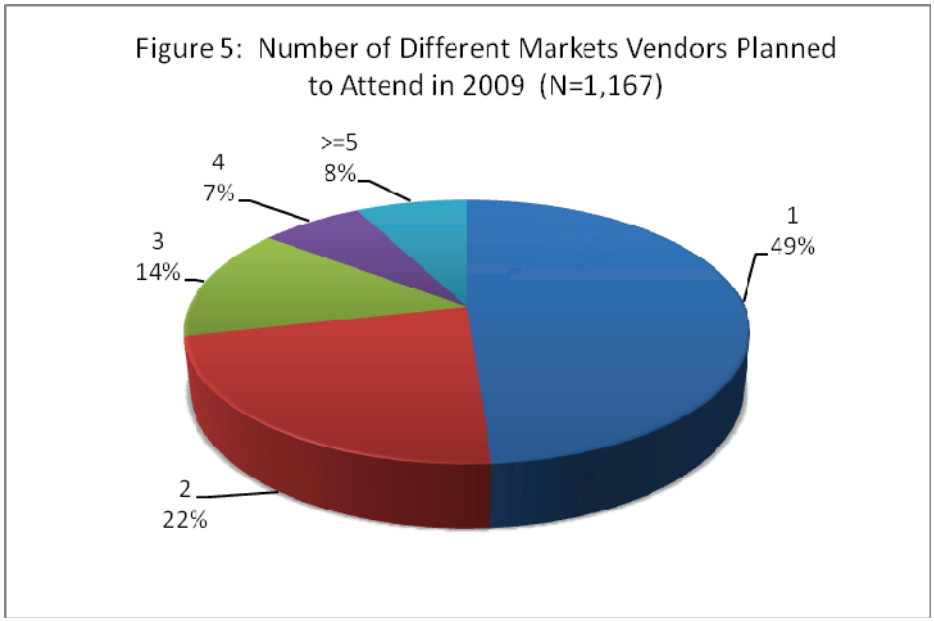


Table 6: Vendor Characteristics by Market Size, 2009

Market Size	N	Age	N	Years	N	Sales/Vendor
1-9 Vendors	614	51-65 Years	601	8	689	$21,389
10-20 Vendors	318	51-65 Years	314	7	346	$10,420
21-40 Vendors	138	51-65 Years	133	8	116	$17,643
>40 Vendors	114	36-50 Years	113	9	115	$115,395

Goods Sold

A little less than half of vendor revenue came from sales of fruits and vegetables in both 2009 and 2004, with 21 percent of vendor revenue coming from the sale of baked goods during each of those two years (Table 7).

Table 7: Percent Revenue from Different Goods

Groups	2004 (N=756)	2009 (N=1,139)
Fruits/Vegetables	49	45
Meats/Fish/Poultry/Eggs	3	4
Crafts	7	14
Flowers	4	3
Baked Goods	21	21
Honey/Jam/Wine/ Prepared Foods/and Other	15	13

Numbers may not total 100% because of rounding

Most vendors report selling goods from one or two groups (Table 8). Most vendors who sold from only one (1) group sold fruits and vegetables (Table 9).

Table 8: Percent of Sales by Vendors From Multiple Categories

Groups	2004	2009
Fruits/Vegetables	44	67
Meats/Fish/Poultry/Eggs	28	14
Crafts	17	24
Flowers	5	15
Baked Goods	3	41
Honey/Jam/Wine/ Prepared Foods/and other	0	35

Table 9: Percent of Sales by Vendors from Single Categories

Groups	2004	2009
Fruits/Vegetables	23	19
Meats/Fish/Poultry/Eggs	2	1
Crafts	4	11
Flowers	1	0
Baked Goods	10	7
Honey/Jam/Wine/ Prepared Foods	4	6

Economic Impact of Farmers Market Activity

The estimate of total statewide farmers market sales was used to estimate the economic impact resulting from market activity. Details are provided below. Recall that two different estimates of total sales were generated; $38.4 million in sales were estimated using consumer reports while a much smaller estimate originated with vendor reports.

Although the consumer estimate may be prone to some estimation error due to the nature of consumer reports and market attendance estimates, this estimate ($38.4 million in sales) is taken as the more accurate of the two and was used to assess the overall economic impact of Iowa farmers markets.

Because there is a greater motivation for vendors to underestimate sales information possibly to reduce their sales tax liability, the sales numbers used in this study was based on the consumer estimates.

The estimation of the total economic impact of Iowa farmers market sales activity generated estimates of three different measures of the Iowa economy:

- the total value of all economic transactions
- the overall level of household income
- the number of jobs impacted in the economy

These estimates were generated using the IMPLAN Input-Output (I-O) model. An I-O model is a matrix of data that represents a point-in-time set of relationships among the economic sectors of an area (in this case Iowa). Sectors along one axis represent industrial inputs or suppliers to the industries on the other axis they represent industrial users or demanders.

Each of the cells of the matrix is mathematically linked to all of the other cells by production functions. Changing the values of goods supplied or demanded by any of the industries causes the model to rebalance the matrix, showing how that initial change affects all of the industries that supply inputs to or demand outputs from the industry altered. (See Appendix II for more discussion of how the I-O model works).

Tables 10a through 10c present the economic effects associated with farmers markets sales. The total sales figure used was the value estimated from the consumer survey results. The initial in-state expenditures of just over $38.4 million are identified in Table 10a as the total "Direct" economic transactions.

These are the input to the I-O model that then rebalances to estimate the value of linkages to the rest of the Iowa economy. Table 10a shows the "Indirect" and "Induced" effects in terms of the value of economic transactions that result from this rebalancing.

- "Indirect" effects measure the total value of supplies and services supplied to vendors by the chain of businesses which serves market vendors.
- "Induced" effects accrue when market vendors and workers in the indirect industries spend their earnings on goods and services in the region. "Induced" effects are also often called household effects.
- "Total" effects are the sum of direct, indirect, and induced effects. They are the total of transactions attributable to the direct activity that we are measuring.

The sum of these "Direct," "Indirect," and "Induced" effects are the "Total" effects linked to the initial $38.4 million of sales by market vendors.

Overall, an estimated $59.4 million of gross sales transactions are directly or indirectly related to Iowa farmers market activity, implying an output or gross sales multiplier of 1.55 ($59.38 million/$38.4 million). Nearly $11.5 million of these effects are "Indirect," meaning that they represent the wholesale or supply transactions that support market vendors.

