

ECONOMIC AND SOCIAL BENEFITS ASSESSMENT OF FARMERS' MARKETS

PROVINCIAL REPORT

British Columbia, Canada

A collaborative project of
British Columbia Association of Farmers' Markets
and
School of Environmental Planning,
University of Northern British Columbia



BC ASSOCIATION OF
FARMERS' MARKETS



UNIVERSITY OF
NORTHERN BRITISH COLUMBIA

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EXECUTIVE SUMMARY

The demand for locally-produced, fresh, nutritious food by local consumers has grown rapidly over the past ten years. So, too, has the number of farmers' markets. As the most visible and accessible component of our local food systems, farmers' markets have strengthened their role as providing unique places for local producers and local consumers to connect. Although this role of farmers' markets within local food systems is well recognised, it is important to know not only what markets contribute to local areas but also to know how much they contribute.

This final report presents the findings from the assessments completed at 33 markets across British Columbia between June and September, 2012. It includes results of this province-wide assessment of BC's farmers' markets and incorporates some results from a national study of farmers' markets completed in 2008¹.

The project was completed by the BC Association of Farmers' Markets, in collaboration with Dr. David Connell of the University of Northern British Columbia. The purpose of the provincial study was to measure the social and economic benefits of farmers' markets across British Columbia in order to quantify the significant contributions of farmers' markets and to increase their visibility both locally and provincially. This year's project built upon the success of a similar project completed in 2006. Six years later, by using similar methods we were able to assess changes that took place during this time.

During the outdoor market season of 2012 we completed 33 assessments across the province. Four Research Associates (three worked full time and one worked part time) and a part-time Project Co-ordinator were hired to complete the project. Each of the Research Associates covered a region of the province. Using methods based on the Rapid Market Assessment technique developed by Oregon State University, each market assessment included shopper surveys using flip charts and sticky dots, crowd counts, and one-on-one interviews with both market shoppers and nearby businesses. In total, over 9,800 people participated in the flip chart surveys and we completed 291 interviews with market shoppers and 102 interviews with nearby businesses.

The results of the project show that farmers' markets in BC have grown significantly over the past six years. A summary of results is presented in Table 1. The total direct sales at farmers' markets increased 147% between 2006 and 2012, from \$46 million to \$113 million. This growth can be attributed to three main factors: (1) more farmers' markets in BC; (2) more people shopping at farmers' markets; and (3) more money being spent by shoppers at farmers' markets.

Table 1. Highlights of results: 2006 and 2012

	2006*	2012	% increase
Number of farmers' markets in BC (estimated)	98**	159	62.24%
Total number of assessments completed	28	33	
Total number of respondents in flip chart survey	7,245	9,819	
Total number of respondents in interviews with farmers' market shoppers	446	291	
Average amount spent per customer (flip chart survey)	\$23.41	\$28.81	23.07%
Estimated total direct sales (all markets in BC)	\$46.02M	\$113.69M	147.16%
Estimated total economic benefits (all markets in BC; multiplier = 1.5)	\$69.00M	\$170.54M	147.16%

* The estimated results for the 2006 assessments were revised based on changes to some base assumptions and data collected from the national study of farmers' markets completed in 2008.

** The estimate for the total number of markets in 2006 may have excluded some farmers markets run on different days by the same organisation.

RESEARCH METHODS

The assessments of farmers' markets in BC were organised around two sets of activities: rapid market assessment and market surveys. These same methods were used for the BC study in 2006.

1) Rapid Market Assessment:

The Rapid Market Assessment (RMA) technique was developed by researchers at Oregon State University for studying farmers' marketsⁱⁱ. This method has been implemented successfully in markets throughout Oregon and Washington states. The RMA method consists of three parts: customer survey; crowd count; environmental observations. The environmental observations are optional for markets in this present study and so are not included in this report.

- a) Flip-chart survey: The flip-chart survey method engaged consumers in friendly interaction through multiple-choice questions posted in large print on flip charts. This approach has a high response rate, thereby increasing validity and accuracy.

The set of questions used for the flip chart survey in each market were developed in two parts. Four questions, as listed in Box 1, were developed by the research team and were asked at all farmers' markets participating in the project. Asking the first two questions at all markets was necessary to complete the provincial analysis of economic benefits. Each participating market developed a fifth question to collect data that are relevant to making effective changes and improvements to the local market.

Box 1. Flip-chart survey questions

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

- b) Crowd count: During a ten-minute period of each hour the market is open, members of the assessment team stood at each major entry point to the market and counted people entering, excluding children. The total number of attendees is estimated from these systematic counts.

2) Market surveys

The analysis of community benefits of farmers' markets involves more detailed surveys of market customers and local businesses.

- a) Customer surveys. At each farmers' market a small sample of customers was asked to participate in a short interview. Using convenience sampling, people who had completed the flip chart survey were asked if they had a few minutes to complete a longer survey. 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. The small sample size and non-random sampling method mean that the results cannot be generalised to all market customers. Nevertheless, the information collected expands upon the flip-chart survey information and lends further insights to market customers and the relation between markets and neighbouring businesses.
- b) Business surveys. Businesses located near the farmers' markets were surveyed to assess the influence of the market on neighbouring businesses and to explore the nature of the relationship. The information collected from these surveys is specific to each local market and provided insight to how relations might be further developed. The business information helped to understand the relation between farmers' markets and nearby businesses generally.

Together, the market assessment and the more detailed market surveys improve our understanding of what makes farmers' markets successful and how they contribute both economically and socially to the local areas.

Selection of farmers markets

All farmers' markets who were members of the BC Association of Farmers' Markets were invited to participate in the study. Thirty-three farmers' markets agreed to participate. Each participating market paid a small contribution fee that varied by size of market. A list of markets that participated in the 2012 study is provided in Table 2.

