



Sustaining Farmers Market Success

The Economic Contributions of
Farmers Markets in Montana



BBER

June 2022

Bureau of Business and Economic Research
University of Montana—Missoula

Photo credit: Courtney Nucito, Butte Farmers Market

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Finally, Janet Stevens, BBER's data collection coordinator, did an amazing job obtaining the data BBER presents here. She was key to this study's success.

Bureau of Business and Economic Research
University of Montana - Missoula
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Executive summary

The National Center for Appropriate Technology (NCAT) requested information about the economic impacts farmers markets have on Montana. NCAT hired the University of Montana's Bureau of Business and Economic Research (BBER) to obtain this information. The primary objective of this study is to summarize the economic contributions of farmers markets in Montana. A secondary objective of this study is to provide a portrait of Montana's farmers markets from a statewide perspective.

BBER collected data on 71 farmers markets during the period from August 7, 2021, through November 11, 2021. The following summarizes the results of the study.

Key takeaways:

- In 2021, farmers markets made substantial contributions to the Montana economy. Specifically, in 2021 Montana farmers markets received \$17.3 million in revenue and generated an additional \$10.4 million in new spending from resident wages, tax payments, sales, and investments that occurred as a result of farmers markets.
- An impressive 4,900 people worked to produce and sell the goods and services offered on one typical market day at Montana's 71 markets during the 2021 market season. In 2021, farmers markets also generated 260 full-time Montana jobs over and above the 4,900 people who worked to put on farmers markets.
- While it varied from town to town, the typical 2021 Montana farmers market offered 22 individual market stands, generated \$244,000 in revenue over the course of the market season, and needed 69 people to put on the market for one typical market day.
- In 2021, farmers markets offered important supplemental products all across Montana, especially in rural areas - from Libby to Broadus. These products often included fresh fruits and vegetables, crafts, baked goods, meat or other items that are staples in many areas.
- Farmers markets in Montana are highly scalable businesses. As a business, farmers markets have adapted to a wide range of communities, from the smallest and most rural to large urban communities. They have adapted by offering an appropriate number of market stands and an appropriate mix of products and services tailored to each community. This scalability has made farmers markets in Montana a very useful business model that has propagated across the state in all sizes of communities.

Introduction

Montana's farmers markets are vibrant, visible, and important centers of commerce in communities across the state. Not only do they constitute a valuable source of locally produced foodstuffs in the areas in which they operate, but they also provide a variety of social benefits as they bring producers and consumers together into the centers of the towns in which they thrive.

The Sustaining Farmers Market Success project is led by the National Center for Appropriate Technology that aims to provide capacity building and peer learning for farmers market managers and vendors. As a part of this program, NCAT requested baseline information about the economic impacts farmers markets have on Montana. NCAT contracted with the University of Montana's Bureau of Business and Economic Research (BBER) to obtain this information.

The primary objective of this study is to summarize the economic contributions of farmers markets in Montana. A secondary objective of this study is to provide a portrait of Montana's farmers markets from a statewide perspective. This report presents the results of the study.

