

2023 BC Farmers' Market Economic Impact Study **FINAL REPORT**

Grand Forks Farmers' Market
Grand Forks, British Columbia

This project was completed by:

BC Association of Farmers' Markets (BCAFM)

in collaboration with:

University of Northern British Columbia (UNBC)

December 23, 2023

Prepared by:

David J. Connell, PhD RPP MCIP
Chloe Brogan, Project Manager
Kate Poirier, Project Coordinator
Cait Wills, Research Associate

PROJECT SUPPORTERS:



SUMMARY

The BC Association of Farmers' Markets (BCAFM), in collaboration with Dr. David Connell of the University of Northern British Columbia (UNBC), completed a large, province-wide study in 2023 to measure the economic impacts¹ of farmers markets in BC. The results of this project show that farmers markets in BC have grown over the past decade, despite unprecedented social, political, and economic challenges, including the COVID-19 global pandemic.

Quantifying the economic contributions of farmers markets encourages long-term support for local BC agriculture and food sectors, along with the thousands of farm and food businesses who sell at farmers markets across BC. Furthermore, this study demonstrates the role of farmers markets as integral low-barrier, direct sales channels for local BC producers and shoppers to connect, while showing us their essential role in local food security and food systems.

The **2023 BC Farmers' Market Economic Impact Study** builds upon the success of similar projects completed in 2012 and 2006, which were also led by BCAFM and Dr. David Connell. By using comparable methods, we are able to assess changes over time. This study measures market spending and spending at neighbouring local businesses, both of which contribute to the economic impact of farmers markets in BC. In total, 70 farmers market assessments were completed across the province between May and September, 2023. This final report presents the findings from the assessment completed for the Grand Forks Farmers Market on Tuesday, July 18th, 2023. Additionally, this report includes partial results from the provincial analyses of BCAFM member markets. A full profile of provincial results is available in the BC final report.

2023 Study Highlights for the Grand Forks Farmers' Market:

- **Annual economic impact² on the local economy: \$2.1 million**
- **Annual direct sales: \$1.4 million**
 - **Average shopper spending per market visit: \$32.68**
- **Over 57,000 visits and 42,800 shoppers annually**
- **41% of study participants self-identified as tourists or day-trippers**
- **42% of the survey respondents visit the farmers market either *regularly* (almost weekly) or *frequently* (2-3 times per month)**
- **Shopper spending at other local neighbouring businesses: \$1.8 million**
 - **88% of study participants said that they would spend \$48.61 each shopping or eating at other local neighbouring businesses**

¹ This study measures the economic benefits of farmers markets. The BC Association of Farmers' Markets chose to use the term "impacts" because of its common use in media communications and its greater recognition by members of the public.

² This is a measure of the "ripple effect" for every dollar spent at farmers markets, including monies vendors spend on inputs for the products sold.

The Grand Forks Farmers' Market

Market Website: <https://grandforksfm.wixsite.com>

Your source for LOCAL food. The market's entrepreneurs, crafters, and farmers are what make the community vibrant.

The Grand Forks Farmers' Market takes place on the traditional, ancestral, and unceded territory of the Ktunaxa Nation, Sinixt Nation, and the Syilx/Okanagan people.

Availability:	May 2 – October 13, 2023 Tuesdays and Fridays 8:00am – 1:00pm
# Vendors:	38
Location:	Gyro Park – corner of Hwy. 3 (Central Ave.) & 5 th St. 7342 5 th St. Grand Forks, BC
Contact Info:	Christina Hagemann, Market Manager grandforksfm@gmail.com

RESEARCH METHOD

Using methods based on the Rapid Market Assessment technique developed by Oregon State University³, individual market assessments included interactive dot surveys, crowd counts, and one-on-one interviews with both market shoppers and nearby businesses. These are the same methods used for the BC study in 2012 and 2006.

Dot Survey

The dot survey method engaged consumers in friendly interaction through multiple-choice questions posted in large print on paper pads at eye level. This approach has a high response rate, thereby increasing both validity and accuracy.

The colours of dot survey stickers were random, except for yellow stickers which were reserved for tourists and/or day-trippers to the market. Participants were asked: "Are you a tourist or day-tripper?". The following definitions were provided to research associates to assist in communicating with participants:

A tourist is someone who is doing overnight stays in the area or region. A day-tripper is someone from the area or region who made a special trip into town for the day. Special trip is not something they usually do.

Picture 1 is an example of an average dot survey set-up on-site at participating markets.

Picture 1.

Dot Survey Market Set-up



³ Brewer, L., Lev, L., & Stephenson, G. (2008). *Tools for Rapid Market Assessments*. Oregon State University. <https://catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/sr1088.pdf>

The set of questions used for the survey (Box 1) were developed in two parts. The first four questions were developed by the research team and were asked at all farmers markets participating in the project. The consistency provided by asking the same questions at all markets is necessary to complete the provincial analysis. Each participating market developed the fifth question to collect data that are relevant to making effective changes and improvements to the local market.

Box 1.

Dot Survey Questions

1. How much have you spent, or do you plan to spend, at the market today?
2. How often do you come to this farmers market?
3. If you plan to do additional shopping or eating while in this area of town today, how much do you plan to spend?
4. When did you start shopping at this market?
5. What is your primary reason why you came to the farmers' market today?

Crowd Count

During a ten-minute period of each hour a market is open, members of the assessment team and market volunteers stood at each major entry point to the market and counted people entering. The total number of attendees is estimated from these systematic counts using an established formula of multiplying the actual counts by six to determine estimated hourly attendance.

Shopper Surveys

At each market, a small sample of customers was asked to participate in a short interview. People were asked about where they shop, factors they consider when buying food, how long they spend at the market, and how they spend their time when at the market. Customers were also asked if they shop at other businesses on the same day that they visit the farmers market.

Given the small sample size collected at each market, only results aggregated at the provincial level are shown. The information collected from shoppers builds upon the dot survey data, providing additional insights into market customers. Together, the dot survey and the more detailed shopper surveys improve our understanding of what makes farmers markets successful and how they contribute to the local area, in terms of both economic and social impacts.

Local Neighbouring Business Surveys

Neighbouring businesses located near assessed farmers markets were surveyed to assess the influence of the market on neighbouring businesses and to explore the nature of the relationship. Surveys were not completed at farmers markets that did not have other businesses located nearby. The business information helps to understand the relationship between farmers markets and local, neighbouring businesses generally. Given the small sample size collected at each market, only results aggregated at the provincial level are shown. Local neighbouring business survey results can be found in the provincial final report.

Tourist & Day-tripper Analysis

Tourist and day-tripper averages referenced in this report are based on markets, as opposed to shoppers. The regional averages in this report rely on the percentages of locals and tourists/day-trippers for each assessed market and markets are weighed equally. The results would differ if averages were calculated proportionate to the number of shoppers.

Research Associates

A team of six research associates, located in different regions, were hired to conduct on-site market assessments across the province. Research associates, along with Dr. David Connell, Project Lead, the Project Manager, and Project Coordinator met in-person for training and a trial market assessment at the start of the project. Research associates were then responsible for implementing study methods consistently to the best of their ability at 70 market assessments in BC, with ongoing remote support from the study team.

Limitations

The goal of all researchers is to be as accurate and precise as possible. Inevitably, there are trade-offs when these aims compete with other goals. In this study, the project team chose to prioritize engaging as many shoppers as possible in our five-question dot survey. This approach helped to support relations between shoppers and the farmers markets, and with over 11,000 shoppers participating in the dot survey, we gained accuracy. On the other hand, the simple questions reduced our level of precision. The quality of our results was also affected by the diversity among markets, including factors such as: size of the market, physical characteristics of the market (e.g., flow of customers), how busy the market was on the day of the assessment, and weather conditions.

Differences among our research associates also contributed to different outcomes. For example, the question *“Are you a tourist or day-tripper?”* was not asked consistently with all participants at all market assessments. These and other factors affected levels of participation in the dot survey and one-on-one surveys in different markets.

RESULTS

This section reviews the results of the crowd count estimates and dot surveys, as well as provincial-level results from the shopper and business surveys.

Market Assessment

The weather on the day of the assessment was hot and sunny. There were approximately 21 vendors present.

Crowd & Shopper Counts

The total estimated number of people attending the Grand Forks Farmers' Market on July 18, 2023, was 1,434.

When asked, vendors at the market said market attendance was consistent for that time in the season, as compared with past years.

The actual and extended counts for the assessment are shown in Table 1. The total estimated counts are also shown in Chart 1.

Table 1.

Estimated Crowd Count

Time period	Count period	Actual count	Extended total
1 st hour (8:00-9:00)	8:00 - 8:10am	47	282
2 nd hour (9:00-10:00)	9:00 - 9:10am	39	234
3 rd hour (10:00-11:00)	10:00 - 10:10am	50	300
4 th hour (11:00-12:00)	11:00 - 11:10am	71	426
5 th hour (12:00-1:00)	12:00 - 12:10pm	32	192
Estimated total crowd count on July 18, 2023			1434

Chart 1 (next page) shows the estimated crowd totals for each hour. Attendance starts strong and remains steady throughout the morning, peaking between 11am and noon. The quietest hour of the day is between noon and 1pm, when the market closes.