Table 10a: Output Impact of Iowa Farmers Market Activities, 2009

Sectors	Direct Impact	Business-Related Indirect Impact	Consumer-Related Induced Impact	Total Impact
Agriculture & Mining	$24,960,000	$915,629	$123,876	$25,999,504
Construction	0	1,060,974	111,077	1,172,052
Manufacturing	0	2,374,500	862,535	3,237,035
Wholesale & Retail Trade	13,440,000	1,080,607	1,819,466	16,340,074
Transportation & Utilities	0	1,702,314	708,567	2,410,881
Finance, Insurance & Real Estate	0	2,164,023	2,450,352	4,614,374
Professional Services	0	1,173,101	1,856,549	3,029,650
Personal Services	0	966,701	1,610,661	2,577,362
Total	$38,400,000	$11,437,850	$9,543,083	$59,380,932

Approximately $9.5 million of these effects are “Induced,” meaning that they are the result of personal purchases made by the market vendors and workers (payroll recipients) in the businesses that directly serve vendors.

Tables 10b and 10c show these impacts in terms on income and job effects. Table 10b translates these effects from market purchases into personal or household income. The dollar values in Table 10b are substantially smaller than those in Table 10a, because personal income is only one of the components of any transaction price. Even so, Table 10b shows that the personal income component of the $38.4 million in “Direct” expenditures is nearly $11.2 million.

The initial $11.2 million of direct income generates an additional $3.7 million of “Indirect” and $2.95 million in “Induced” personal income. This gives a total personal income component effect of over $17.8 million in the form of payrolls resulting from market-related expenditures and the back-office transactions that support these expenditures. This implies an income multiplier of 1.59.

Table 10b: Income Impact of Iowa Farmers Market Activities, 2009

Sectors	Direct Impact	Business-Related Indirect Impact	Consumer-Related Induced Impact	Total Impact
Agriculture & Mining	$6,716,860	$113,933	$9,564	$6,840,356
Construction	0	857,471	33,099	890,570
Manufacturing	0	307,385	138,574	445,959
Wholesale & Retail Trade	4,466,500	449,769	736,628	5,652,896
Transportation & Utilities	0	440,276	165,479	605,755
Finance, Insurance & Real Estate	0	598,556	359,902	958,458
Professional Services	0	517,673	936,900	1,454,573
Personal Services	0	387,924	572,454	960,378
Total	11,183,359	3,672,986	2,952,599	17,808,944

Similarly, Table 10c translates these expenditure and income effects into an estimate of the number of jobs in the Iowa economy that are tied to farmers market activity. An estimated 374.4 jobs are directly related to farmers market activities. An additional 104.8 "Indirect" and nearly 96.9 "Induced" jobs are linked to this activity.

Because vending of goods at farmers markets is a primarily seasonal and often a secondary occupation, the estimate of "Direct" jobs linked with farmers markets – and the associated multiplier effect - should be interpreted cautiously.

Table 10c: Jobs Impact of Iowa Farmers Market Activities, 2009

Sectors	Direct Impact	Business-Related Indirect Impact	Consumer-Related Induced Impact	Total Impact
Agriculture & Mining	228.9	4.7	0.4	234.0
Construction	0.0	32.7	0.8	33.4
Manufacturing	0.0	4.6	2.5	7.1
Wholesale & Retail Trade	145.5	9.1	26.1	180.6
Transportation & Utilities	0.0	8.0	3.1	11.1
Finance, Insurance & Real Estate	0.0	20.0	9.0	29.0
Professional Services	0.0	13.8	22.9	36.8
Personal Services	0.0	12.0	32.2	44.2
Total	374.4	104.8	96.9	576.2

"Direct" jobs refer to employment positions in the economy that are generated directly by the measured activity (see Appendix II). The direct employment due to farmers markets, namely vending, often cannot be characterized as employment directly generated by farmers market activity. Market vendors are more often otherwise employed so market activity is often a residual use of time. Accordingly, the equivalent of 229 full-time "Agriculture" jobs and almost 146 "processing and retail trade" jobs are directly attributed to the combined activity of approximately 1600 seasonal vendors[9].

Summary and Conclusions

During the summer of 2009, staff from the USDA, National Agriculture Statistics Service, Iowa Field Office collected demographic and market participation information from over 4,000 consumers and over 1,200 vendors. This study presents the results of that statewide survey of Iowa farmers markets along with an assessment of the economic impact of statewide market activity.

Using the data collected from the surveys, the author estimated total sales, and the associated economic impact for Iowa's farmers markets. The reports from consumers indicate that approximately $38.4 million in sales occurred at those markets. The vendors reported a more conservative estimate of $11.2 million. Although the former estimate may be somewhat liberal due to the nature of consumer reports and market attendance estimates, this estimate ($38.4 million in sales) was taken as more accurate and was used to assess the overall economic impact of Iowa farmers markets.

Because there is a greater incentive for market vendors to misrepresent sales information and because the estimation of total statewide sales was relatively more complicated, use of the latter estimate may have resulted in a relatively less accurate assessment of the economic impact.

Applying the relevant multiplier impacts identified with the IMPLAN I-O model, this study estimates $59.4 million of gross sales (using the total sales estimate from consumer reports) and $17.8 million of personal income effects directly or indirectly related to farmers market activity. Based on these estimates, the calculated multipliers were 1.55 and 1.59, respectively. The Model also identified over 200 secondary jobs within the economy indirectly attributed to farmers market activity.

Findings regarding consumer and vendor characteristics may be no surprise but may reveal opportunities for increased marketing toward certain participants. The typical market consumer was 51-65 years of age, buying mostly fruits, vegetables, and baked goods.

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[9] Vendors sell unprocessed agricultural goods like vegetables and plants, and retail goods like baked items. The calculated jobs multiplier is approximately 1.54 (576.2/374.4); this effect applies to the combined activity of four to five market vendors.

Evidence suggested that consumers patronizing the largest markets were slightly younger, traveled farther, and spent more.

The average vendor was also 51-65 years of age and received the most revenue from produce and baked goods. The relative popularity of city-based markets was apparent. Approximately 72 percent of all sales were generated by five urban market areas. Evidence that Iowa's farmers markets are largely an urban phenomenon is further provided by mapping of markets and market participants.

Those who patronized farmers markets apparently shopped frequently throughout the season (the average consumer visited a market approximately 10 times during the 2009 season). This high level of repeat business may indicate that consumers are satisfied by their shopping experiences and are dedicated farmers market consumers.

This high level of repeat business may also reveal opportunities to increase market participation by developing new strategies to encourage more visits by those who typically shop infrequently and to encourage those unfamiliar with the markets to give them a try. Consumer data suggests that attendance at markets could be increased through efforts to attract younger consumers in addition to targeting urbanites and those approaching retirement age.

Because the typical consumer is a city resident and not necessarily familiar with local agriculture and the types of goods available throughout the season, greater market participation might result from increased marketing (including market and agriculture-related education) in urban areas. Efforts to increase the amount and variety of produce and other goods offered (through the participation of more vendors) would be complementary to increased marketing as well as encouragement of the purchase of a greater variety of goods.

As an established feature of the Iowa spring and summer, farmers markets continue to thrive and offer quality of life opportunities.

Studies like this one which provide improved knowledge of current market participants and their market impact may provide greater appreciation of this valuable seasonal activity and increased future participation.