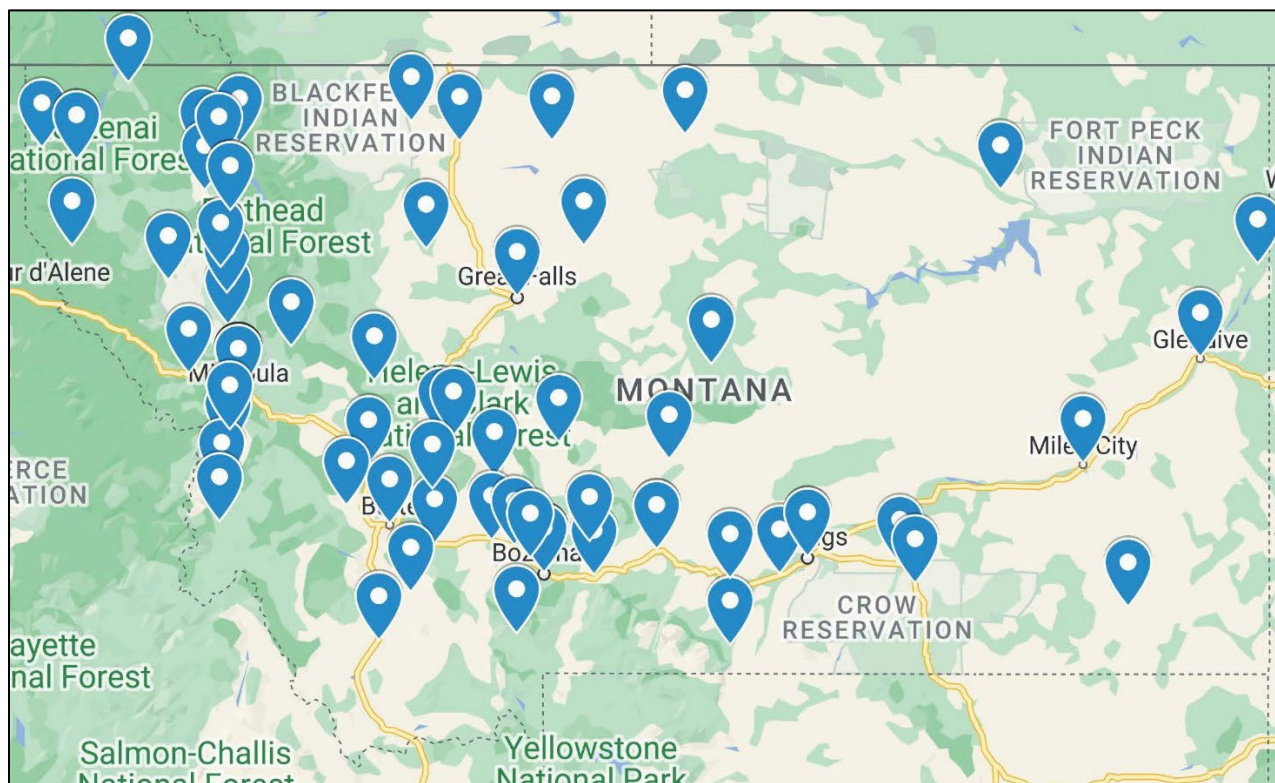
Structure of this report

This report contains four sections. First, BBER's data collection efforts are described to provide readers with needed context for the remainder of the report. Next, the findings of the study are presented and summarized into three parts: the direct economic contributions of farmers markets; the indirect and total economic contributions of farmers markets; and the description of the farmers markets. The third section summarizes BBER's conclusions. Finally, the works cited in this report are presented for reference.

Data collection

Bureau of Business and Economic Research (BBER) studied 71 markets that were provided through a list from the National Center for Appropriate Technology (NCAT). The markets were located across the state of Montana. Figure 1 presents the locations of the farmers markets that BBER studied for this report.

Figure 1: Locations of farmers markets studied



BBER collected data during the period from August 7, 2021, through November 11, 2021, the season when most markets are operational. BBER staff collected extensive data during in-person visits to 12 markets located in 10 Montana communities:

Market location	Date
Bozeman	14-Aug-21
Red Lodge	14-Aug-21
Havre	21-Aug-21
Glendive	21-Aug-21
Twin Bridges	21-Aug-21
Helena	31-Aug-21
Missoula	4-Sep-21
Boulder	9-Sep-21
Great Falls	11-Sep-21
Miles City	18-Sep-21

These markets were selected because they represent a mix of market sizes, from small to large, and because they represent the geographic diversity of Montana. BBER also conducted in-depth telephone interviews with the managers of 47 additional markets. BBER then collected basic data from the internet and other sources on the 12 remaining markets that did not respond to requests for information. The final outcomes of data collection were that BBER collected data on 100% of the studied markets and 59 of the 71 markets (83%) directly participated in the study. This high participation rate makes it very likely that the data collected are representative of the markets studied.

For each market, BBER collected the number of stands at the market by type of stand, the number of days the market was open during the season, the amount of grant support received by the market administration, and the number of people who worked for the market administration.

For the 12 markets that were intensively studied, BBER collected the market level information described in the previous paragraph. In addition, BBER collected detailed information from 220 stands at the 12 markets. The stands were chosen to be representative of the product mix at the studied market. The information collected included revenue (sales) collected per market day and the number of employees (paid or unpaid) required to produce and sell those products on one market day.

Findings

The paragraphs that follow present a summary of the economic contributions of farmers markets in Montana. The summary is presented in two parts. First, the direct contributions farmers markets made to the 2021 Montana economy are described. Second, the indirect and total economic contributions are presented.

A secondary objective of this study is to provide a portrait of Montana's farmers markets from a statewide perspective. The portrait presented here focuses on three areas: market stands; revenue generated; and the workers who make the markets happen. This description of Montana's farmers markets follows the summary of the economic contributions of farmers markets.

Direct economic contributions

The direct contributions farmers markets made to the 2021 Montana economy fall into two categories: revenue generated and workers engaged. These are described in more detail below.