Table 2. List of participating markets

Name of market	Location	Size
Abbotsford Farm and Country Market	Abbotsford	L
Bulkley Valley Farmers' Market	Smithers	L
Cherryville Farmers Market	Cherryville	S
Comox Valley Farmers' Market (Saturday)	Comox	L
Comox Valley Farmers' Market (Wednesday)	Comox	M
Coquitlam Farmers Market	Coquitlam	L
Cranbrook Farmers' Market	Cranbrook	L
Creston Valley Farmers' Market	Creston	M
Fernie Mountain Market	Fernie	M
Haney Farmers Market	Maple Ridge	L
Invermere Farmers' Market	Invermere	L
Kamloops Regional Farmers' Market (Saturday)	Kamloops	L
Kamloops Regional Farmers' Market (Wednesday)	Kamloops	M
Kelowna Farmers and Crafters Market	Kelowna	VL
Kerrisdale Village Farmers Market	Vancouver	M
Kitsilano Farmers Market	Vancouver	L
Langley Community Farmers Market	Langley	L
Main Street Station Farmers Market	Vancouver	M
Moss Street Community Market	Victoria	L
Oak Street Farmers' Market	Vancouver	S
Port Coquitlam Farmers' Market	Port Coquitlam	M
Prince George Farmers' Market	Prince George	L
Quesnel Farmers' Market	Quesnel	M
Royal City Farmers' Market	New Westminster	M
Salt Spring Farmers' Market (Tuesday)	Salt Spring Island	M
Skeena Valley Farmers' Market	Terrace	L
Squamish Farmers' Market	Squamish	L
Sun Peaks & Region Farmers' Market	Sun Peaks	S
Surrey Urban Farmers' Market	Surrey	M
Trout Lake (East Vancouver) Farmers Market	Vancouver	L
Vernon Farmers' Market (Thursday)	Vernon	VL
West End Farmers Market	Vancouver	M
White Rock Farmers' Market	White Rock	L

Small: 1-19 vendors. Medium: 20-39 vendors. Large: 40-99 vendors. Very large: 100+ vendors

RESULTS

This section presents the results of the rapid market assessment, including the crowd count estimates and flip-chart surveys. The results for the one-on-one customer interviews and business interviews follow.

Rapid Market Assessment

Crowd count

The estimated crowd totals for each assessed farmers' market are shown in Chart 1 (next page). The results are based on the average number of shoppers attending a market on an hourly basis (not on the total number of shoppers). As illustrated, there is a wide variation among markets, from 1,248 shoppers per hour in Kitsilano to 77 shoppers per hour in Cherryville. Although it is easier to assume that the higher crowd counts occur in urban markets, there are other factors that affect the size of crowds, such as the reputation, age, and size of the market, as well as the day of the week the market runs.

Flip-chart survey

Over 9,800 people participated in the dot surveys, which is about 15% of the estimated total crowd counts for all of the assessments.

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

Overall, respondents spent an averageⁱⁱⁱ of \$28.81 each on the day of the assessment. As shown in Chart 2, 45% of customers surveyed in BC said they would spend up to \$20 at the market that day; 31% said they would spend between \$21 and \$40. This pattern is similar to the shopping patterns at farmers' markets across Canada in 2008. (Note: different categories were used in the 2006 study in BC so a comparison cannot be made directly.)

Chart 2. How much have you spent, or do you plan to spend, at the market today?
(BC: n=9,819; Canada: n=3,167)