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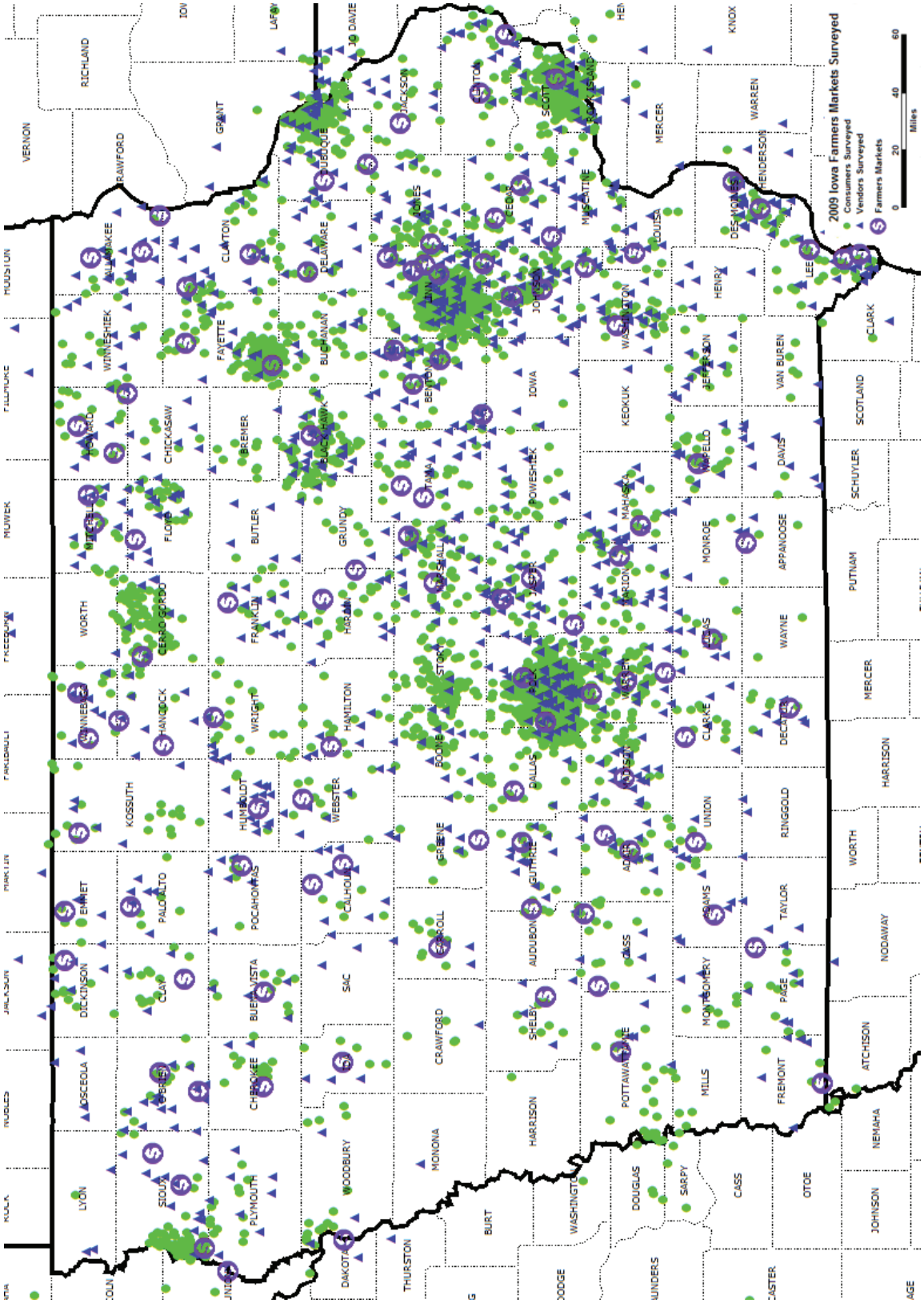
5. 2002 Census of Agriculture. US Department of Agriculture: National Agricultural Statistics Service. State Data-Iowa, Table 2. "Value of agricultural products sold directly to individuals for human consumption" http://www.nass.usda.gov/census/census02/volume1/ia/st19_1_002_002.pdf

6. 2007 Census of Agriculture. US Department of Agriculture: National Agricultural Statistics Service. State Data-Iowa, Table 2. "Value of agricultural products sold directly to individuals for human consumption" http://www.agcensus.usda.gov/

Appendix I
Location of Iowa Farmers Markets Surveyed in 2009



Appendix II
Input-Output Model Description

An I-O model is essentially a generalized accounting system of a regional economy that tracks the purchases and sales of commodities between industries, businesses, and final consumers. Successive rounds of transactions stemming from the initial economic stimulus (such as a new plant or community business) are summed to provide an estimate of direct, indirect, induced (or consumer-related) and total effects of the event. The impacts are calculated using the IMPLAN Input Output modeling system, originally developed by the US Forest system and currently maintained by the Minnesota IMPLAN Group. This modeling system is widely used by regional scientists to estimate economic impacts.

I-O models are capable of providing many types of reports on regional data and interactions among sectors. For economic studies, several of the more important indicators are: 1) total output, 2) personal income, 3) value added, and 4) jobs. Total output for most industries is simply gross sales. For public institutions we normally include all public and private spending, all direct sales and subsidies received in order to isolate the economic value of their output. Personal income includes the wages and salaries of employees, along with normal proprietor profits. Value added is another appropriate measure of economic effects. Value added is analogous to gross regional product. It includes all personal income, plus estimates of returns to investors, and indirect business taxes paid to state and local governments. In short, value added gives us a measure of the income or wealth that accrues to individuals and governments as a result of industrial activity in an area. Jobs, the fourth measure, represent the number of positions in the economy, not the number of employed persons.

We also get detailed breakdown of this data into direct, indirect, induced, and total economic effects. Direct effects refer to the operational characteristics of the firm that we are studying. Indirect effects measure the value of supplies and services that are provided to the direct firm by industries in the region. Induced effects accrue when workers in the direct and indirect industries spend their earnings on goods and services in the region. Induced effects are also often called household effects. Total effects are the sum of direct, indirect, and induced effects. They are the total of transactions attributable to the direct activity that we are measuring.

The term multiplier is also often used when referring to economic effects or economic impacts. A multiplier is simply the total effects divided by the direct effects. It tells how much the overall economy changes per unit change in the direct effects (a dollar of output, a dollar of personal income, a dollar of value added, or a job). Multipliers help us to anticipate the potential change in the regional economy attributable to a change in direct activity in a particular industry. Firms with strong linkages to area supplying businesses or that pay relatively high earnings may yield high multipliers. Firms that are otherwise not connected strongly locally or that pay lower than average wages will have lower multipliers. Urban areas with their more developed economies have, on the average, much higher multipliers than rural areas.