Revenue

Farmers markets contribute a significant amount of money to the Montana economy through the revenue they generate directly. BBER found that customers spent a total of \$16.86 million at the 71 farmers markets studied during the spring through fall market season. In addition, many of the 71 markets collected a total of \$440,000 in grant and other revenue during the study period. The combined total of revenue directly generated by the farmers markets during the study period was \$17.3 million. Table 1 describes the revenue generated by specific types of farmers market products or activities.

Table 1: Statewide revenue by product or activity - 2021

Product or activity	Revenue	Product or activity	Revenue
Fruits and vegetables	\$5,700,000	Honey	\$270,000
Crafts	\$5,000,000	Floral	\$200,000
Bakery	\$2,140,000	Health or beauty (lotions, salves or non-food herbal products)	\$170,000
Processed and packaged food or beverages	\$1,200,000	Live plants	\$60,000
Meat	\$1,100,000	Eggs	\$20,000
Hot or cold food or beverage served on site	\$1,000,000	Market administration	\$440,000

Across Montana, fruit and vegetable products generated the most revenue in 2021 (\$5.7 million). Crafts products of all types generated the second most revenue in 2021 (\$5 million). Bakery goods were the 3rd-largest source of 2021 revenue (\$2.1 million).

Employment

In addition to the direct contribution farmers market revenue makes to Montana's economy, farmers markets are a significant source of employment for Montanans. During the 2021 spring through fall market season, BBER found that 4,700 people worked at least one hour to sell or produce products for the 71 markets across Montana. This includes paid and unpaid employment. Also, a total of 200 people worked to administer and manage the 71 markets. The combined total number of people who directly worked for farmers markets during the 2021 study period was 4,900. Table 2 describes the number of people who worked for farmers markets in 2021 by the market product or activity on which they worked.

Table 2: Number of people who work at farmers markets by product or activity - 2021

Product or activity	People	Product or activity	People
Fruits and vegetables	1,900	Honey	100
Crafts	1,000	Floral	100
Bakery	500	Health or beauty (lotions, salves or non-food herbal products)	90
Processed and packaged food or beverages	400	Live plants	60
Meat	300	Eggs	50
Hot or cold food or beverage served on site	200	Market administration	200

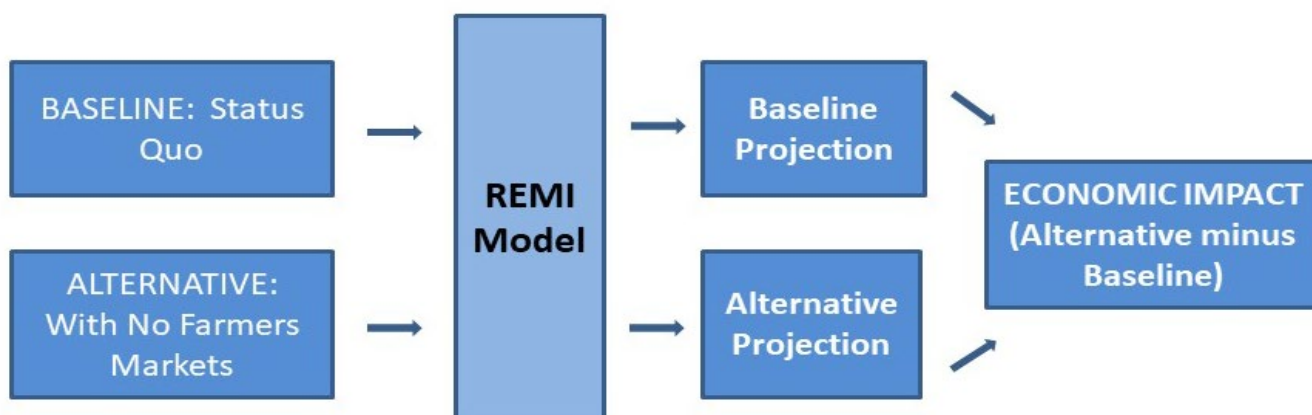
Fruit and vegetable vendors employed the largest number of workers (1,900) to produce and sell their products during the 2021 market season. Crafts vendors employed the second largest number of workers (1,000) to produce and sell their products. Bakery vendors used the third largest number of workers to produce and sell their products (500).

Indirect and total economic contributions

The presence of farmers markets in Montana creates economic contributions over and above the direct revenue generated and the number of people who work at farmers markets. They do this through new spending from resident wages, tax payments, sales, and investments and new jobs that occur as a result of farmers markets. This new spending and these new jobs are what this report refers to as indirect economic contributions. Indirect economic contributions, or new spending and jobs, are what some analysts refer to as the result of a “multiplier.” The following paragraphs describe the indirect economic contributions made by farmers markets to Montana’s economy.