Chart 1.

Crowd Counts by the Hour on Assessment Day

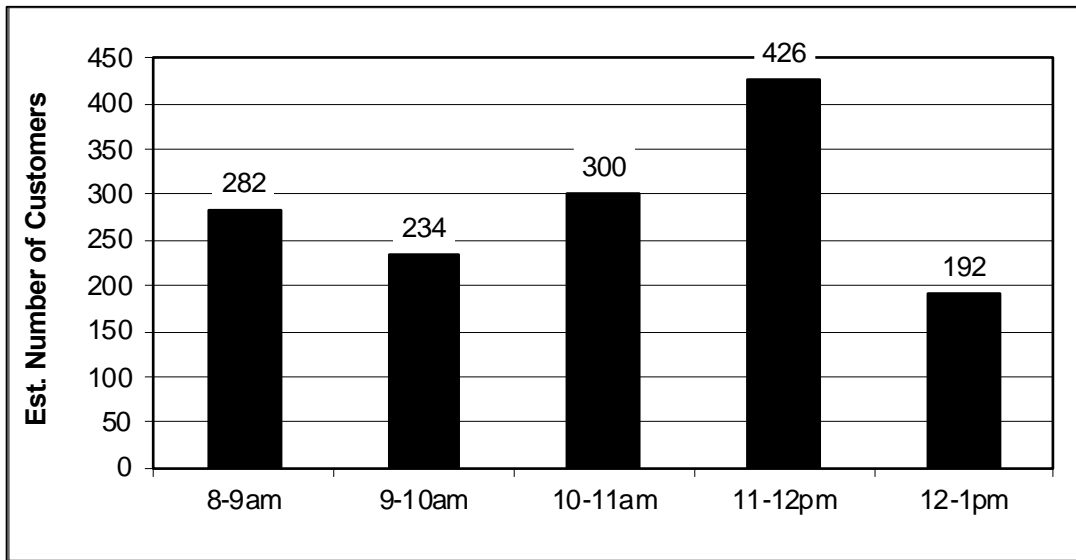
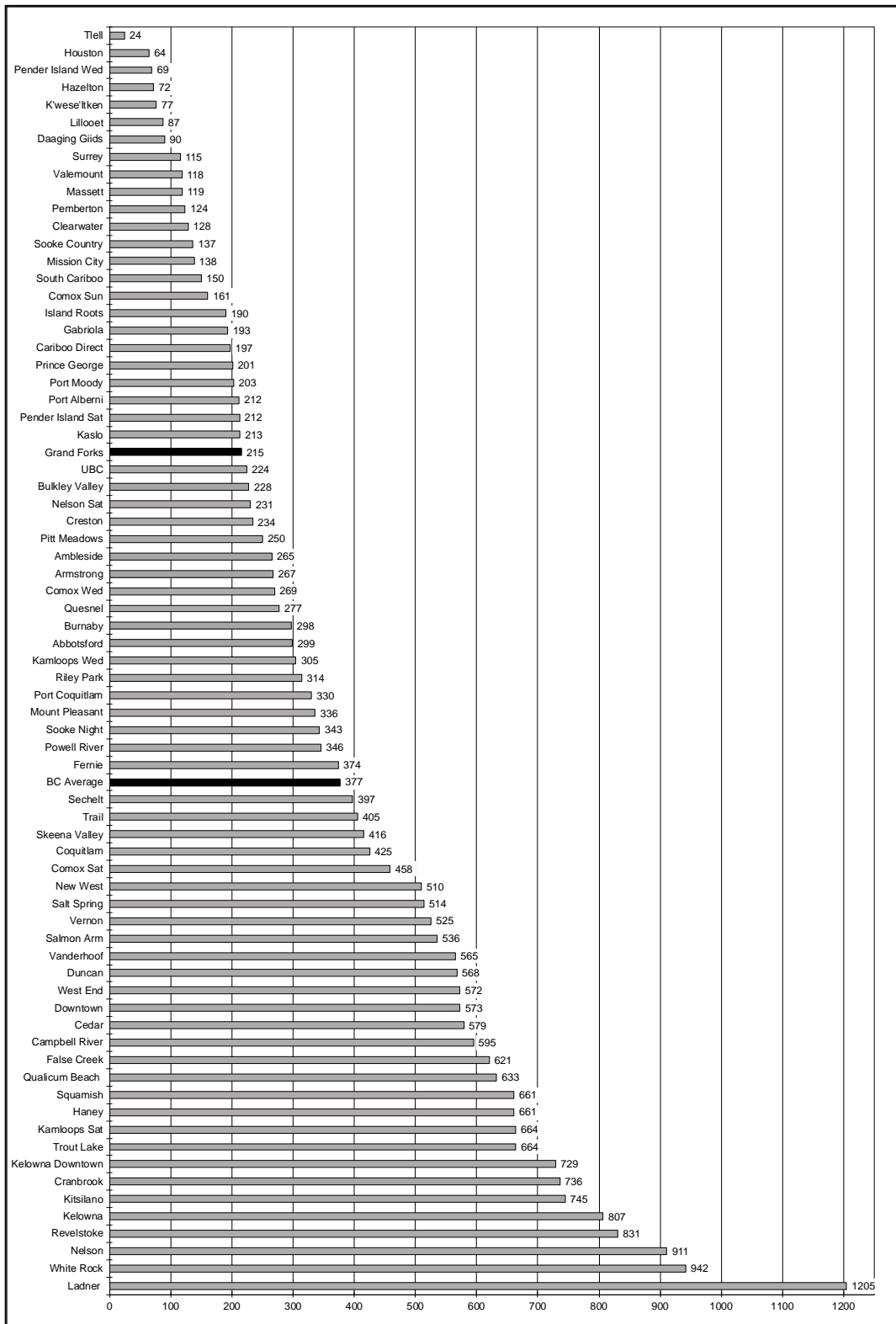


Chart 2 (next page) showcases the average number of shoppers per hour during peak market season at all assessed BCAFM member markets.

Chart 2.

Average Number of Shoppers per Hour in Peak Market Season



Dot Survey

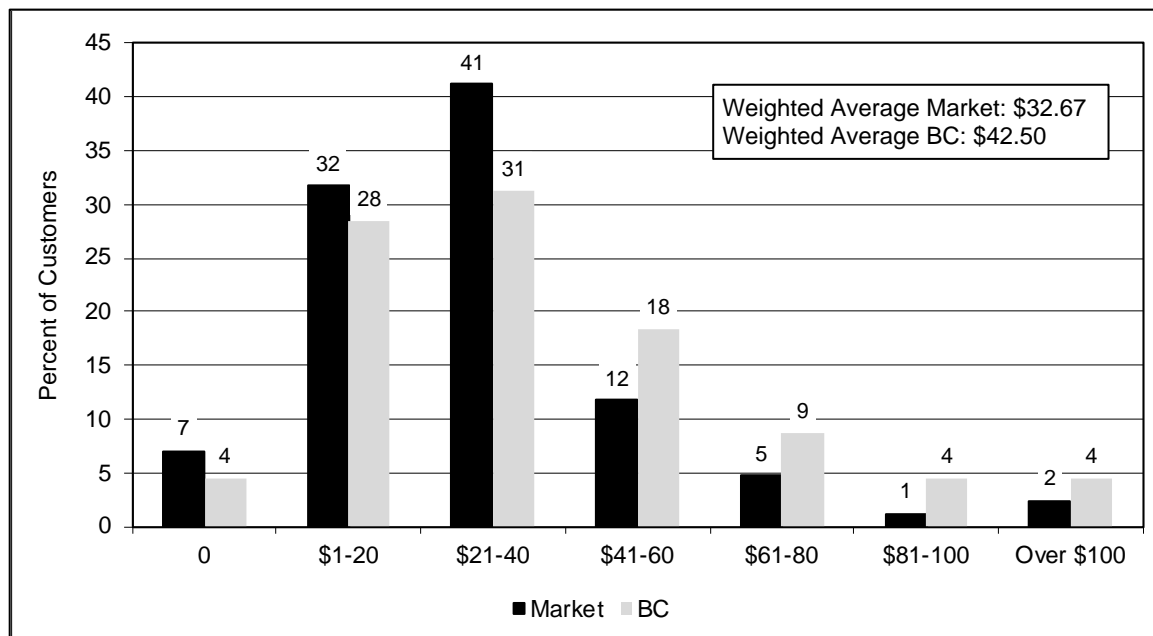
Eighty-five (85) people participated in the dot survey, which is about 6% of estimated total crowd counts for all of the market assessments. The following charts show the results for each of the dot survey questions.

Question 1. How much have you spent, or do you plan to spend, at the market today?