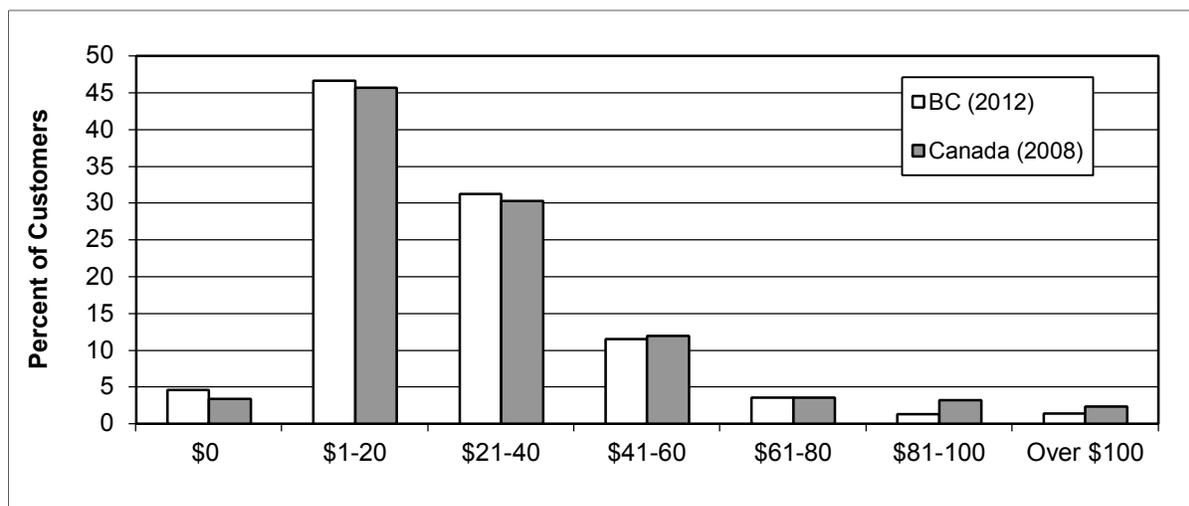
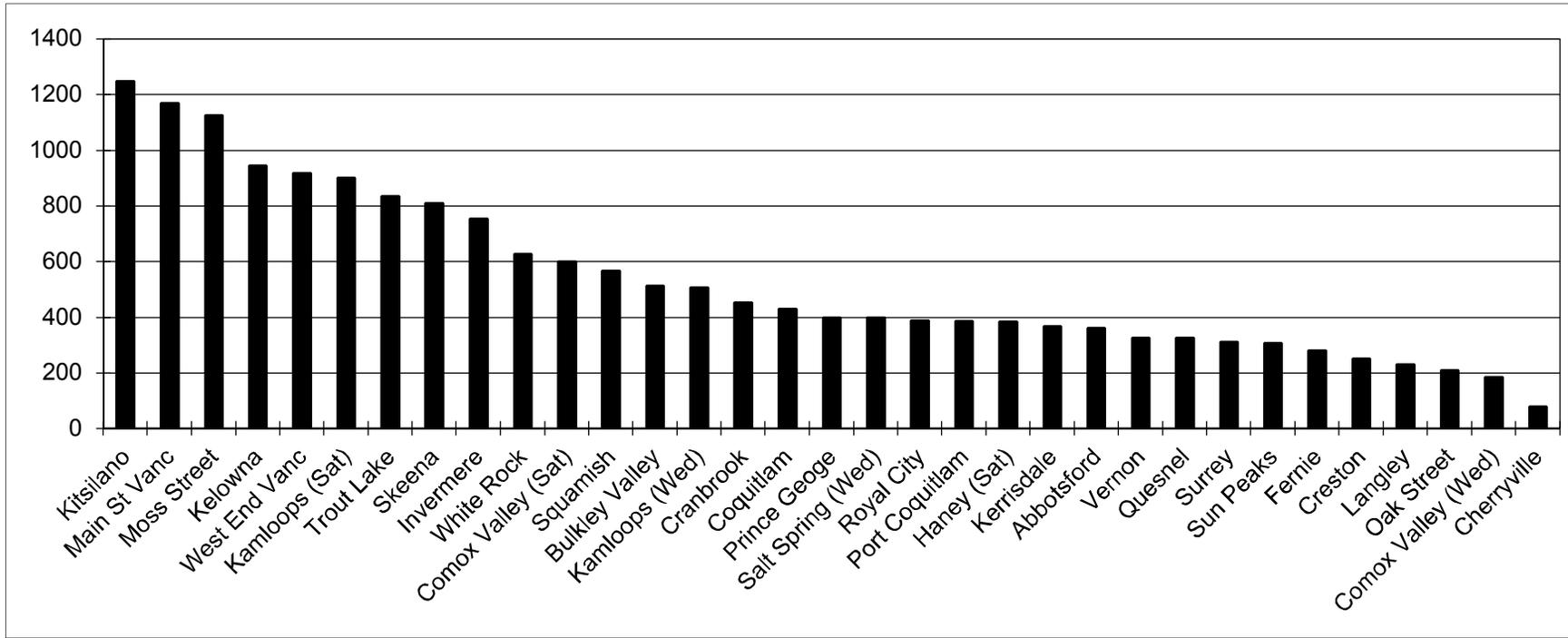
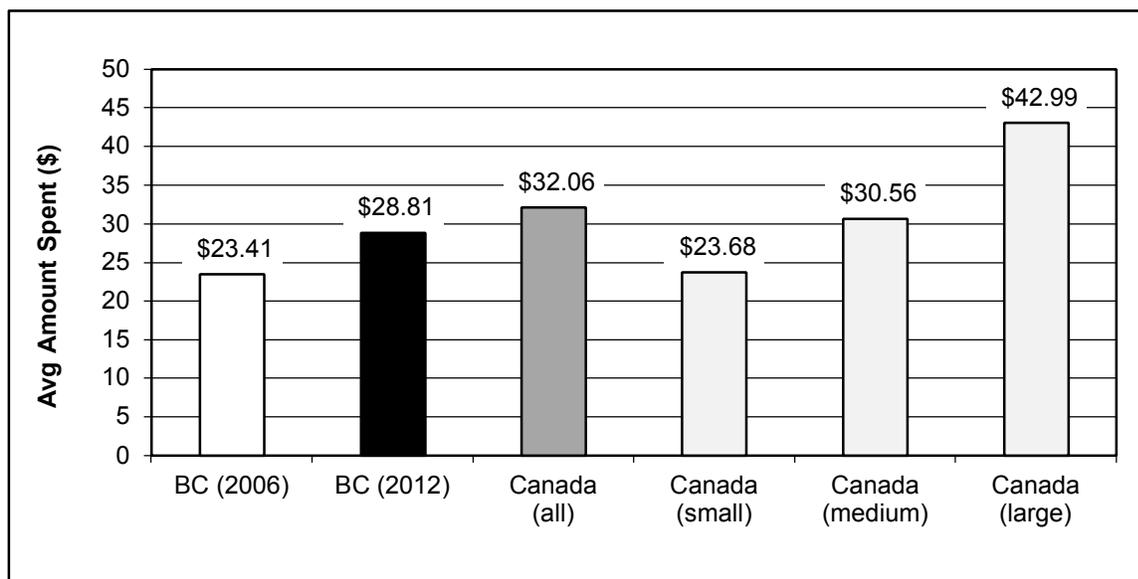


Chart 1. Number of shoppers at BC farmers' markets (average hourly crowd at peak of season)



The average amount spent by shoppers at BC's markets in 2012 increased over the past six years, from \$23.41 in 2006 to \$28.81 in 2012. The results shown in Chart 3 illustrate how the 2012 results from the BC's markets compare to the average amount spent in by customers at small (<20 vendors), medium (20-39 vendors), and large farmers' markets (40+ vendors) in Canada. Although the BC average is lower than the national average, a note of caution is needed when interpreting the results. It is likely that the sampling of shoppers surveyed for the national survey over-represent regular shoppers (refer to Chart 4) who tend to spend more than less frequent shoppers, which means that the results shown below for the national averages of customer spending are likely to be over-stated.