In this study, BBER aimed to quantify the indirect economic contributions made by farmers markets by answering the question: “how much larger is Montana’s economy due to the presence of farmers markets compared to the absence of farmers markets?” BBER uses an economic model calibrated for the current Montana economy to capture all the interrelated connections between farmers markets and the rest of the Montana economy. The Regional Economic Model produced by REMI is an industry-leading tool for estimating overall economic contributions from economic activity or policies on regional and state economies (Treyz, 1993). The approach of this research is to find the difference between two scenarios for the Montana economy, the Montana economy if farmers markets were not present set against the Montana economy as it is, depicted graphically in Figure 2 below.

Figure 2: Economic impact analysis with the REMI model



Indirect economic contributions

The indirect economic contributions in 2021 by farmers markets were considerable. There were two primary types of indirect economic contributions made by farmers markets: additional dollars generated and additional jobs created.

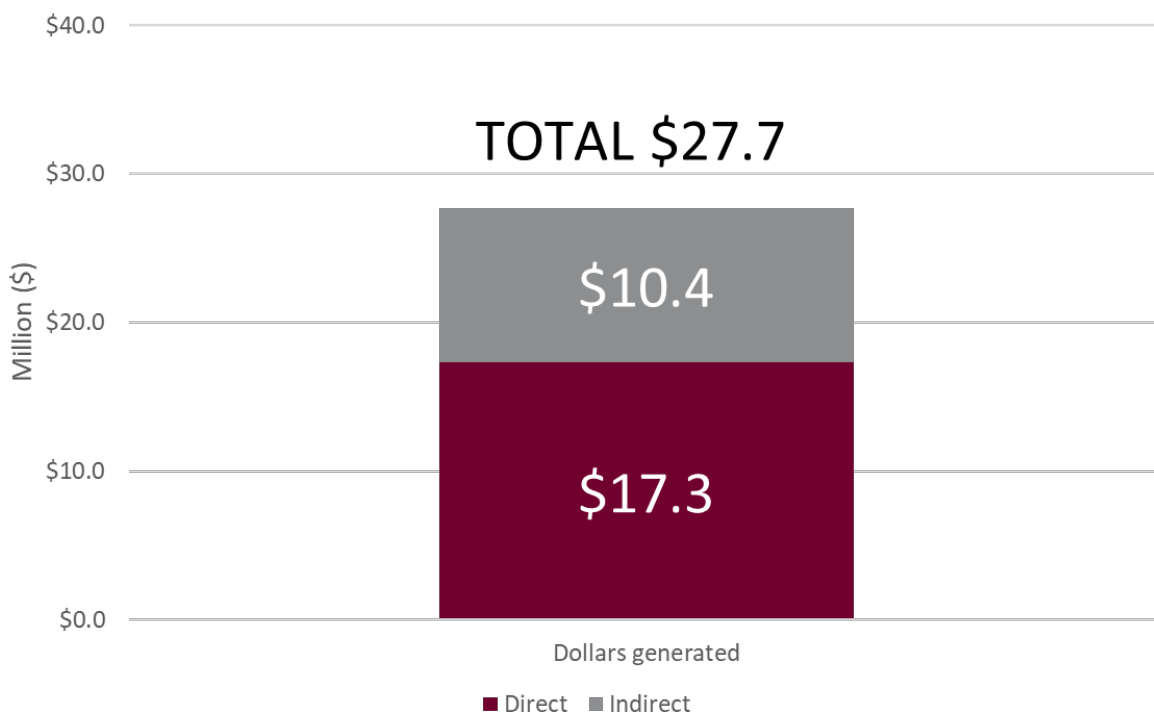
BBER finds that farmers markets were responsible for generating \$10.4 million in indirect dollars over and above the direct revenue generated in 2021. They did this through generating new spending from resident wages, tax payments, sales, and investments that occur as a result of farmers markets. BBER's findings are supported by research from the University of Montana's Institute of Tourism and Recreation Research (ITRR). ITRR reported that in the year 2020 nonresident visitors to Montana spent \$6.3 million at farmers markets (Grau, 2021). Spending on farmers markets by nonresident visitors brings "new" dollars into Montana and generates indirect economic contributions.

BBER also finds that farmers markets were responsible for increasing employment in Montana by generating 260 jobs above and beyond the people who worked for farmers markets in 2021. The additional jobs generated in 2021 were full-time, and based in Montana.