Overall, respondents spent an average⁴ of \$32.67 each on the day of assessment⁵, compared to the provincial spending average of \$42.50 per market shopper. Over half the customers surveyed (73%) said they spent or would spend up to \$40 at the market that day. A small percentage of participants (3%) said they spent or planned to spend over \$80 on the day of assessment. As shown in Chart 3, shoppers at Grand Forks Farmers' Market spend less on average than other markets in BC.

Chart 3.

Average Market Spending (Grand Forks Farmers' Market=85; BC=11,504)



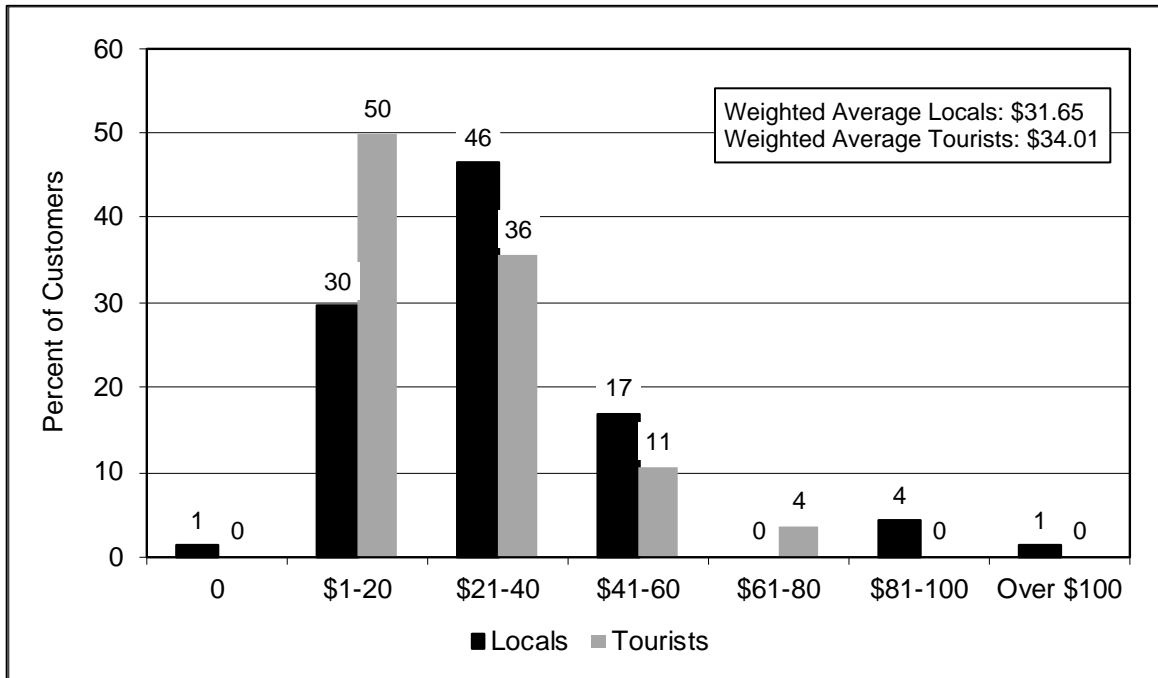
⁴ Experience Renewal Solutions, & Connell, D.J. (2009). *National Farmers' Market Impact Study*. Farmers' Markets Canada. <https://www2.unbc.ca/sites/default/files/sections/david-connell/farmers-markets/nationalfarmersmarketimpactstudy2009.pdf>

⁵ The average spent per customer both at markets and adjacent businesses is weighted by category based on results of a national study of farmers markets completed in 2008.

Chart 4 shows spending differences between locals and those who self-identified as tourists or day-trippers. At the Grand Forks Farmers Market, about 41% of respondents self-identified as tourists or day-trippers. On average, locals spend \$31.65 at the farmers' market while tourists spend an average of \$34.01.

Chart 4.

Grand Forks Farmers' Market Average Spending (Locals=48; Tourists/Day-trippers=37)

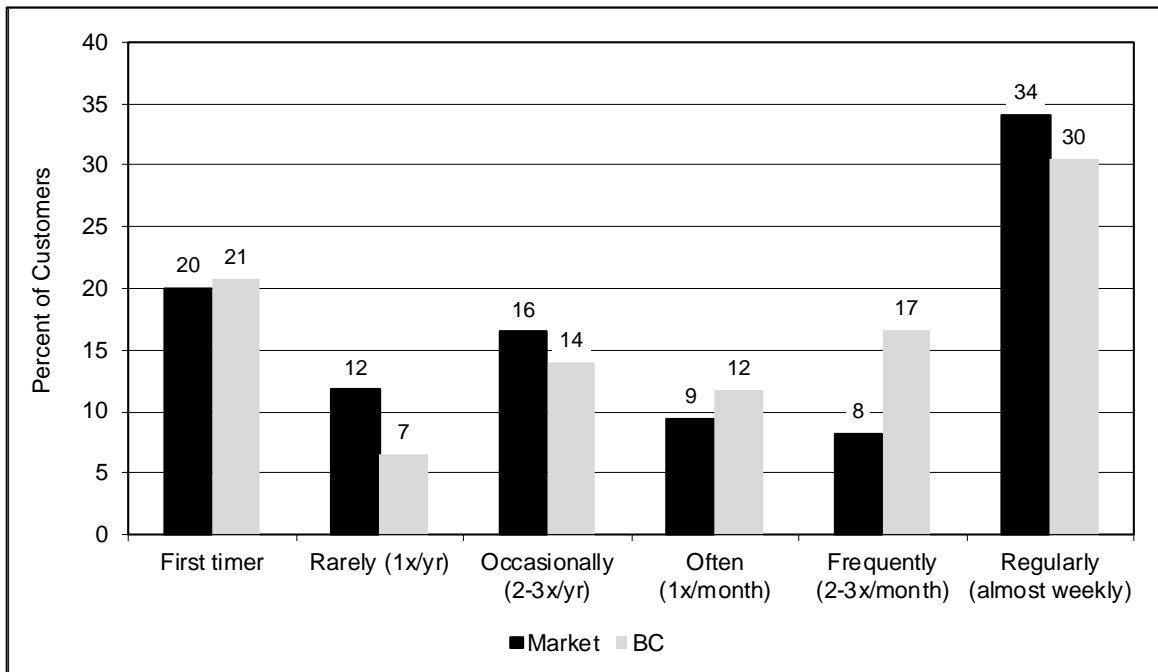


Question 2. How often do you come to this farmers market?

Chart 5 shows that 42% of survey respondents visit the market either frequently (2-3 times per month) or almost weekly. First-time visitors to the market accounted for 20% of participants, compared to a first-time provincial average of 21%. Chart 6 compares the frequency of visits of tourists/day-trippers to locals.

Chart 5.

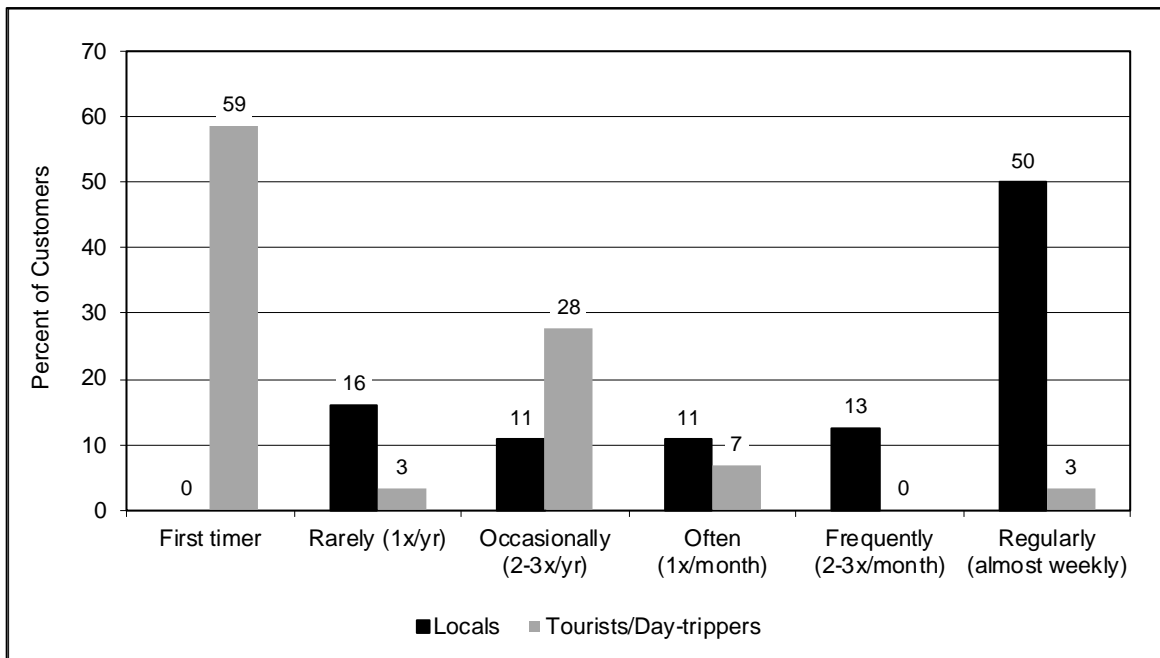
Shopper Frequency (Grand Forks Farmers' Market=85; BC=11,659)



Of survey respondents who identified as tourists or day-trippers to the Grand Forks Farmers' Market, 59% were first-time visitors. Another 10% of participants attended the market at least once per month.