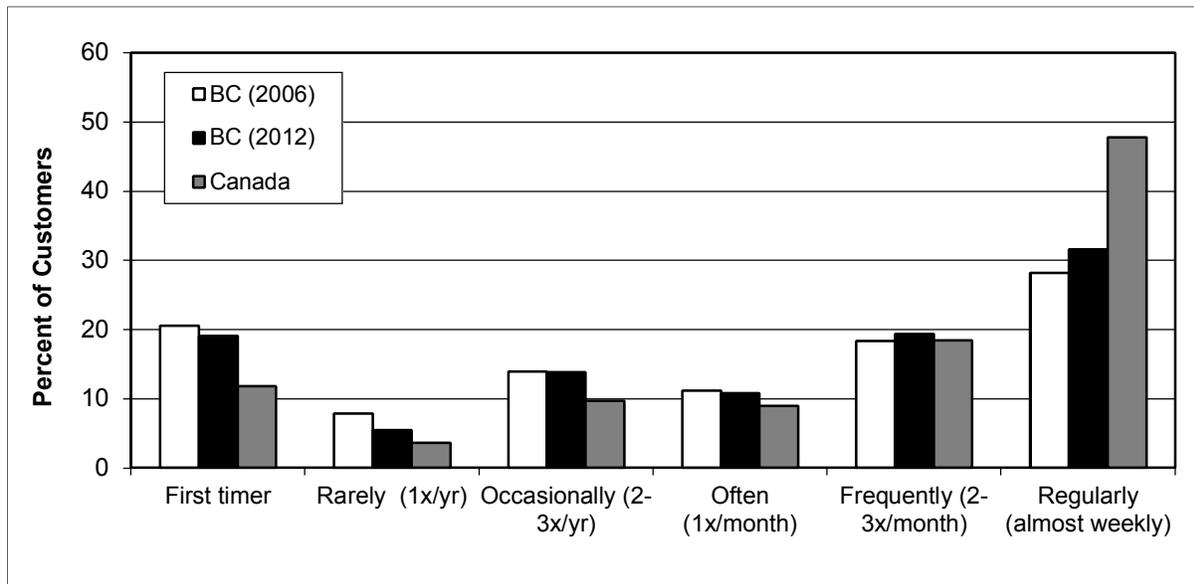
Chart 3. Average amount spent by market shoppers
(BC: n=9,819; Canada: n=3,167)



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

As shown in Chart 4 (next page), there is a wide distribution in the frequency of visits by BC's farmers' market shoppers. About half of market visitors shop at least two to three times a month at the markets, which implies that BC's farmers' markets have a solid core of frequent shoppers. First-time visitors to the markets accounted for about 20% of respondents. This pattern is similar to the results of the assessment in 2006, with the results showing a slight increase between 2006 and 2012 in the number of market shoppers who come more frequently to the markets. The national data show a lower percentage of first-time shoppers and a much higher percentage of visitors who shop almost weekly. Note: here one can see the over-representation of regular market shoppers in the national study completed in 2008.

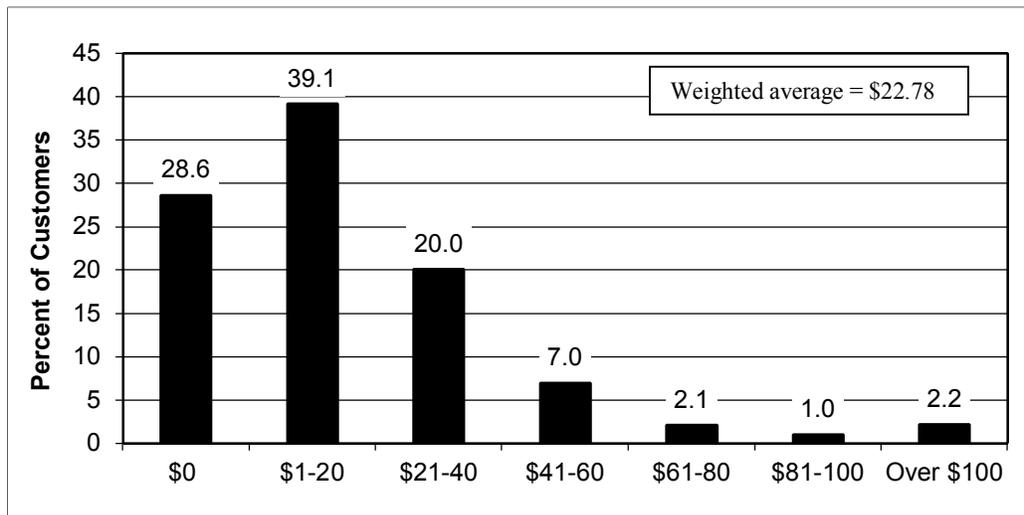
Chart 4. How often do you come to this market?
(BC (2006): n=7,245; BC (2012): n=9,874; Canada: n=3,167)



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 5 shows the range of additional spending by market customers at neighbouring businesses that day, with over 70% of respondents saying they would do additional shopping. Almost 40% of customers surveyed said they would spend up to \$20 plus 20% said they would spend up to \$40.^{iv} The average amount spent per customer at neighbouring businesses was \$22.78. Note that this question was not asked at all markets, as not all markets have businesses nearby. As well, some shoppers included all spending that they would do that day, which may not be restricted to markets at nearby businesses.

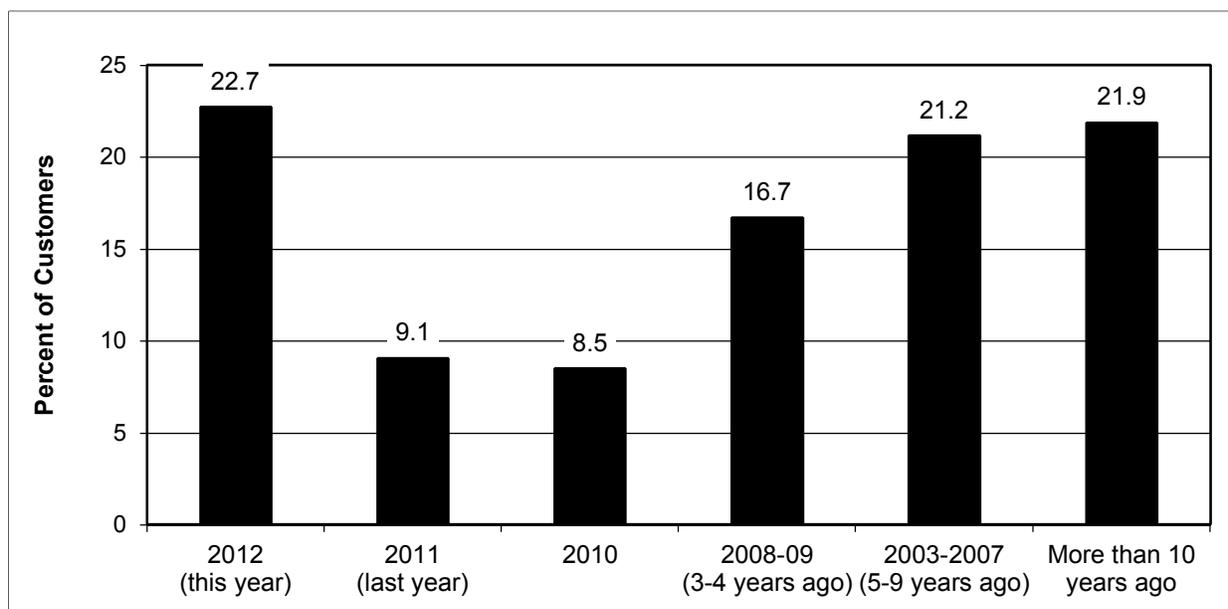
Chart 5. If you plan to do additional shopping or eating while in this area of town today, how much do you plan to spend? (n=9,578)