2009 FARMERS' MARKET CUSTOMER SUMMARY

Released on November 30, 2009, by the National Agricultural Statistics Service (NASS), Iowa Field Office, U.S. Department of Agriculture

Iowa Farmers' Market Customer Survey

The results of the Farmers' Market Customer Survey provided below were compiled by USDA NASS, Iowa Field Office. The Iowa Department of Agriculture and Land Stewardship intends to publish a more in-depth analysis of the economic impact of Farmers Markets' in the spring of 2010.

- Nearly 40 percent of the customers who visit a farmers' market reported they spent $21 or more, compared with 26 percent in 2004.

Money Spent by Customer	2004 Percent of Customers[1]	2009 Percent of Customers[1]
$0	<1	<1
$1-10	47	32
$11-20	27	28
$21-30	14	18
$31+	12	21

- The average customer expected to shop at a farmers' market 10 times during the season, compared with 13 times in 2004.

Days Expected to Shop at a Farmers' Market	2004 Percent of Customers[i]	2009 Percent of Customers[1]
1-5 days	29	36
6-10 days	23	24
11-20 days	23	34
21-30 days	21	2
30+ days	4	3

- Slightly over 84 percent of farmers' market customers purchased fruits or vegetables, down 2 percentage points from 2004, forty-five percent purchased baked goods, up 3 percentage points from 2004, and 31 percent purchased prepared foods or ready-to-eat food, an 11 percentage point increase from 2004.

Type of Purchase	2004 Percent of Customers[1]	2009 Percent of Customers[1]
Fruit/Vegetables	86	84
Meat/Fish/Poultry	5	5
Eggs	5	4
Crafts/Art	6	10
Cut Flowers/Plants	14	16
Honey	2	4
Jam/Jelly	5	6
Baked Goods	42	45
Prepared Foods or Ready-to-Eat	20	31
Wine	*	6
Other	4	3

*In 2004, wine was not a separate category; it was included in the category of "Other".

- The average distance the farmers' market customer traveled to attend the market was 9 miles compared with 8 miles in 2004.
- Customers at Iowa farmers' markets shopped at an average of 1.2 additional local businesses the day they attended the farmers' market.
- Customers reported they would have only shopped at 0.9 local businesses on average if they had not attended the farmers' market.

Continued

2009 FARMERS' MARKET CUSTOMER SUMMARY

- Slightly more than 59 percent of farmers' market customers reported their age as 51 years or older, compared with 60 percent in 2004.

Age Range	2004 Percent of Customers[1]	2009 Percent of Customers[1]
<20 years	1	<1
21-35 years	14	16
36-50 years	25	25
51-65 years	32	33
>65 years	28	26

- More than half of farmers' market customers have a household income of $50,000 or more.

Household Income	2009 Percent of Customers[1]
< $25,000	17
$25,000 – 49,999	27
$50,000 – 74,999	27
$75,000 – 99,999	17
$100,000 +	12

Purpose of the Survey: The purpose of the 2009 Farmers' Market study was to obtain current information on customer demographics of farmers' markets. Data for this study was collected through the Farmers' Market Customer survey and was initiated by the Iowa Farmers' Market Association.

Survey Methodology: The Bureau of Horticulture and Farmers' Markets for the Iowa Department of Agriculture and Land Stewardship (IDALS) provided the USDA National Agricultural Statistics Service, Iowa Field Office a complete list of farmers' markets expected to be in operation during 2009. From this list, a sample of farmers' markets was selected to conduct customer interviews. The number of customer interviews conducted at each farmers' market was proportional to the size of the farmers' market.

To ensure adequate coverage across "seasons," customer data was collected during three time frames: early-season, mid-season, and late-season. Each farmers' market had a Customer Survey sample selected from at least one season. Customers were randomly selected as they left the premises of the market and asked to participate by answering a six question survey. The customer interview was conducted by trained enumerators.

[1] Totals may not add due to rounding.

2009 FARMERS' MARKET VENDOR SUMMARY

Released on November 30, 2009, by the National Agricultural Statistics Service (NASS), Iowa Field Office, U.S. Department of Agriculture

Iowa Farmers' Market Vendor Survey

The results of the Farmers' Market Vendor Survey provided below were compiled by USDA NASS Iowa Field Office. The Iowa Department of Agriculture and Land Stewardship intends to publish a more in-depth analysis of the economic impact of Farmers' Markets in the spring of 2010.

- Almost 48 percent of vendors at farmers' markets reported they plan to sell at any market 25 days or more during 2009.

Frequency	2004 Percent of Vendors[1]	2009 Percent of Vendors[1]
0-24 days or 1 day/week	48	52
25-49 days or 2 days/week	31	26
50-75 days or 3 days/week	10	11
75+ days or 4+ days/week	11	11

- On average, vendors planned to attend 2 farmers' markets during the 2009 market season.

Number of Markets Planned to Attend	2004 Percent of Vendors[1]	2009 Percent of Vendors[1]
1	50	49
2	24	23
3	12	14
4	6	7
5+	8	8

- Slightly more than 45 percent of vendor sales was derived from selling fruits or vegetables, down from 50 percent in 2004 and 21 percent of their sales came from baked goods, unchanged from 2004.

Item Sold	2004 Percent of Sales[1]	2009 Percent of Sales[1]
Fruit/Vegetables	50	45
Meat/Fish/Poultry	2	2
Eggs	1	2
Crafts/Art	7	14
Cut Flowers/Plants	4	3
Honey	2	2
Jam/Jelly	3	3
Baked Goods	21	21
Prepared Foods or Ready-to-Eat	3	5
Wine	<1	<1
Other	5	2

Continued

2009 FARMERS' MARKET VENDOR SUMMARY

- Nearly 42 percent of the vendors reported their gross sales during 2009 were expected to be $2,501 or more, compared with 48 percent in 2004.

Vendor Sales Range	2004 Percent of Vendors[1]	2009 Percent of Vendors[1]
$0-1,000	34	39
$1,001-2,500	18	19
$2,501-5,000	18	13
$5,001-7,500	7	6
$7,501-10,000	7	5
$10,001+	16	18

- Vendors reported 18 percent of their household income was derived from farmers' markets.

Source of Household Income	2009 Percent of Income[1]
Farmers Markets	18
Other Farm Income	17
Off-Farm Work Income	34
Other Income (retirement, etc)	31

- The average number of years the vendor has participated in farmers' markets is 8 years, unchanged from 2004.

- Nearly 59 percent of the vendor operators reported they were 51 years of age or older, compared with 57 percent in 2004.

Age Range	2004 Percent of Vendors[1]	2009 Percent of Vendors[1]
<20 years	3	4
21-35 years	10	9
36-50 years	29	29
51-65 years	31	33
>65 years	26	26

Purpose of the Survey: The purpose of the 2009 Farmers' Market study was to obtain current information on the demographics of vendors at farmers' markets. Data for this study was collected through the Farmers' Market Vendor survey and was initiated by the Iowa Farmers' Market Association.