Chart 6

Shopper Frequency (Locals=56; Tourists/Day-trippers=29)

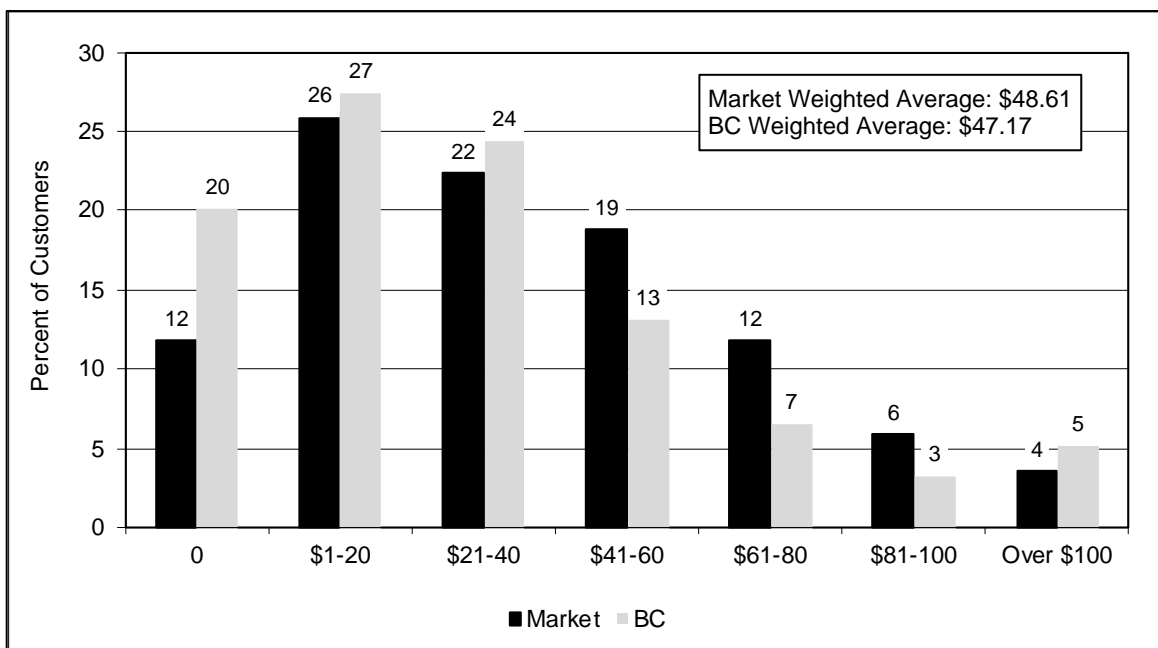


Question 3. If you plan to do additional shopping or eating while in this area of town today, how much do you plan to spend?

Chart 7 shows the range of additional spending by market customers on assessment day for the Grand Forks Farmers' Market, with 88% of respondents saying they would do additional shopping at neighbouring businesses⁶. The average amount spent by market shoppers at neighbouring businesses was \$48.61 per visit, which was slightly higher than the provincial average of \$47.17.

Chart 7.

Local Neighbouring Business Spending (Grand Forks Farmers' Market=85; BC=11,244)

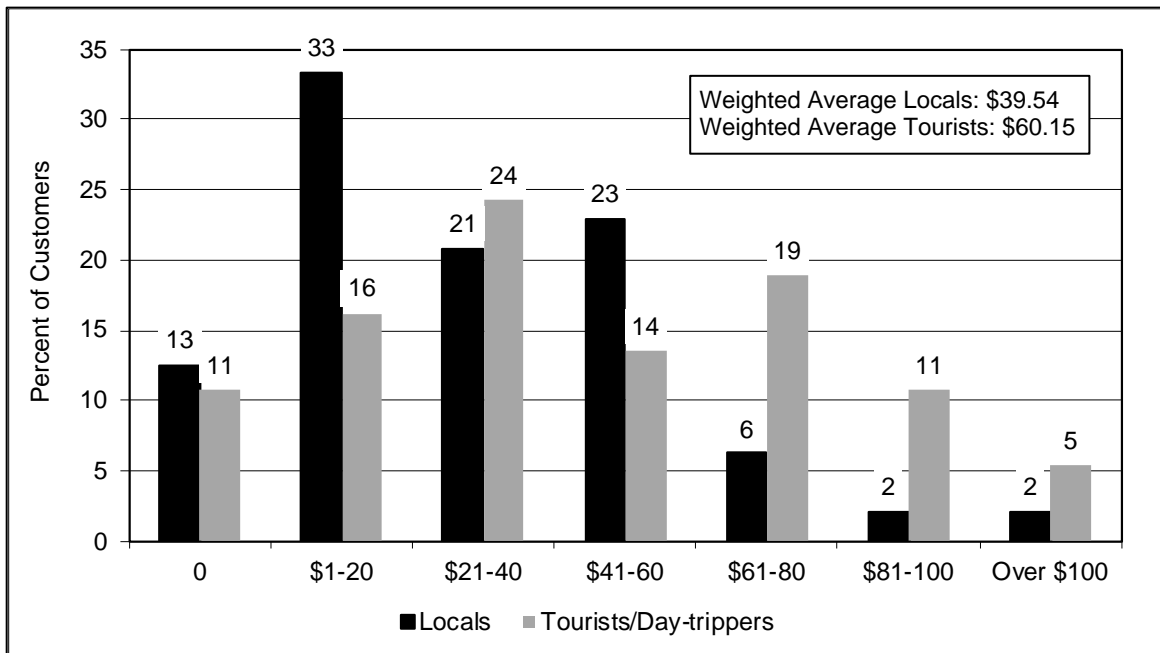


⁶ To some degree, study participants perspective influences the understanding of “neighbouring businesses”. However, participants were given the additional context of businesses they are stopping at because they were also shopping at the farmers’ market.

Chart 8 demonstrates different spending habits between locals and tourists or day-trippers in regard to shopping at neighbouring businesses. While 87.5% of locals indicated that they would shop at adjacent businesses, 89% of tourists and day-trippers also would. Tourist and day-tripper spending was significantly higher than local spending at \$60.15 compared to \$39.54 per local shopper.

Chart 8.

Local Neighbouring Business Spending (Locals=48; Tourists/Day-trippers=37)

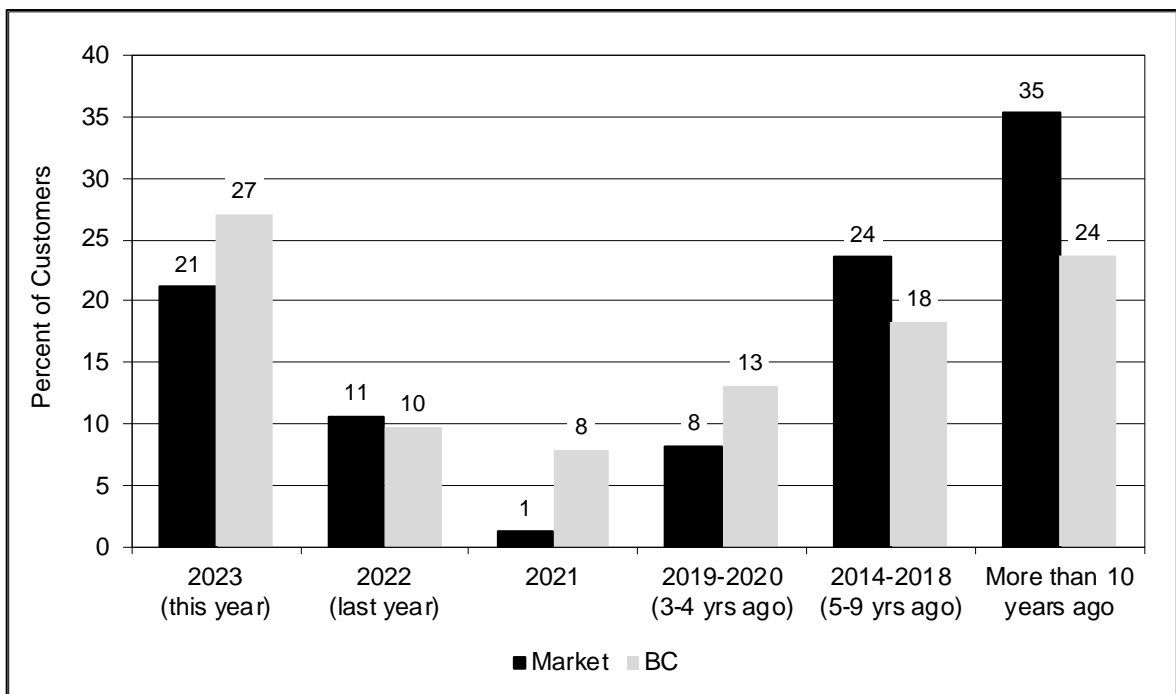


Question 4. When did you start shopping at this farmers market?