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

Farmers' markets in BC have a good portion of long-time, loyal customers. For all of the markets we assessed that were at least ten years old (which is sixteen markets), 60% of all customers surveyed have been coming to those markets for three years or more and 43% of all customers surveyed have been coming to those markets for more than five years (Chart 6).

Chart 6. When did you start shopping at this farmers' market (for markets that have operated for at least ten years)? (n=5606)



Market surveys

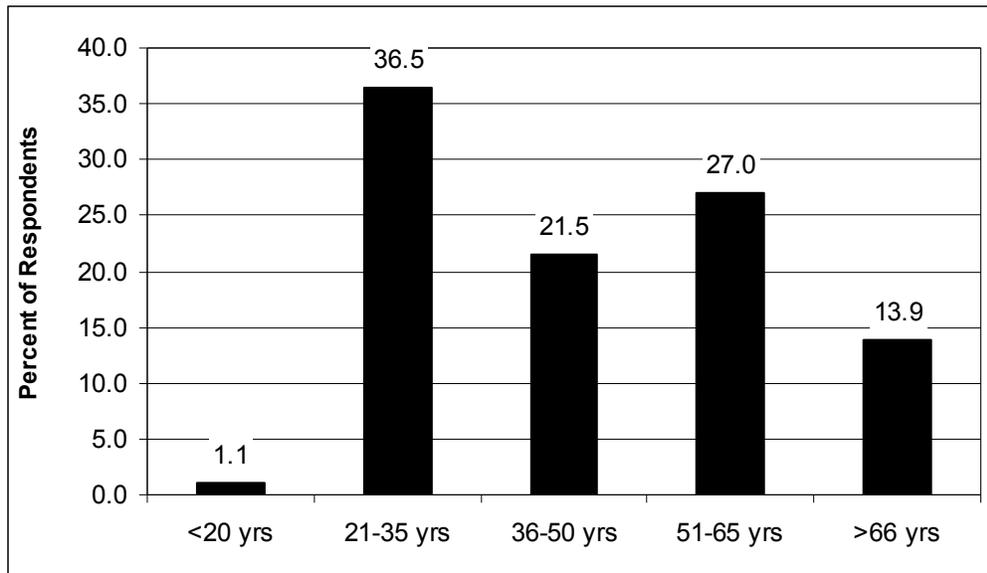
Customer Survey

In addition to the flip chart surveys, we conducted one-on-one interviews with 291 customers at the 33 markets in BC. When interpreting the results of these surveys, it should be noted that the people who agreed to participate in the one-on-one interviews over-represent regular shoppers, as these people are also the ones who are more likely to participate in such market surveys. The over-representation of regular shoppers is evident when we compared the customer survey results (291 responses) against the results gathered from the flip chart surveys (9,819 responses) (refer to Chart 9). The flip chart surveys show a wider representation of market shoppers. For the same reason we believe that the national survey results of 2008 over-represent regular customers.

Notwithstanding the limitations of the one-on-one surveys, the following results lend insight to BC's farmers' market customers. The average amount respondents stated they would spend at the market that day was \$35.98, and the average amount they said they would spend at other businesses in the area was \$44.73. Of the customers surveyed, 63.5% of respondents were female, 36.1% were male. These numbers are not necessarily representative of market shoppers in BC.

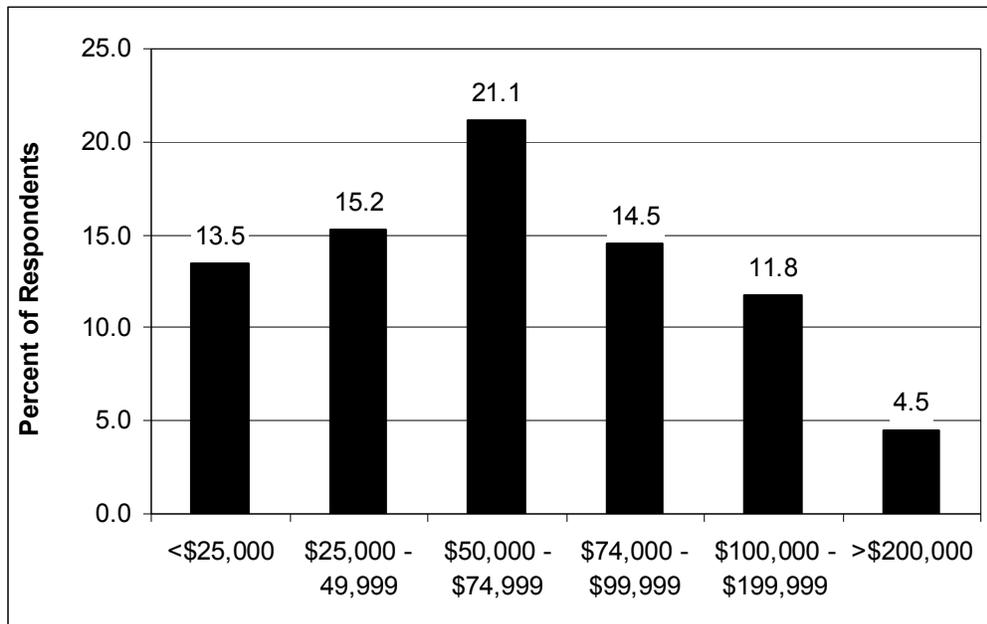
The results in Chart 7 show the age range of farmers' market customers in BC.