Survey Methodology: The Bureau of Horticulture and Farmers' Markets for the Iowa Department of Agriculture and Land Stewardship (IDALS) provided the USDA National Agricultural Statistics Service, Iowa Field Office a complete list of farmers' markets expected to be in operation during 2009.

The Vendor Survey was conducted near the end of the season for each farmers' market to allow expense and income questions to reflect the full 2009 season. All vendors at participating farmers' markets were given a Vendor Survey to complete.

[1] Totals may not add due to rounding.

2009 FARMERS' MARKET CUSTOMER SUMMARY

Released on November 30, 2009, by the National Agricultural Statistics Service (NASS), Iowa Field Office, U.S. Department of Agriculture

Iowa Farmers' Market Customer Survey

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Money Spent by Customer	2004 Percent of Customers[1]	2009 Percent of Customers[1]
$0	<1	<1
$1-10	47	32
$11-20	27	28
$21-30	14	18
$31+	12	21

- The average customer expected to shop at a farmers' market 10 times during the season, compared with 13 times in 2004.

Days Expected to Shop at a Farmers' Market	2004 Percent of Customers[i]	2009 Percent of Customers[1]
1-5 days	29	36
6-10 days	23	24
11-20 days	23	34
21-30 days	21	2
30+ days	4	3

- Slightly over 84 percent of farmers' market customers purchased fruits or vegetables, down 2 percentage points from 2004, forty-five percent purchased baked goods, up 3 percentage points from 2004, and 31 percent purchased prepared foods or ready-to-eat food, an 11 percentage point increase from 2004.

Type of Purchase	2004 Percent of Customers[1]	2009 Percent of Customers[1]
Fruit/Vegetables	86	84
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Prepared Foods or Ready-to-Eat	20	31
Wine	*	6
Other	4	3

*In 2004, wine was not a separate category; it was included in the category of "Other".

- The average distance the farmers' market customer traveled to attend the market was 9 miles compared with 8 miles in 2004.
- Customers at Iowa farmers' markets shopped at an average of 1.2 additional local businesses the day they attended the farmers' market.
- Customers reported they would have only shopped at 0.9 local businesses on average if they had not attended the farmers' market.

Continued

2009 FARMERS' MARKET CUSTOMER SUMMARY

- Slightly more than 59 percent of farmers' market customers reported their age as 51 years or older, compared with 60 percent in 2004.

Age Range	2004 Percent of Customers[1]	2009 Percent of Customers[1]
<20 years	1	<1
21-35 years	14	16
36-50 years	25	25
51-65 years	32	33
>65 years	28	26

- More than half of farmers' market customers have a household income of $50,000 or more.

Household Income	2009 Percent of Customers[1]
< $25,000	17
$25,000 – 49,999	27
$50,000 – 74,999	27
$75,000 – 99,999	17
$100,000 +	12

Purpose of the Survey: The purpose of the 2009 Farmers' Market study was to obtain current information on customer demographics of farmers' markets. Data for this study was collected through the Farmers' Market Customer survey and was initiated by the Iowa Farmers' Market Association.

Survey Methodology: The Bureau of Horticulture and Farmers' Markets for the Iowa Department of Agriculture and Land Stewardship (IDALS) provided the USDA National Agricultural Statistics Service, Iowa Field Office a complete list of farmers' markets expected to be in operation during 2009. From this list, a sample of farmers' markets was selected to conduct customer interviews. The number of customer interviews conducted at each farmers' market was proportional to the size of the farmers' market.

To ensure adequate coverage across "seasons," customer data was collected during three time frames: early-season, mid-season, and late-season. Each farmers' market had a Customer Survey sample selected from at least one season. Customers were randomly selected as they left the premises of the market and asked to participate by answering a six question survey. The customer interview was conducted by trained enumerators.

[1] Totals may not add due to rounding.

2009 FARMERS' MARKET VENDOR SUMMARY

Released on November 30, 2009, by the National Agricultural Statistics Service (NASS), Iowa Field Office, U.S. Department of Agriculture

Iowa Farmers' Market Vendor Survey

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Frequency	2004 Percent of Vendors[1]	2009 Percent of Vendors[1]
0-24 days or 1 day/week	48	52
25-49 days or 2 days/week	31	26
50-75 days or 3 days/week	10	11
75+ days or 4+ days/week	11	11

- On average, vendors planned to attend 2 farmers' markets during the 2009 market season.

Number of Markets Planned to Attend	2004 Percent of Vendors[1]	2009 Percent of Vendors[1]
1	50	49
2	24	23
3	12	14
4	6	7
5+	8	8

- Slightly more than 45 percent of vendor sales was derived from selling fruits or vegetables, down from 50 percent in 2004 and 21 percent of their sales came from baked goods, unchanged from 2004.

Item Sold	2004 Percent of Sales[1]	2009 Percent of Sales[1]
Fruit/Vegetables	50	45
Meat/Fish/Poultry	2	2
Eggs	1	2
Crafts/Art	7	14
Cut Flowers/Plants	4	3
Honey	2	2
Jam/Jelly	3	3
Baked Goods	21	21
Prepared Foods or Ready-to-Eat	3	5
Wine	<1	<1
Other	5	2

Continued

2009 FARMERS' MARKET VENDOR SUMMARY

- Nearly 42 percent of the vendors reported their gross sales during 2009 were expected to be $2,501 or more, compared with 48 percent in 2004.

Vendor Sales Range	2004 Percent of Vendors[1]	2009 Percent of Vendors[1]
$0-1,000	34	39
$1,001-2,500	18	19
$2,501-5,000	18	13
$5,001-7,500	7	6
$7,501-10,000	7	5
$10,001+	16	18

- Vendors reported 18 percent of their household income was derived from farmers' markets.

Source of Household Income	2009 Percent of Income[1]
Farmers Markets	18
Other Farm Income	17
Off-Farm Work Income	34
Other Income (retirement, etc)	31

- The average number of years the vendor has participated in farmers' markets is 8 years, unchanged from 2004.

- Nearly 59 percent of the vendor operators reported they were 51 years of age or older, compared with 57 percent in 2004.

Age Range	2004 Percent of Vendors[1]	2009 Percent of Vendors[1]
<20 years	3	4
21-35 years	10	9
36-50 years	29	29
51-65 years	31	33
>65 years	26	26

Purpose of the Survey: The purpose of the 2009 Farmers' Market study was to obtain current information on the demographics of vendors at farmers' markets. Data for this study was collected through the Farmers' Market Vendor survey and was initiated by the Iowa Farmers' Market Association.

Survey Methodology: The Bureau of Horticulture and Farmers' Markets for the Iowa Department of Agriculture and Land Stewardship (IDALS) provided the USDA National Agricultural Statistics Service, Iowa Field Office a complete list of farmers' markets expected to be in operation during 2009.

The Vendor Survey was conducted near the end of the season for each farmers' market to allow expense and income questions to reflect the full 2009 season. All vendors at participating farmers' markets were given a Vendor Survey to complete.