As shown in Chart 9, the Grand Forks Farmers' Market has a good proportion of long-time, loyal customers. More than half of all customers surveyed (59%) have been coming to this market for five years or more, 35% of which have been attending for more than 10 years. In addition to the long-time regulars, there were also 21% of respondents who were first-year visitors to this market.

Chart 9.

Market Attendance (Grand Forks Farmers' Market=85; BC=11,547)

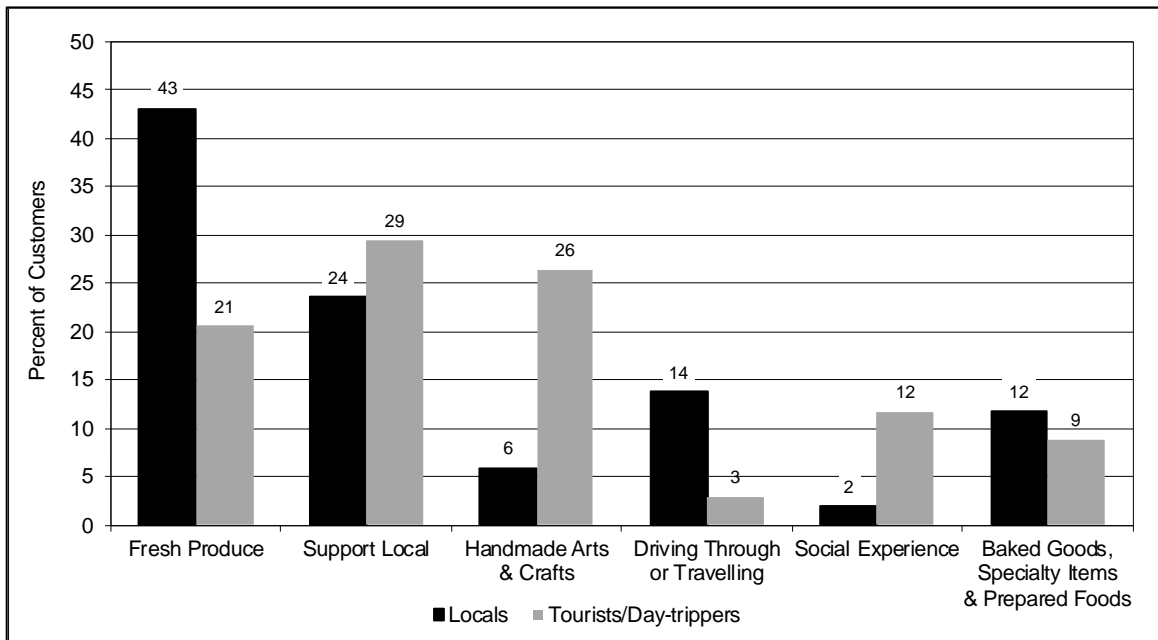


Question 5. What is your primary reason for coming to the farmers' market today?

As shown below, the majority of market visitors visit for fresh produce and to support local. Of tourist and day-trippers, 26% attended the market for handmade arts and crafts.

Chart 10.

Market Question – What is your primary reason for coming to the farmers' market today? (n=85)



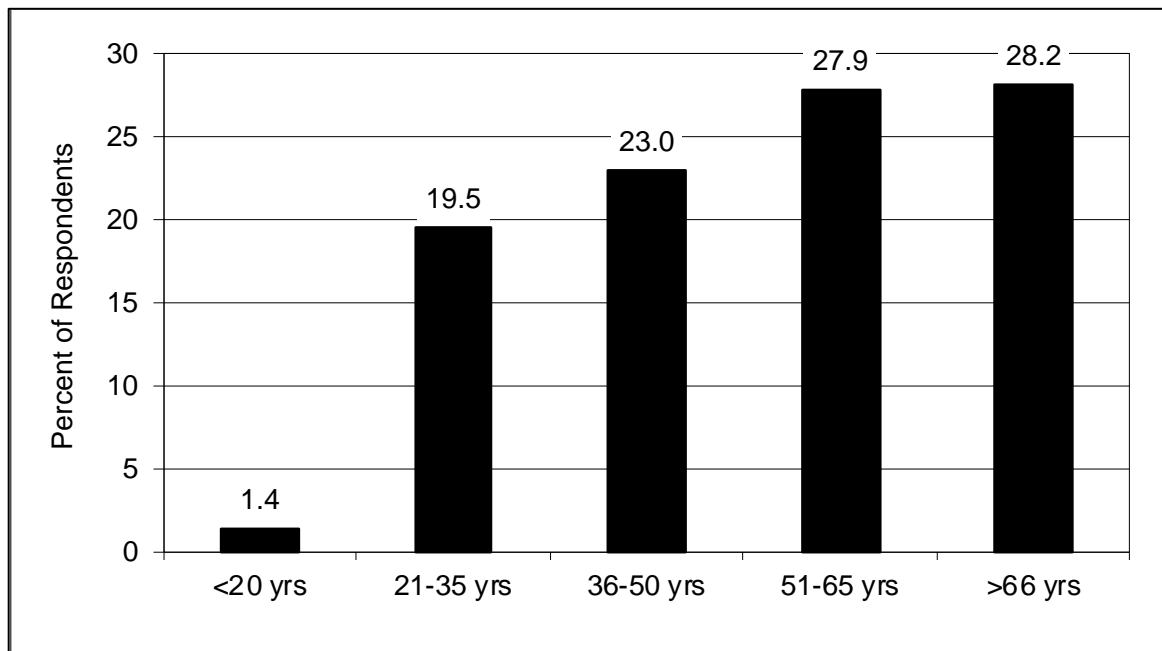
Shopper Surveys

A total of 373 interviews were completed at 70 markets in BC. The following charts show results of all the shoppers surveyed one-on-one across the province. When interpreting the results of these surveys, it should be noted that people who support the market most frequently are also more likely to agree to an interview. The over-representation of regular shoppers is demonstrated when we compare the respondents who reported shopping almost weekly, which was 30% of the dot survey participants, compared to 43% of shopper survey participants. It should be acknowledged that the following results represent only the market shoppers who were interviewed.

The results in Chart 11 show the age range of interview participants at assessed farmers market across BC. The majority of one-on-one interviews (56%) were conducted with market shoppers aged 51 and up.

Chart 11.

Age of Respondents. (n=348)



The household income of interview participants is shown in Chart 12. The results show that people from households with a range of incomes shop at BC's markets. However, one-quarter of participants fall within \$100,000-\$199,000 range.

Chart 12.

Household Income (2023=356)