Chart 7. Age of respondents (BC: n=274)



The household income of shoppers at farmers' markets in BC is shown in Chart 8. The results show that people from households with a range of incomes shop at BC's markets.

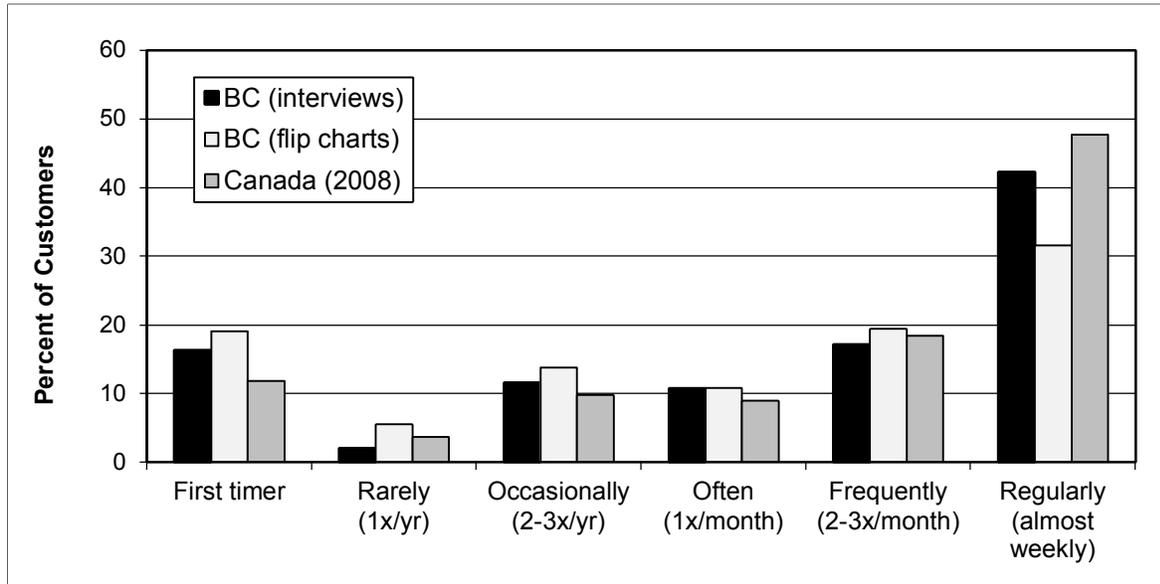
Chart 8. Household income (BC: n=233)



We also asked customers how often they visit the farmers' market they were attending the day of the assessment. Over 40% of customers surveyed in BC shop at the market regularly (almost weekly), with an additional 17% shopping at least two to three times per month (Chart 9). Together, these results indicate that almost six of ten shoppers

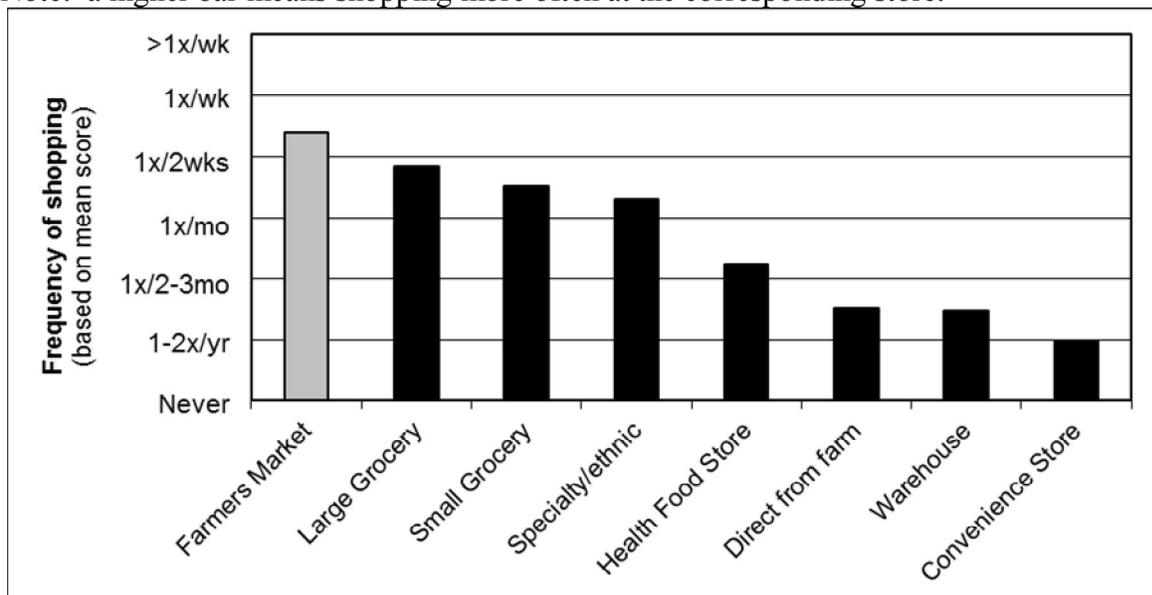
surveyed can be considered among the core group of shoppers at BC markets, although, as noted, the results do over-represent regular shoppers. The actual results are likely to be lower but still significant. Chart 9 also shows the results of the one-on-one interviews compared with the flip chart survey results and the results of the national study.

Chart 9. Frequency of shopping at farmers' markets
(BC (interviews): n=251; BC (flip chart): n=9,874; Canada (2008): n=3,167)



We also asked shoppers where and how often they buy groceries at other food retail outlets during the outdoor market season. The people surveyed indicated that they shop more often at the farmers' market than at other food retail outlets (Chart 10, next page).

Chart 10. Where shoppers shop during the outdoor market season (BC: n=290)
Note: a higher bar means shopping more often at the corresponding store.



Part of the answer to explain the shopping pattern of market customers is evident in Chart 11, which shows the relative importance of factors customers consider when buying food.

During the farmers' market season the five most important factors to market customers are:

- Nutritional content
- Grown/produced in BC
- In season
- Grown/produced locally
- Animal welfare

Brand name, low price, and certified organic are among the lowest rated factors that influence shoppers' food purchasing decisions.