[1] Totals may not add due to rounding.

Iowa Farmers Market Study, 2009

- $38.4 million in sales at Iowa's 203 farmers' markets in 2009 season, representing a 92% increase since 2004
- Total impact on the Iowa economy includes $59.4 million of sales, $12.2 million of personal income, and 576 jobs
- On an average week during the 2009 market season, 99,000 consumers attended and 1,500 vendors had booths at Iowa's farmers' markets
- Fresh produce was most popular category of items sold representing 45% of vendor sales and 84.5% of consumers purchases
- $27.7 million of farmers' market sales (72% of all sales) occurred in the five largest urban centers in Iowa

Iowa Farmers Market Study, 2009

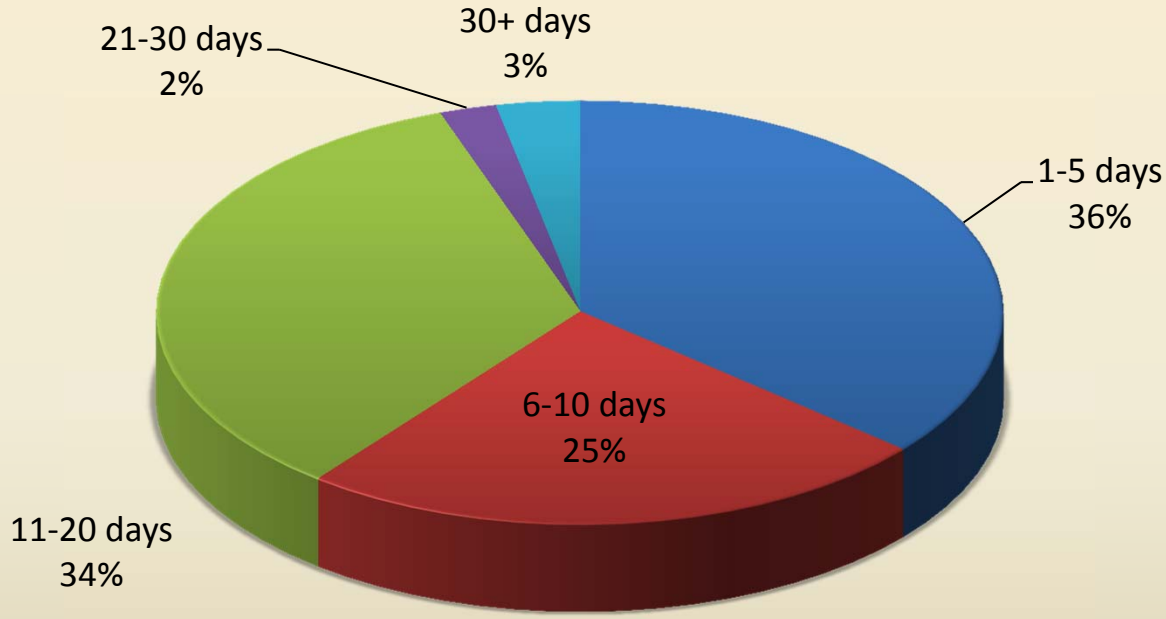
Table 1b: Market Sales per City or Urban Center, 2009

City	Estimated Sales ($1000's)	Population 2008	Per Capita Sales ($)
Cedar Rapids	$4,788	128,056	$37.39
Davenport/Bettendorf	$2,394	133,411	$17.94
Des Moines Area	$19,178	290,847	$65.94
Sioux City	$574	82,807	$6.93
Waterloo-Cedar Falls	$736	104,721	$7.03
Total	$27,670	739,842	$37.40

Des Moines Area includes West Des Moines and Urbandale

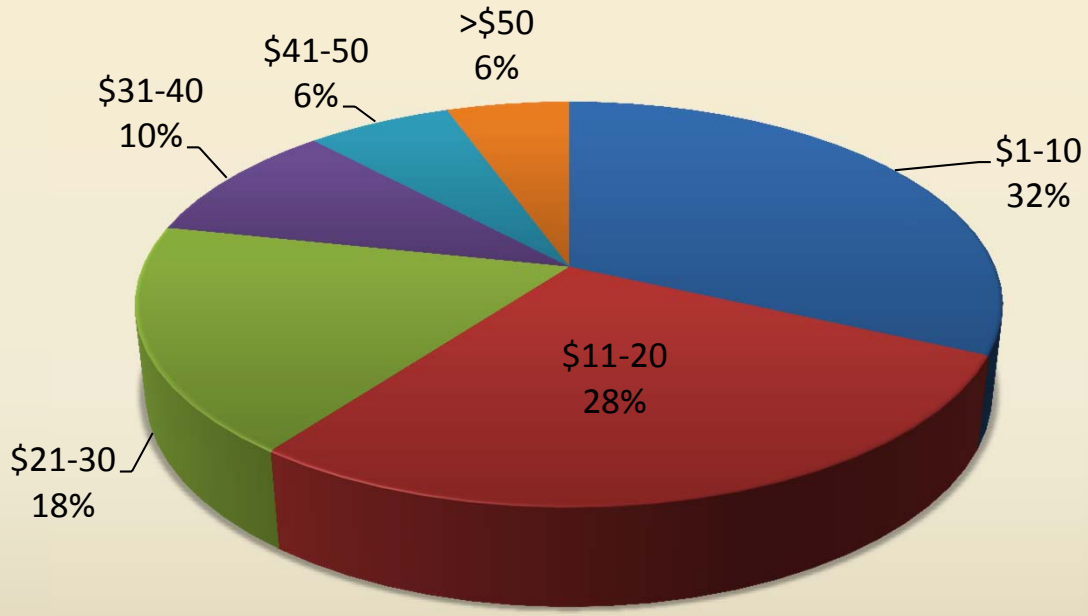
Iowa Farmers Market Study, 2009

Figure 1: Number of Days Consumers Expected to Shop at Farmers Markets in 2009 (N=4,032)