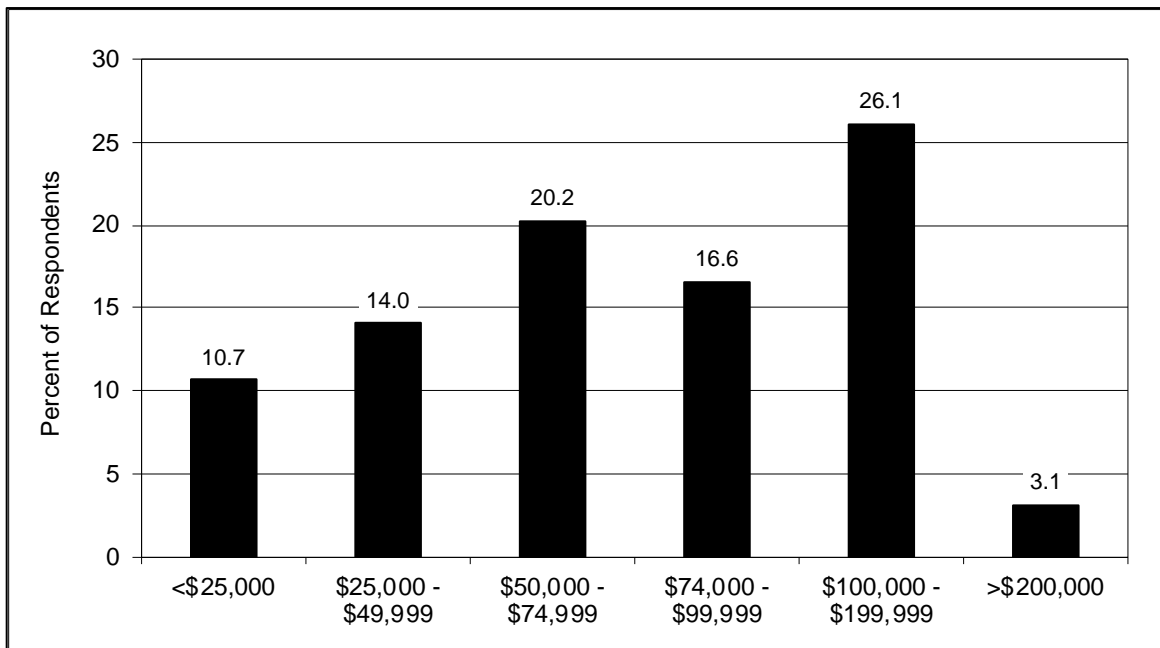
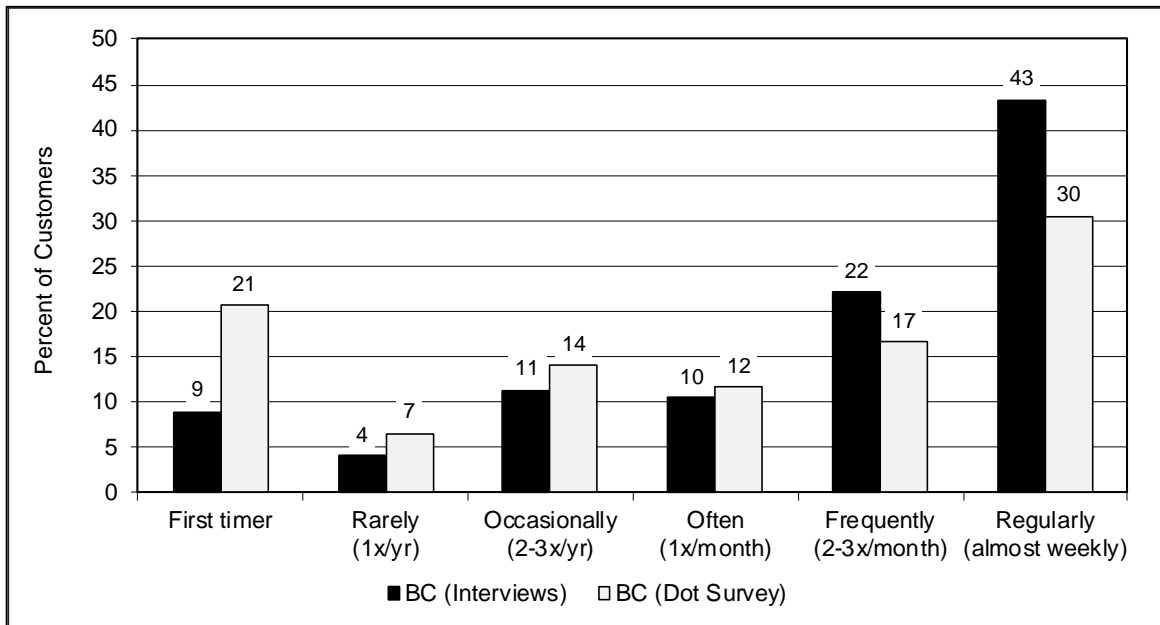


Chart 13 demonstrates the frequency of visits to farmers markets. As previously noted, the results do over-represent regular shoppers due to the nature of survey participation. The actual results are likely to reflect less frequent shopping behaviour, but are still relevant.

Chart 13.

Frequency of Visits to Farmers Markets (2023=372)



Shoppers were asked where and how often they buy groceries at other food retail outlets during the regular outdoor market season. Chart 14 shows where people bought their food in 2023.

Chart 14.

Where Shoppers Buy Groceries During the Outdoor Market Season (2023=347)

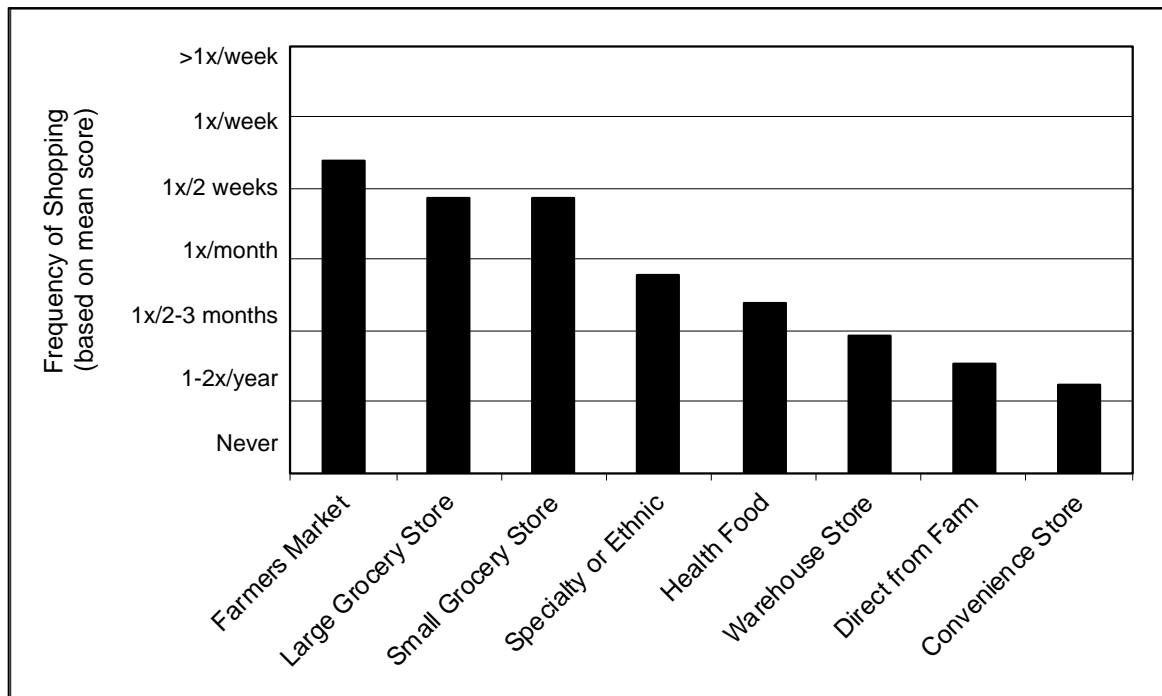
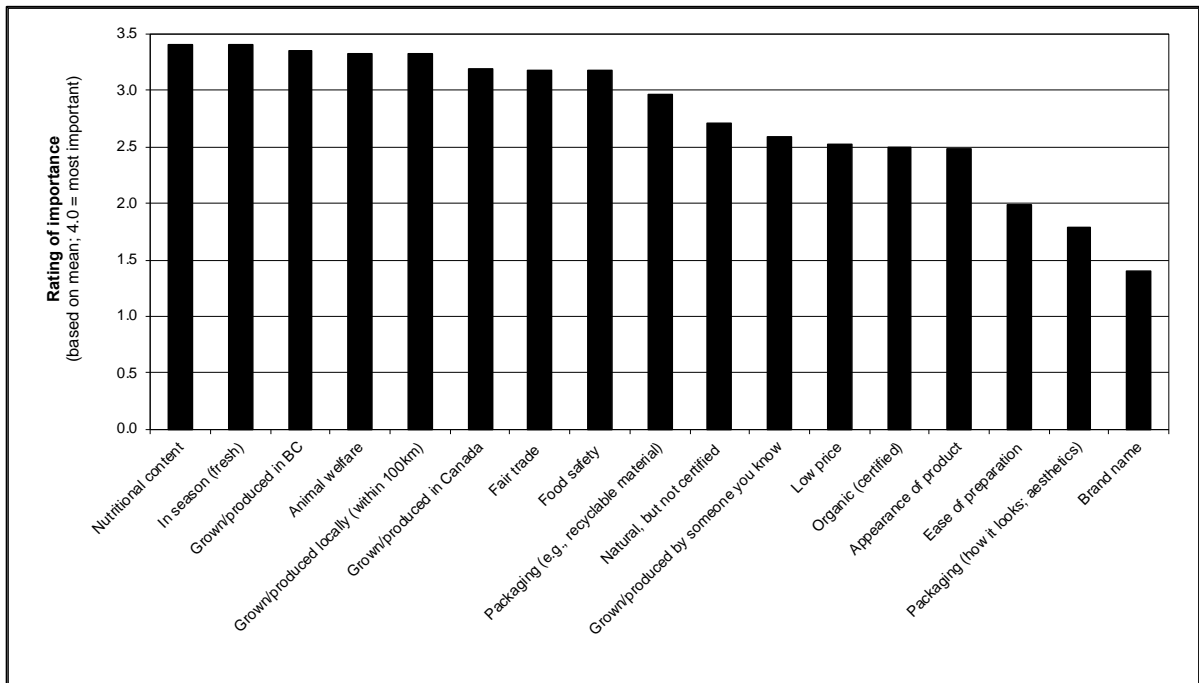


Chart 15 provides insight into shopping patterns and the factors customers consider when buying food. Generally, nutritional content and freshness are most important; however, local production and animal welfare are also important factors among interview participants.

Chart 15.