We also asked customers how long they spend at the market (Chart 12) and how much of that time they spend talking with vendors and friends (Chart 13). The results for all BC shoppers surveyed highlight the important social aspect of farmers' markets. Almost 70% of all respondents said that they spend over 30 minutes at the market, and over half (53.8%) of all respondents said they spend at least half their time at the market socialising with others.

Chart 12. Amount of time customers spend at the market (BC: n=290)

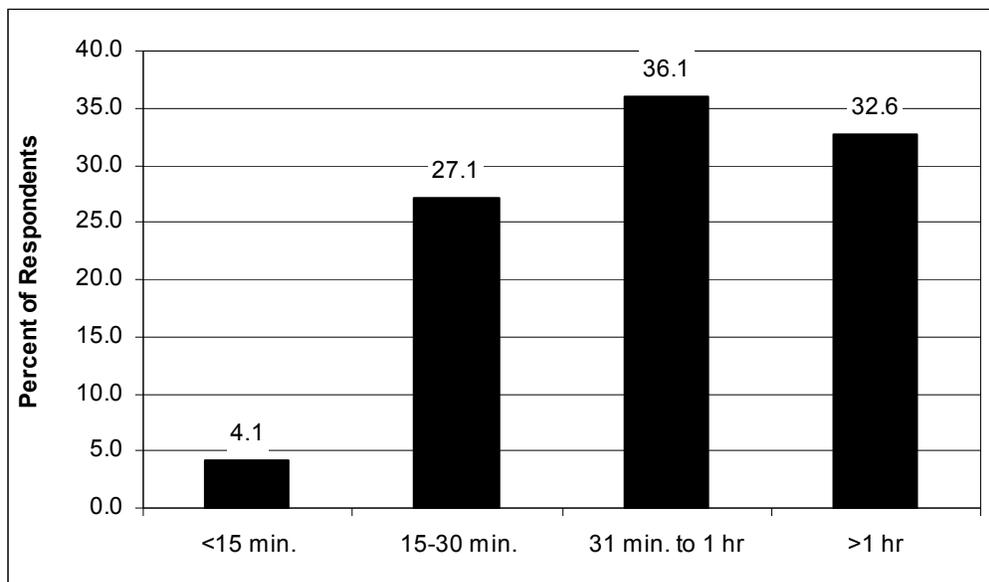


Chart 11. Factors people consider when buying food: BC (n=289)

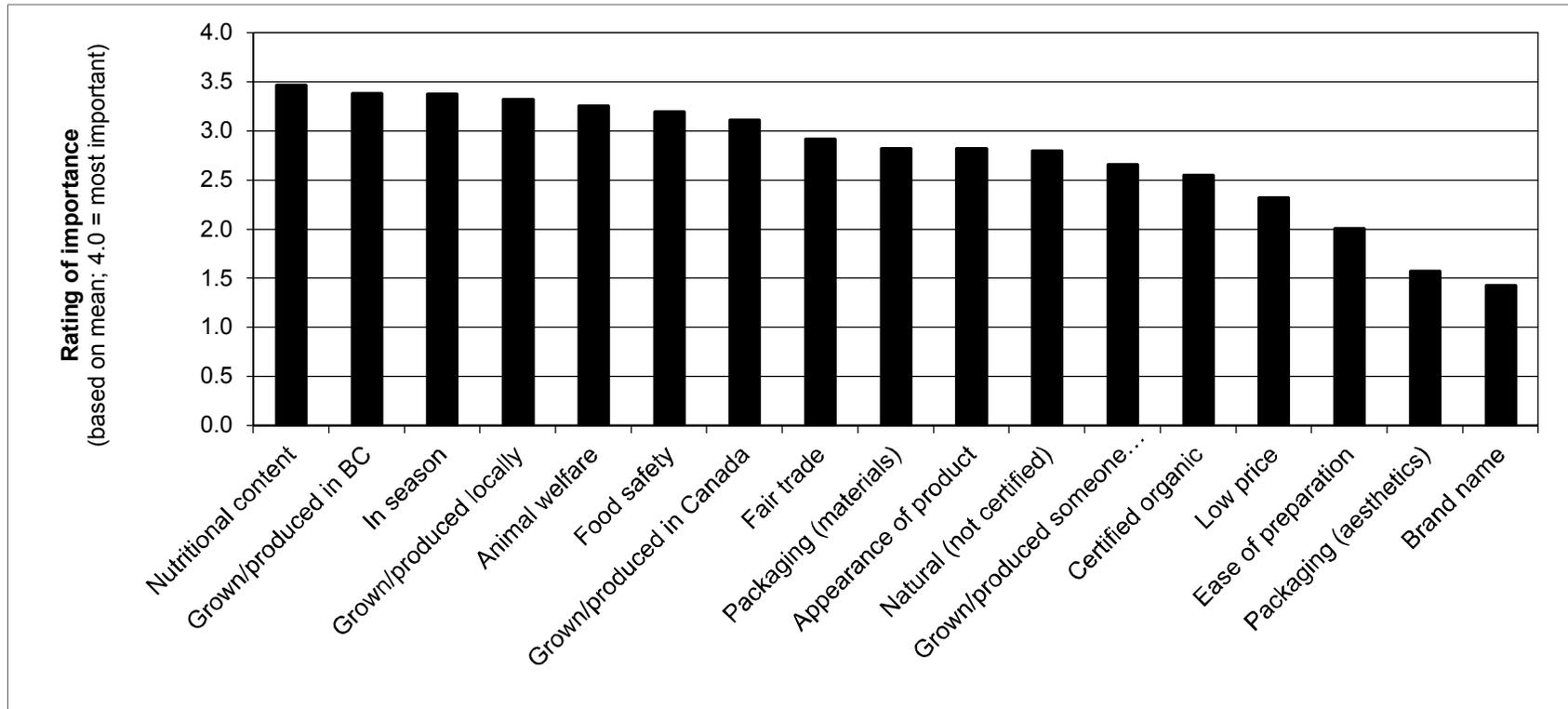
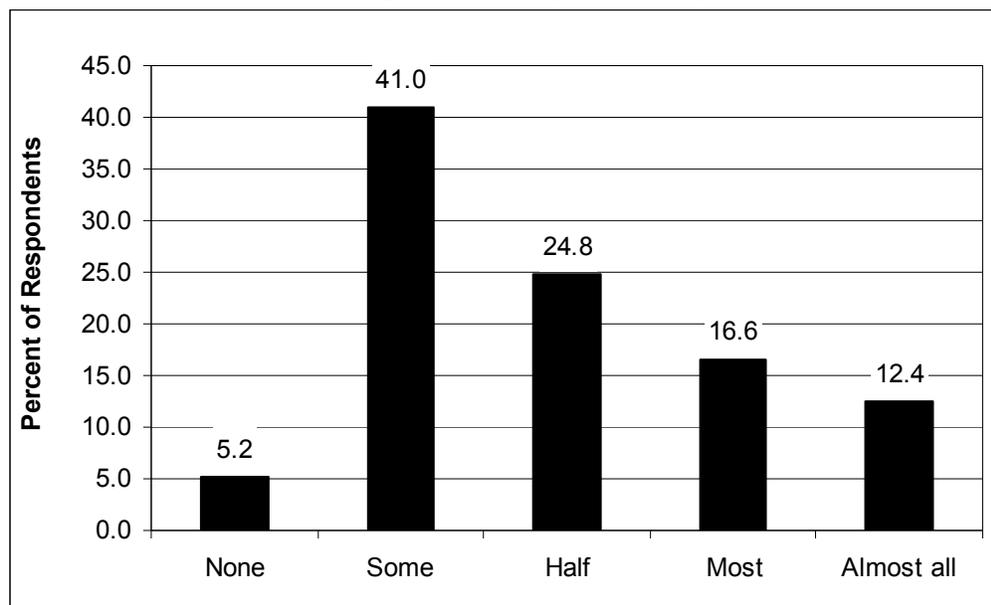