Total economic contribution

BBER estimates that the total 2021 economic contribution of farmers markets to Montana was \$27.7 million, \$17.3 million in direct revenue and \$10.4 million in indirect contributions generated. Figure 3 illustrates this finding.

Figure 3: Total economic contribution - 2021



Economic contributions of farmers markets in context

To place the economic contributions of Montana farmers markets in context it helps to look at the results of other studies. Table 3 below presents two key findings from this study and compares them to three additional studies (Otto, 2010), (Zendehdel, 2021) (Yosick, 2008).

Table 3: Economic contribution of farmers markets around the country

Location	Year	Direct revenue (million)	Total contribution (million)
Montana	2021	\$17.3	\$27.7
Washington D.C. metro area	2021	\$24.4	\$36.8
Iowa	2009	\$38.4	\$59.4
Portland, Oregon	2008	\$11.7	\$17.1

When viewed in the context of farmers markets from around the country, the economic contributions of farmers markets in Montana are entirely consistent with those found in other places. The direct revenue generated by Montana farmers markets is very comparable to that generated in other areas. Similarly, the total economic contributions of farmers markets in Montana tracks closely with the totals found by studies of markets in other areas. While the number of economic impact studies of farmers markets is limited, the consistency among these studies lends credibility to the findings presented here. In addition, the similarity of the Montana findings to those from other places suggests that farmers markets in Montana were thriving in 2021.

Description of the markets

Collecting the data needed to summarize the economic contributions of farmers markets in Montana enabled BBER to fulfill a second study objective: to provide a portrait of Montana's farmers markets from a statewide perspective. The paragraphs that follow present that portrait. One key aspect of the farmers markets studied is their market stands.

Market stands

The sheer number of farmers market stands that operated in Montana was impressive, about 1,560 on a typical 2021 market day. There were 22 stands operating at a typical Montana farmers market on a market day. Table 4 presents the typical distribution of stands by type within an average Montana market. But readers should keep in mind that every individual market was unique and didn't look quite like this statistical portrait.

Table 4: Typical distribution of stands by type within in a typical market

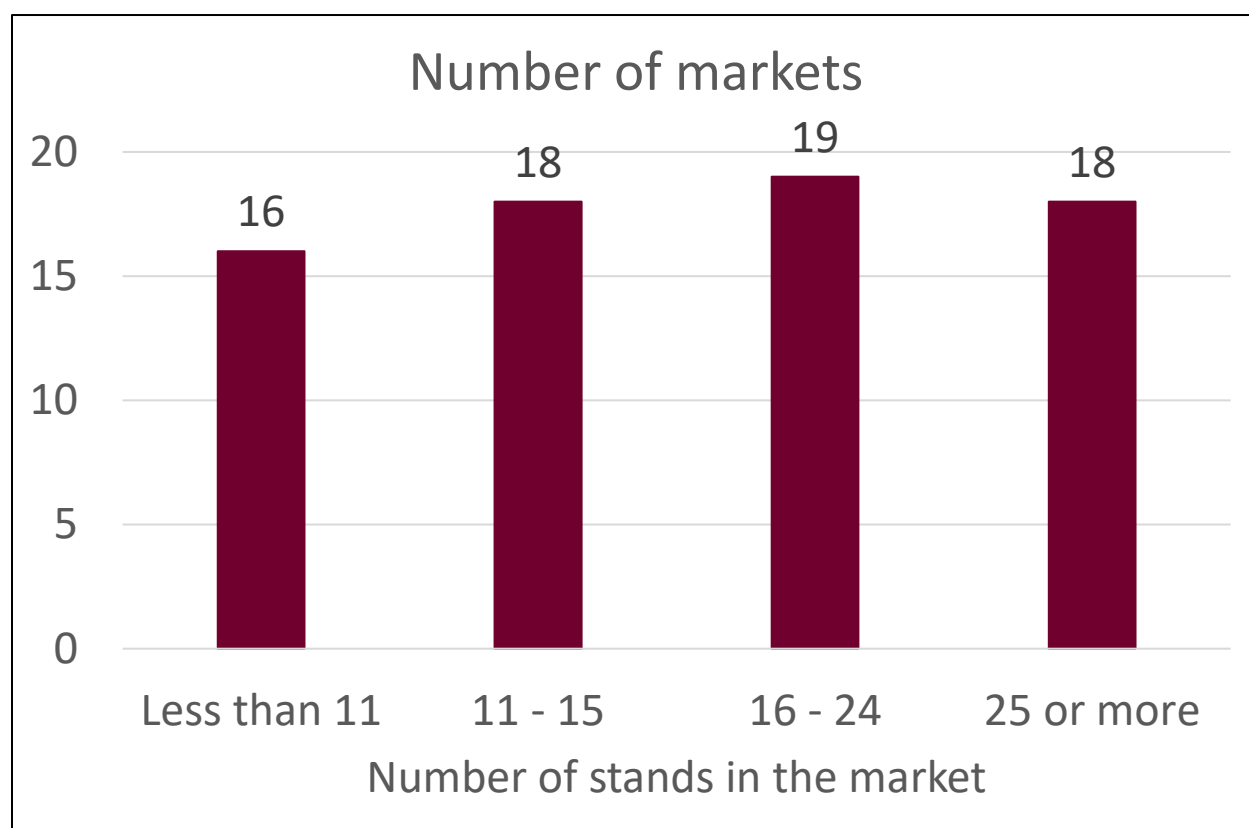
Type of stand	Number per market	Percent
Total	22	100%
Crafts	9	41%
Fruits and vegetables	5	23%
Bakery	2	9%
Health or beauty	1	5%
Meat	1	5%
Processed and packaged food or beverages	1	5%
Hot or cold food or beverage served on site	0.9	4%
Live plants	0.6	3%
Honey	0.6	3%
Eggs	0.5	2%
Floral	0.4	2%