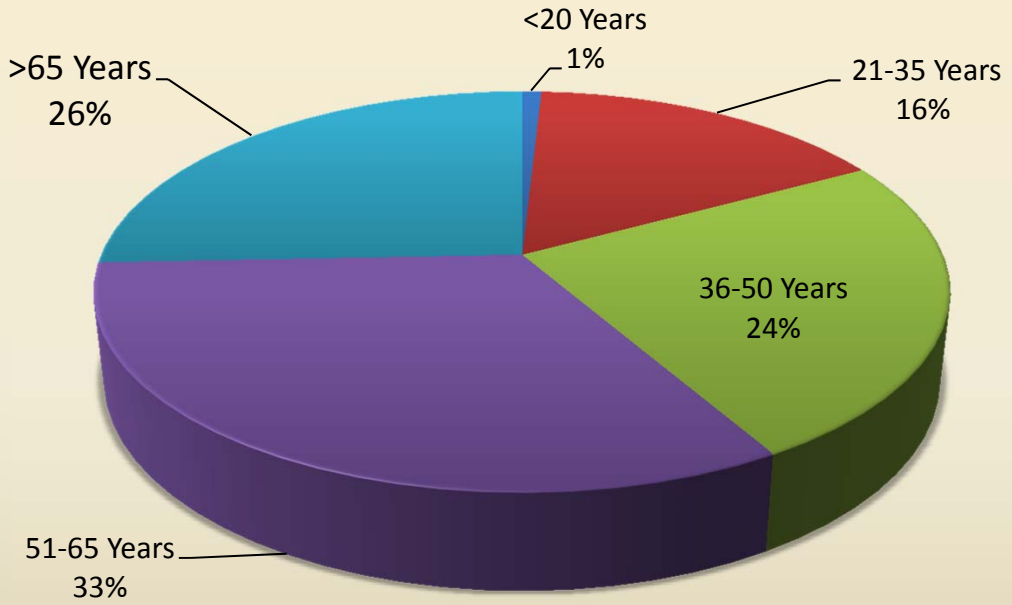
Iowa Farmers Market Study, 2009

Figure 2: Money Spent by Consumers at Farmers Markets in 2009 (N=4,031)



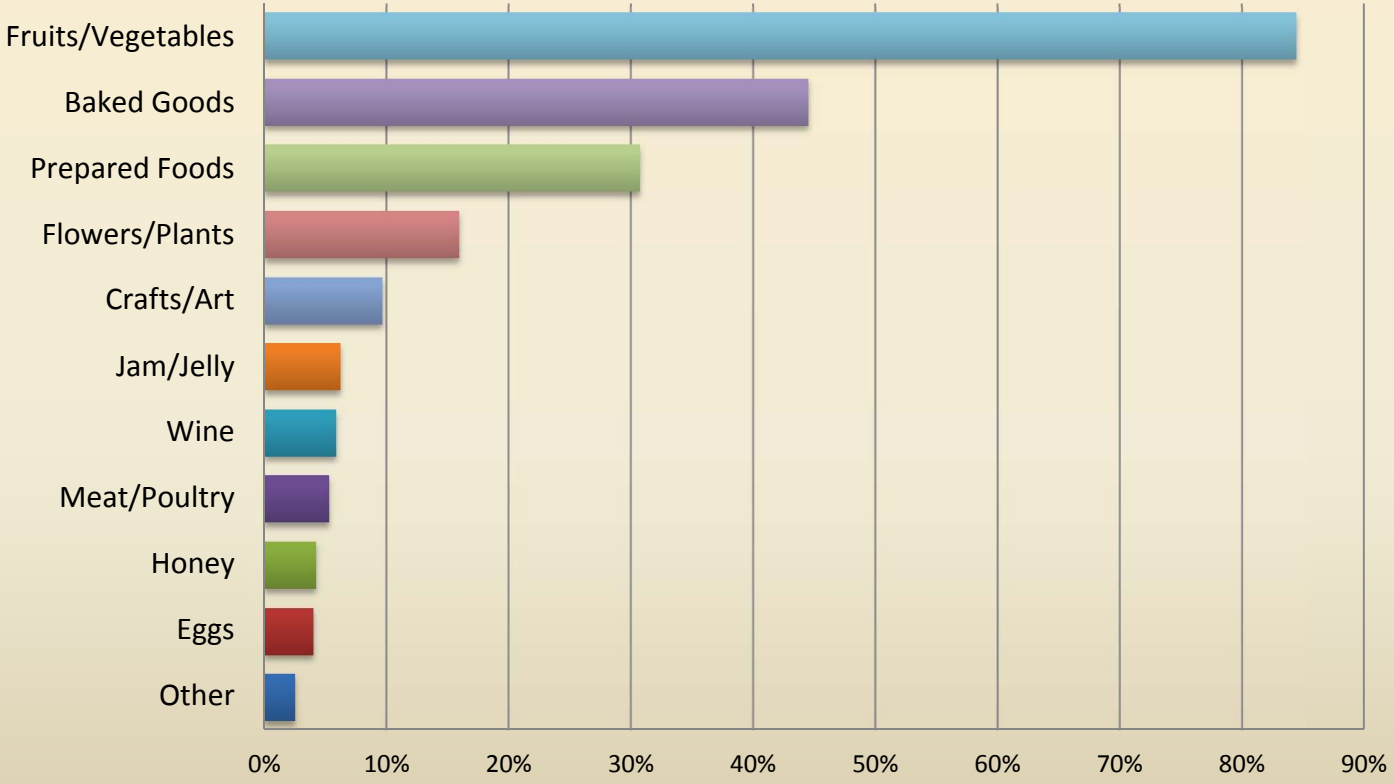
Iowa Farmers Market Study, 2009

Figure 3: Age of the Consumers at Farmers Markets in 2009 (N=4,080)



Iowa Farmers Market Study, 2009

Figure 4: Percentage of Market Consumers Purchasing from Goods Categories, 2009 (N=4,055)



Iowa Farmers Market Study, 2009

Table 3: Percent of Purchases by Consumer From Multiple Groups

Groups	2004	2009
Fruits/Vegetables	46	42
Meats/Fish/Poultry/Eggs	32	4
Crafts	16	5
Flowers	5	8
Baked Goods	1	22
Honey/Jam/Wine/ Prepared Foods	<1	20

Iowa Farmers Market Study, 2009

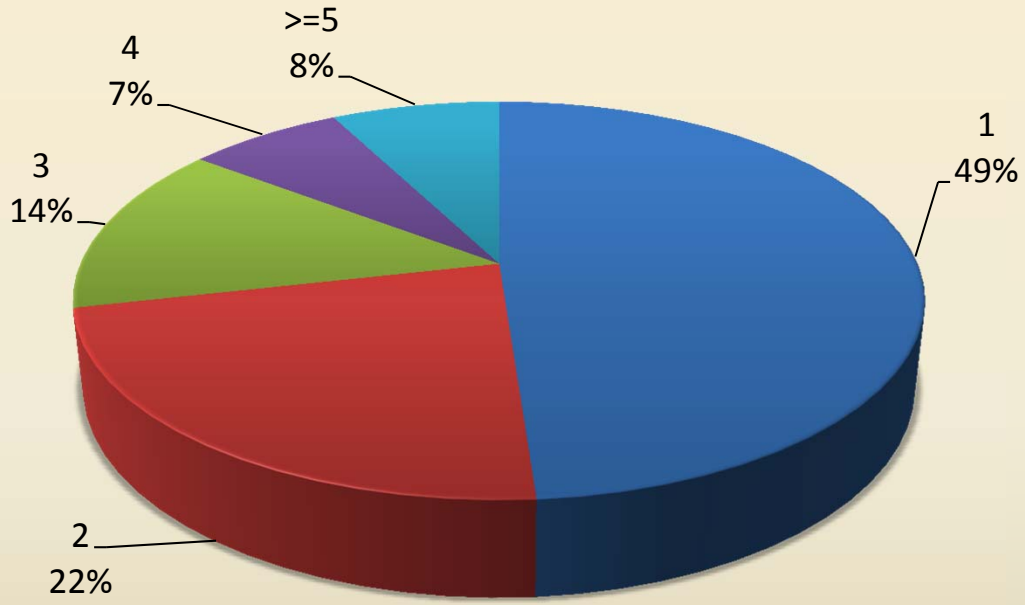
Table 4: Consumer Purchasing by Product Categories, 2009