Factors People Consider when Buying Food (2012=286; 2023=363)



Shoppers were asked how much time they spend at the market during their visits and whether they spend any of that time talking with vendors and/or friends (Charts 16 and 17 respectively, next page)

Chart 16.

Length of Time Shoppers Spend at the Market (2023=370)

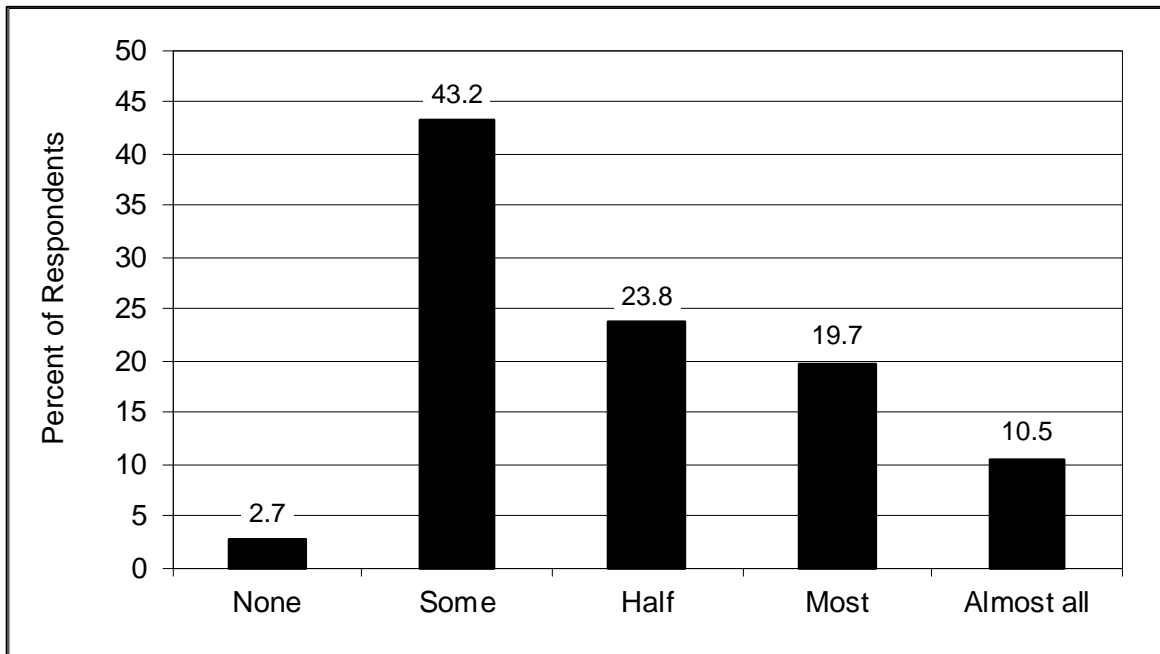
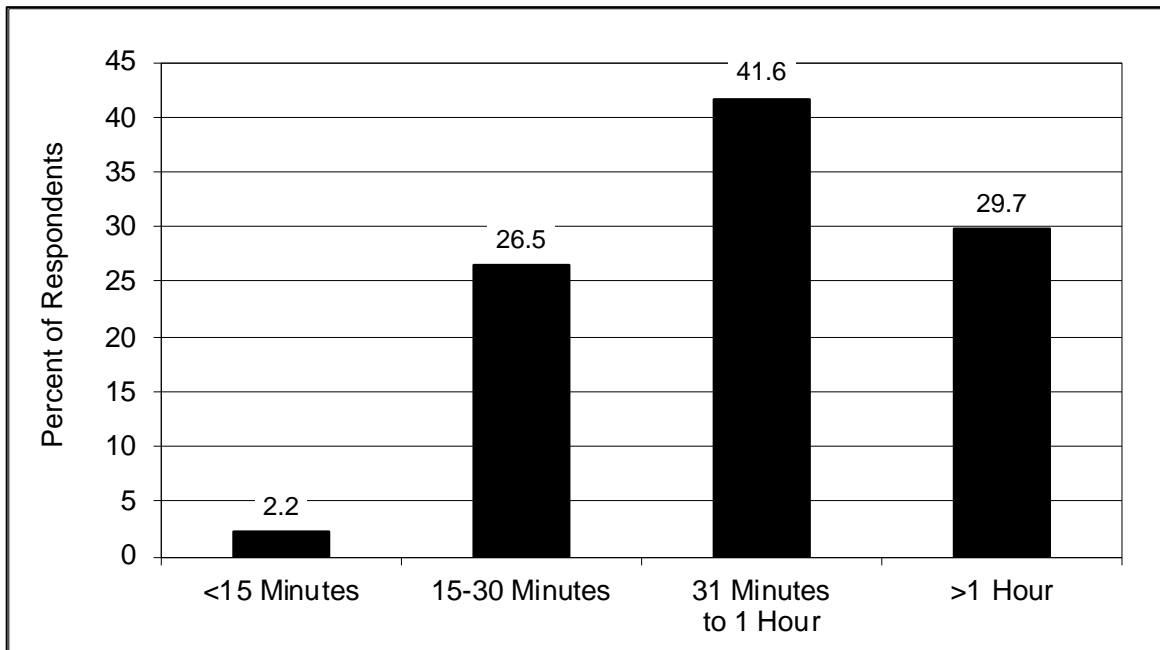


Chart 17.

Time Spent Talking with Others at the Market (2023=370)



The results of the above two questions are combined in Table 3 below. The shaded boxes highlight those people who spend at least half an hour at the market and at least half of that time talking with others (46%).

Table 3.

Time Spent at the Market Socializing (BC=370)

		How time is spent					Total
		None	Some	Half	Most	Almost All	
Time spent at market	<15 min.	1%	2%	0%	0%	0%	2%
	15-30 min.	1%	17%	5%	3%	1%	26%
	31 min. to 1 hr	1%	16%	15%	6%	3%	42%
	>1 hr	0%	8%	4%	11%	7%	30%
Total		3%	43%	24%	20%	11%	100%

Shoppers were asked to indicate the extent to which they agreed or disagreed with the following two statements: “*prices at farmers markets provide good value*” and “*farmers markets are too expensive*”. The overwhelming majority of respondents (84%) agreed that farmers markets provide good value, with 55% of respondents disagreeing that farmers markets are too expensive. Charts 18 and 19 (next page) showcase these results.

Chart 18.

Prices at Farmers Markets Provide Good Value. (n=365)

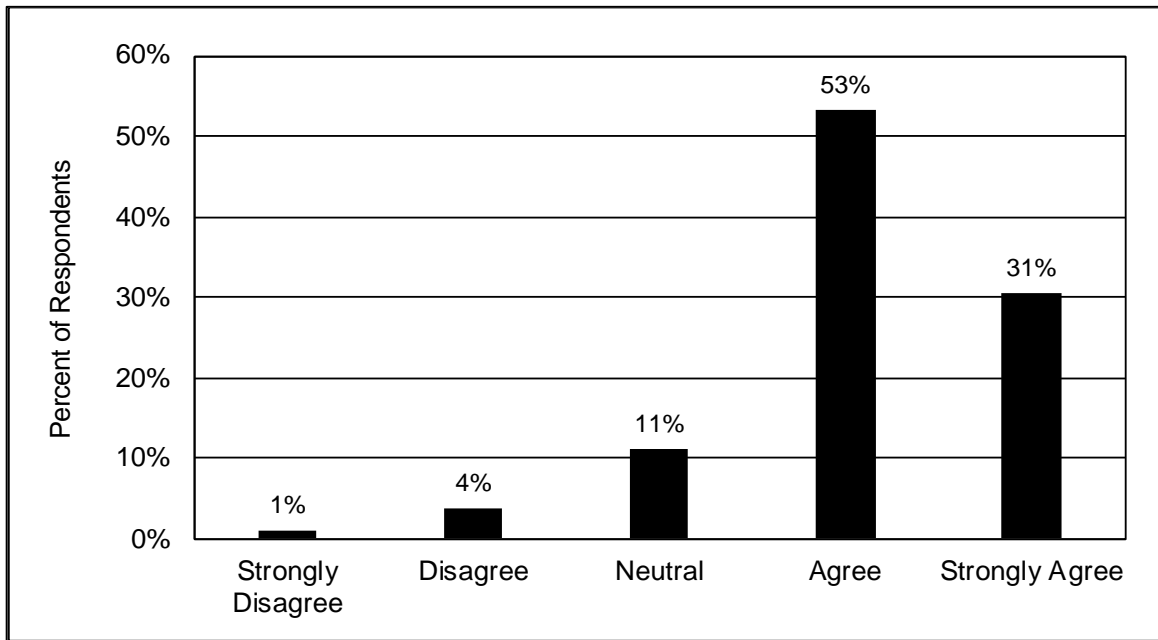
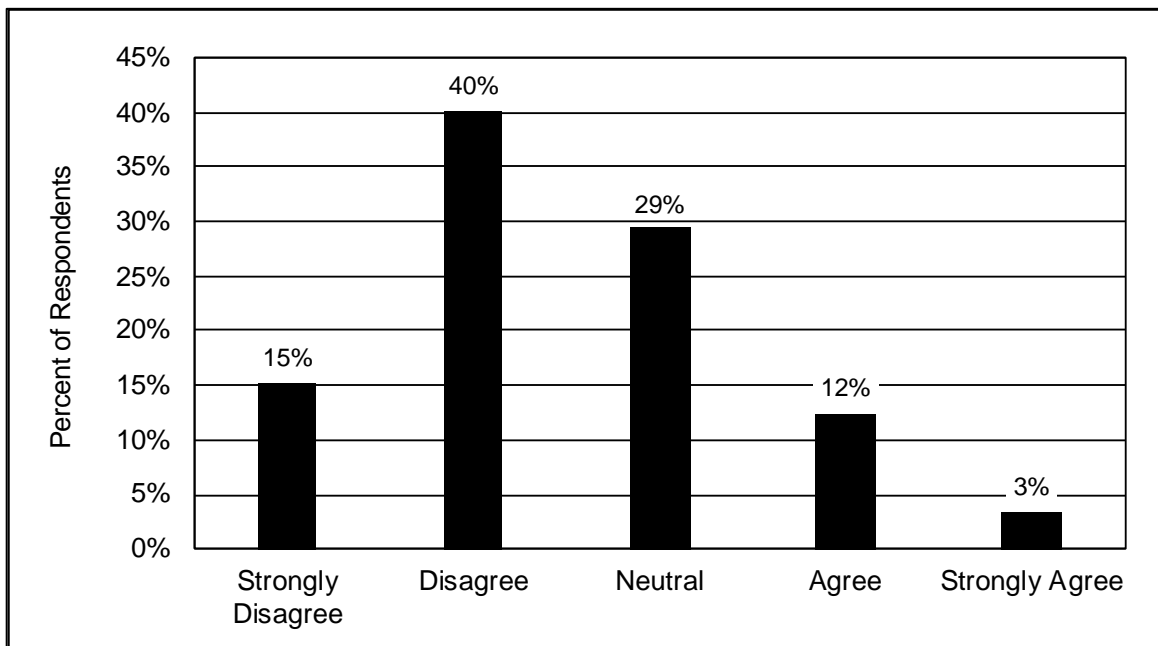