Crafts stands were the most common among markets statewide (nine stands per market), followed by fruits and vegetables (five stands per market) and bakery stands (two stands per market). Egg stands and floral stands were the least common, each averaging about one stand for every two markets. For this report a stand is classified by the main product sold.

The breadth of products offered in 2021 by markets stands (see Figure 1 and Table 4) across Montana indicates that farmers markets were an important source of goods, especially in rural Montana economies. However, BBER staff did receive a few anecdotal reports saying it was difficult to recruit fruit and vegetable vendors to markets. Fewer than 10% of markets in 2021 reported not having any fruit and vegetable vendor. The few markets without fruit and vegetable vendors in 2021 were all in rural areas of the state.

When examining the number of market stands at markets statewide, Montana's farmers markets in 2021 ranged from very small, with under five stands at a market, to very large, with over 70 stands at a market. Figure 4 presents the relative sizes of farmers markets in Montana by the number of stands at each market.

Figure 4: Distribution of markets by number of stands at each market - 71 markets



The smallest quarter of Montana's 2021 farmers markets all had fewer than 11 individual market stands. The largest quarter of markets had 25 or more market stands. The middle half of Montana's farmers markets had between 11 and 24 markets each in 2021.

BBER staff also received a few, anecdotal reports about new markets starting in the same community. These new markets in the same community caused vendors concern about competition and raised questions about whether or not the vendor should try to sell at the new market. Market managers also expressed some concern about these new markets.

Finally, a small number of market managers told BBER that they would like to be able to accept the Supplemental Nutrition Assistance Program (SNAP) at their market, but the market didn't have the money to pay for the program or the manager found the SNAP application or management process to be cumbersome.

Revenue

The 2021 revenue generated is another vital aspect of Montana's 71 farmers markets. The average Montana farmers market generated a total of \$244,000 per market over the 2021 market season. The smallest markets generated less than \$10,000 while the largest generated more than \$1.5 million. It is important to note that the 2021 average presented here is skewed somewhat by Montana's largest markets. So, it is useful to consider that the median 2021 farmers market generated about \$180,000 in total revenue during the spring through fall season.