Consumers who bought goods from the following categories*	Number of consumers	Share of consumers surveyed
Consumers who bought from any category	4,092	100.0%
Consumers who bought Fruits/Vegetables	3,456	84.5%
Consumers who either bought Fruits/Vegetables or Baked Goods	3,797	92.8%
Consumers who either bought Fruits/Vegetables or Honey/Jam/Wine	3,830	93.6%
Consumers who either bought Fruits/Vegetables or Honey/Jam/Wine or Baked Goods	4,014	98.1%

* irrespective of whether they also bought goods from any other category

Iowa Farmers Market Study, 2009

Figure 5: Number of Different Markets Vendors Planned to Attend in 2009 (N=1,167)



Iowa Farmers Market Study, 2009

Table 7: Percent Revenue from Different Goods

Groups	2004 (N=756)	2009 (N=1,139)
Fruits/Vegetables	49	45
Meats/Fish/Poultry/Eggs	3	4
Crafts	7	14
Flowers	4	3
Baked Goods	21	22
Honey/Jam/Wine/ Prepared Foods	15	13

Numbers may not total 100% because of rounding

Iowa Farmers Market Study, 2009

Table 8: Percent of Sales by Vendors From Multiple Groups

Groups	2004	2009
Fruits/Vegetables	44	67
Meats/Fish/Poultry/Eggs	28	14
Crafts	17	24
Flowers	5	15
Baked Goods	3	41
Honey/Jam/Wine/ Prepared Foods	0	35

Table 9: Percent of Sales by Vendors from Single Groups

Groups	2004	2009
Fruits/Vegetables	23	19
Meats/Fish/Poultry/Eggs	2	1
Crafts	4	11
Flowers	1	0
Baked Goods	10	7
Honey/Jam/Wine/ Prepared Foods	4	6

Iowa Farmers Market Study, 2009

Table 10a: Output Impact of Iowa Farmers Market Activities, 2009

Industry	Direct	Indirect	Induced	Total
Agriculture & Mining	24,960,000	915,629	123,876	25,999,504
Construction	0	1,060,974	111,077	1,172,052
Manufacturing	0	2,374,500	862,535	3,237,035
Wholesale & Retail Trade	13,440,000	1,080,607	1,819,466	16,340,074
Transportation & Utilities	0	1,702,314	708,567	2,410,881
Finance, Insurance & Real Estate	0	2,164,023	2,450,352	4,614,374
Professional Services	0	1,173,101	1,856,549	3,029,650
Personal Services	0	966,701	1,610,661	2,577,362
Total	38,400,000	11,437,850	9,543,083	59,380,932

Iowa Farmers Market Study, 2009

Table 10b: Income Impact of Iowa Farmers Market Activities, 2009

Industry	Direct	Indirect	Induced	Total
Agriculture & Mining	6,716,860	113,933	9,564	6,840,356
Construction	0	857,471	33,099	890,570
Manufacturing	0	307,385	138,574	445,959
Wholesale & Retail Trade	4,466,500	449,769	736,628	5,652,896
Transportation & Utilities	0	440,276	165,479	605,755
Finance, Insurance & Real Estate	0	598,556	359,902	958,458
Professional Services	0	517,673	936,900	1,454,573
Personal Services	0	387,924	572,454	960,378
Total	11,183,359	3,672,986	2,952,599	17,808,944

Iowa Farmers Market Study, 2009

Table 10c: Jobs Impact of Iowa Farmers' Markets (Jobs)

Industry	Direct	Indirect	Induced	Total
Agriculture & Mining	228.9	4.7	0.4	234.0
Construction	0.0	32.7	0.8	33.4
Manufacturing	0.0	4.6	2.5	7.1
Wholesale & Retail Trade	145.5	9.1	26.1	180.6
Transportation & Utilities	0.0	8.0	3.1	11.1
Finance, Insurance & Real Estate	0.0	20.0	9.0	29.0
Professional Services	0.0	13.8	22.9	36.8
Personal Services	0.0	12.0	32.2	44.2
Total	374.4	104.8	96.9	576.2

Source: IMPLAN model for Iowa

For Immediate Release
Wednesday, April 28, 2010

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NORTHEY: NEW SURVEY SHOWS IOWA FARMERS MARKETS CONTRIBUTE $71 MILLION TO STATE'S ECONOMY

DES MOINES – Iowa Secretary of Agriculture Bill Northey today announced that the 223 farmers markets across Iowa in 2009 had an estimated $59.4 million in direct and indirect sales and an additional $12.2 million of personal income effects. In addition, 374 direct jobs and over 200 indirect jobs could be attributed to the activities of farmers markets.

"In the five years since the last comprehensive survey we have seen a 92 percent increase in sales at the farmers markets located across the state," Northey said. "Farmers markets are a great opportunity to access fresh, nutritious, locally grown foods and it looks like Iowans are taking full advantage of that opportunity."

The report also shows that farmers markets had $38.4 million in sales in 2009 based on consumer reports, which was an increase from $20 million in 2004. Other findings from the report show that approximately 99,000 customers and 1,500 vendors attended at least one market in 2009. Also, the average customer returned for approximately 11 market visits per season.

The survey also showed that farmers market customers spent an average of $17.12 per visit. When visiting, 84.4 percent of customers purchased fresh fruit and vegetables and 45 percent purchased baked good.

Iowa is a national leader in the number of farmers markets. In 2009 we had 223 markets in operations, the fourth most nationally and second in the number per capita. We have also seen the number of markets increase by more that 75 percent over the past 15 years.

"This report again highlights the importance of farmers markets as a way for consumers to purchase the wide variety of agricultural products raised and grown here in Iowa and a great opportunity to get to know and interact with the farmer that produced them," Northey said.

The findings come from the 2009 Farmers Market Economic Impact Survey that was conducted by a cooperative agreement between the Iowa Department of Agriculture and Land Stewardship and the USDA National Agriculture Statistics Service Iowa Field Office. Surveys were conducted at farmers markets throughout the state and the data was provided to Strategic Economics Group, Inc for analyses. Dr. Daniel Otto, a Professor of Economics at Iowa State University, is a Principal Associate with Strategic Economics and conducted the analysis.

A full copy of the report is available by contacting the Department's Horticulture and Farmers Market Bureau at mike.bevins@iowaagriculture.gov.

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