Chart 19.

Farmers Markets Are Too Expensive. (n=358)

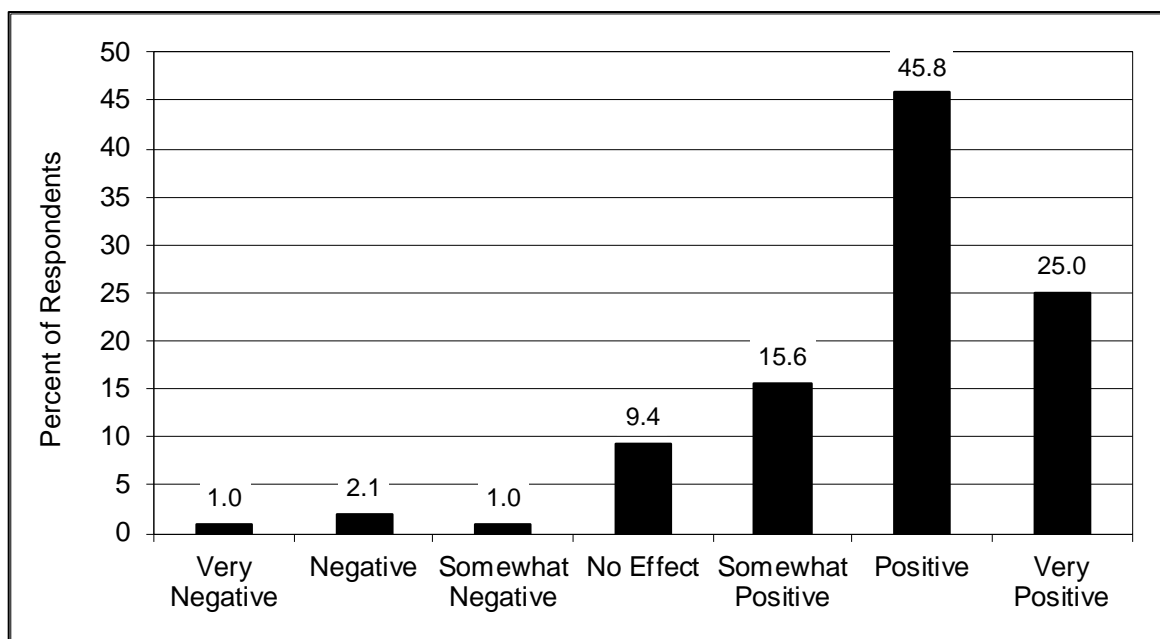


Business Surveys

Based on the availability of businesses for interviews, proximity to the market, and whether they are open on market days, we conducted 103 surveys with neighbouring businesses. Responses from adjacent businesses were overwhelmingly positive, as evident in Chart 20. Most respondents (86%) reported that their neighbouring farmers market has had a net positive effect on their businesses. One-quarter (25%) of businesses described the effect as “very positive”.

Chart 20.

Effect of Market on Neighboring Businesses (2023=103)



ECONOMIC IMPACTS ASSESSMENT – GRAND FORKS FARMERS' MARKET

The information collected in this assessment enables us to measure the economic impacts of the Grand Forks Farmers' Market.

Annual Direct Sales

The amount of money spent by market shoppers (referred to as direct sales) is an effective way to measure economic impacts of a farmers market. This impact is the measure of total annual sales of a farmers market. Annual sales are calculated as follows:

$$\text{Average Expenditure by Shopper} \times \text{Number of Spending Shoppers per Market Day}^7 \times \text{Number of Market Days per Year}^8 \times \text{Seasonal Factor}^9$$

Grand Forks Farmers' Market seasonally adjusted annual direct sales for 2023:

$$\$32.68 \text{ per shopper visit} \times 1076 \text{ spending customers} \times 48 \text{ (adjusted) sessions} =$$

\$1.4 million

Multiplier Effect

Another measure of economic impacts of farmers markets is to measure the ripple effect of people spending dollars at the market: "If I spend \$1 at the market then how does this dollar benefit the local economy?". The ripple effect includes both the profit to the market vendor and the monies the vendor spent on inputs for the products sold at the market, such as: seeds, feed, tools, and ingredients.

In this study we measure revenues and account for the ripple effect using a multiplier of 1.5^{10,11} to calculate the economic impact. This multiplier means that for every dollar spent at the market, another \$0.50 was spent in the local economy.

⁷ The number of spending customers is 75% of the seasonally adjusted estimated crowd count for a peak market day.

⁸ Market days account for comparable hours and multiple locations, including winter and special dates, such as holiday markets.

⁹ The seasonal factor accounts for varying sales and crowd levels during a market season and is based on data provided by the market manager and/or long-time vendors.

¹⁰ Hughes, D.W., Brown, C., Miller, S., & McConnell, T. (2008) Evaluating the economic impact of farmers' markets using an opportunity cost framework. *Journal of Agricultural and Applied Economics*, 40(1), 253-265. <https://www.cambridge.org/core/journals/journal-of-agricultural-and-applied-economics/article/abs/evaluating-the-economic-impact-of-farmers-markets-using-an-opportunity-cost-framework/E57B46247B82A049139B0FE6804234D8>

¹¹ Otto, D., & Varner, T. (2005). Consumers, vendors, and the economic importance of Iowa farmers' markets: An economic impact survey analysis. Ames, Iowa: Leopold Centre for Sustainable Agriculture. Retrieved from: <https://dr.lib.iastate.edu/entities/publication/45ba02a3-1938-464b-81f0-24f7a4bd8d02>

Using a multiplier of 1.5, the annual economic impact is approximately:

2023 Annual Economic Impact: \$2.1 million

This calculation means that the Grand Forks Farmers' Market contributes an estimated \$2.1million to the local economy each year. These monies benefit not only market vendors but also the local businesses that supply these vendors.

Community Impact

We can also assess the 'spillover' effect that the Grand Forks Farmers' Market has on their neighbouring businesses. Based on dot survey results for question three, we can estimate the impact of market customers spending additional dollars at local, neighbouring businesses on the day of the market. Using the same formula for estimating sales, as above, the annual spending at neighbouring businesses is approximately:

2023 Annual Spending at Local Neighbouring Businesses: \$1.8 million

Acknowledgements

The BC Association of Farmers' Markets and the project team would like to thank the Grand Forks Farmers' Market for participating in this study and for providing a team of volunteers to help conduct the assessment. The BCAFM gratefully acknowledges the financial assistance of BC Ministry of Agriculture and Food.

Finally, with the completion of this study, the BCAFM Membership and Communications team will ensure these important results and findings are shared far and wide with BCAFM members and a range of local, provincial, national, and global stakeholders.