Figure 5: Distribution of markets by total season revenue - 71 markets

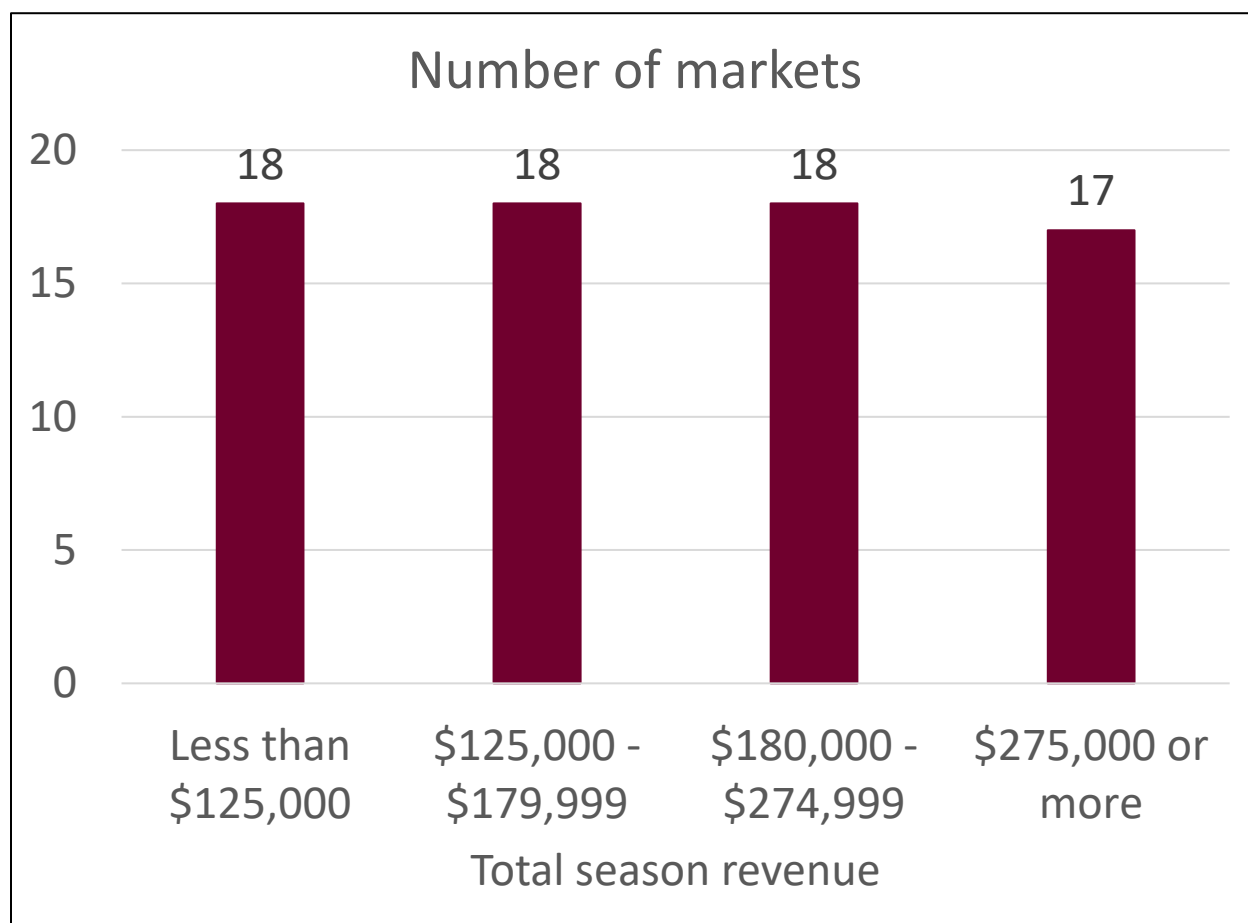


Figure 5 shows the distribution of Montana farmers markets by the total amount of revenue each market generated during the 2021 season. The smallest quarter of markets generated less than \$125,000 over the season. The largest quarter of markets generated \$275,000 or more. The middle half generated between \$125,000 and \$274,999.

Employment

Like revenue, the people whose hard work was required to put on Montana's 71 farmers markets were fundamental to this portrait of the markets. Organizing a successful farmers market needed the work of a large number of people. Workers in this study were defined as people who worked at least one hour to sell or produce products or services at a farmers market on a typical market day, including market administrators. This work was either paid or unpaid. The typical Montana farmers market required 69 people to put on the market for one typical market day during the 2021 season. In 2021, Montana's smallest markets needed fewer than 20 people to put on a market, while the largest markets needed more than 110 people.

Figure 6: Distribution of markets by the number of people who worked to put on each market - 71 markets

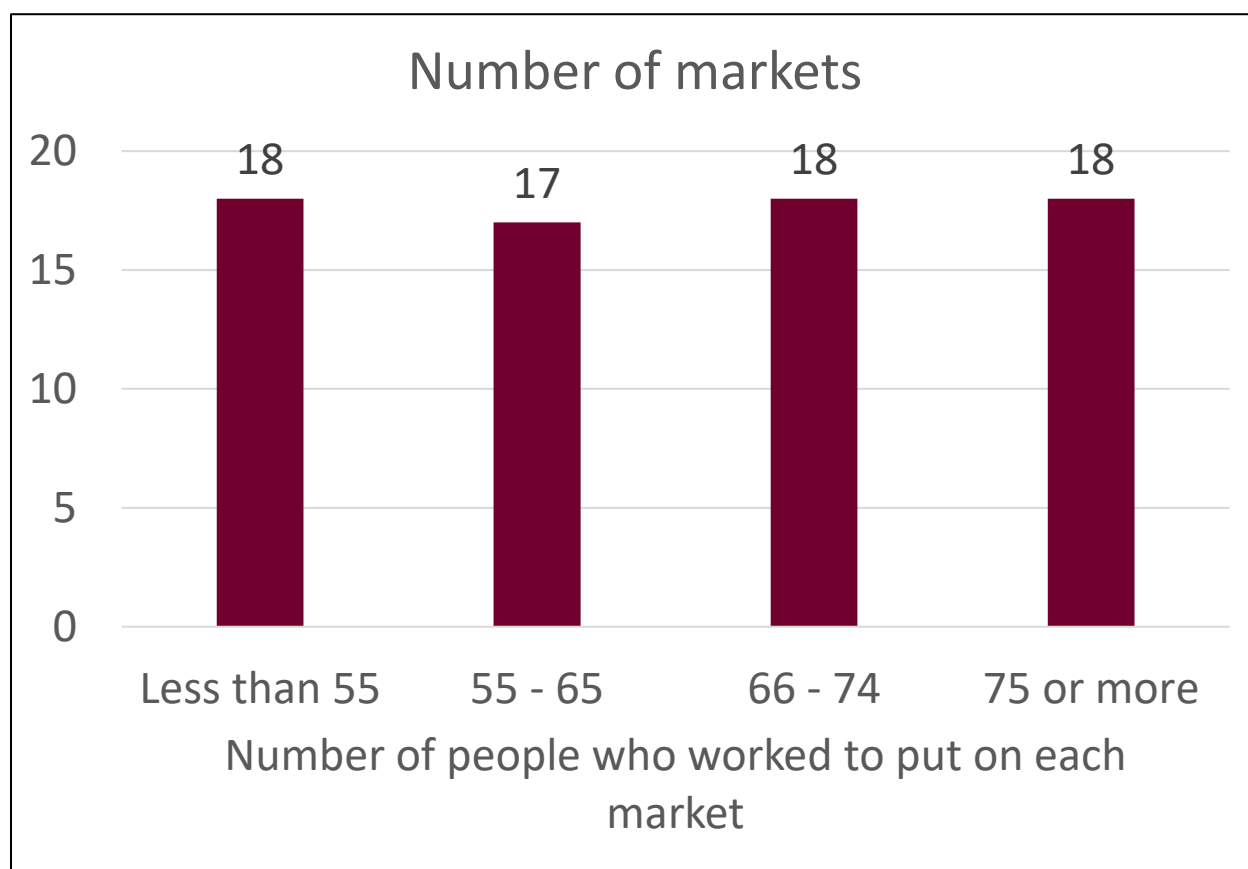


Figure 6 illustrates the distribution of Montana farmers markets in 2021 by the number of workers required to put on a market for one typical market day. Montana's smallest quarter of markets needed fewer than 55 workers. Montana's largest quarter of markets needed 75 or more workers. The middle half of markets needed between 55 and 74 workers.

Scalability and utility of farmers markets

The portrait of 2021 Montana farmers markets presented here indicates that farmers markets in Montana are highly scalable. Farmers markets adapted to a wide range of communities, from the smallest and most rural to large urban communities. They adapted by tailoring an appropriate number of market stands and an appropriate mix of products and services to each community. This scalability made 2021 farmers markets in Montana a very useful business that was found across the state and in all sizes of communities.

Conclusions

BBER finds that in 2021 farmers markets made substantial contributions to the Montana economy. Specifically, in 2021 Montana farmers markets received \$17.3 million in revenue and generated an additional \$10.4 million in new spending from resident wages, tax payments, sales, and investments that occurred as a result of farmers markets.

BBER finds that an impressive 4,900 people worked to produce and sell the goods and services offered on one typical market day at Montana's 71 markets during the 2021 market season. In 2021, farmers markets also generated 260 full-time Montana jobs over and above the 4,900 people who worked to put on farmers markets.

BBER finds that the typical average 2021 Montana farmers market offered 22 individual market stands, generated \$244,000 in revenue over the course of the market season, and employed (paid or unpaid) 69 people to put on the market for one typical market day.

BBER also finds that in 2021 farmers markets offered important supplemental products all across Montana, especially in rural areas - from Libby to Broadus. These products often included fresh fruits and vegetables, crafts, baked goods, meat or other items that are staples in many areas.

Finally, BBER finds that farmers markets in Montana are highly scalable. Farmers markets adapted to a very wide range of communities, from the smallest and most rural to large urban communities, by adopting a specific number of market stands and a specific mix of products and services for each community. This scalability made farmers markets in Montana very useful businesses that were found across the state and in all sizes of communities.

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