Chart 13. How much of your time at the market did you spend, or will spend, talking with vendors, friends, and other acquaintances? (BC: n=290)



The results of the above two questions are combined in Table 3. 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 vendors, friends, and acquaintances. Altogether, these people represent 45% of the shoppers surveyed at BC’s farmers’ markets.

Table 3. Time spent at market talking with others (percentage) (BC: n=290)

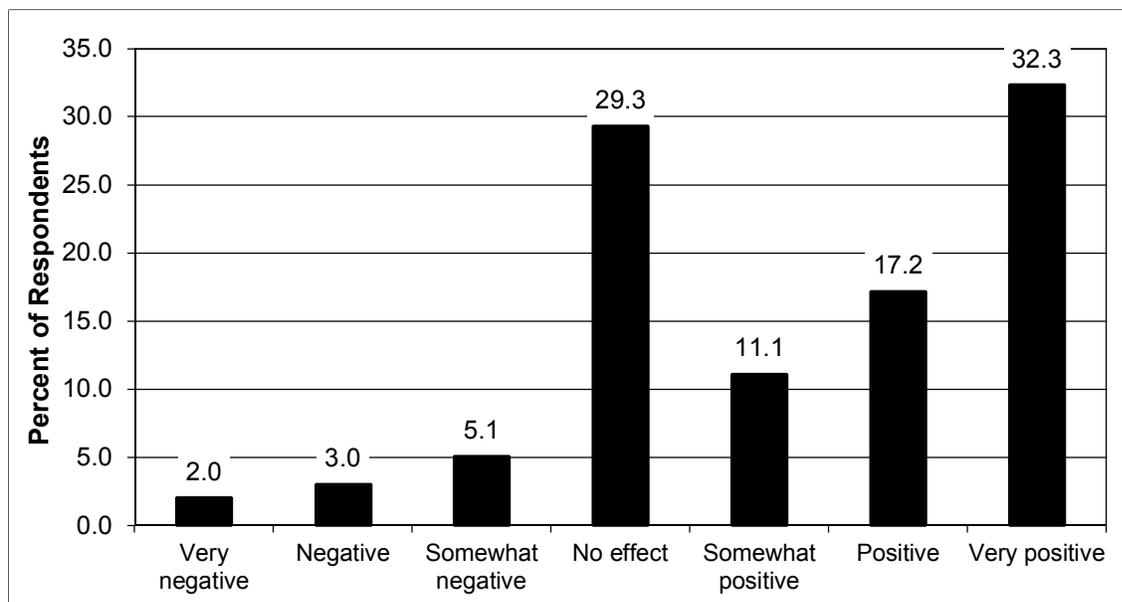
		How time spent					Total
		None	Some	Half	Most	Almost all	
Time spent at market	<15 min.	1	2	0	0	0	4
	15-30 min.	2	17	5	3	0	27
	31 min. to 1 hr	1	16	11	5	4	36
	>1 hr	1	7	9	9	8	33
Total		5	41	25	17	12	100

Business survey

Based on availability of businesses for interviews, and whether they are open on market days, we conducted surveys with 101 neighbouring businesses. Responses from neighbouring businesses were mostly positive, as evident in Chart 14 (next page): 60% of businesses reported at least a positive effect and one in three noted a ‘very positive’ effect of the market on their business. One benefit many businesses stated was that the market helped to draw people to their businesses with many businesses noting positive correlations between market days and sales increases. As well, some businesses opened earlier, closed later, hired more staff, or made sure their best staff was present on market days. Even in cases where businesses reported that the market did not affect them, the businesses often expressed strong support for the farmers market because of its positive impact on the community. Negative

concerns centred on reduced parking for their customers, with very few concerns about direct competition.

Chart 14. Effect of market on neighbouring businesses (n=101)



Information collected from the customer survey further indicates the importance of farmers' markets to local economies. Eighty percent of customer survey respondents said the farmers' market was their primary reason for being in that area of town that day. As well, 54.7% said they would do additional shopping at neighbouring businesses that day, and of these people, almost 40% of them said they would not have visited those businesses that day if they had not come to the farmers' market. In addition, as noted above, almost half of all respondents said they would spend over 30 minutes at the market and would spend at least half of that time talking with others. These results show that in addition to being a place to find local, seasonal food, farmers' markets are also places to come together to build community.

Economic Benefits

To measure the economic benefits of farmers' markets means 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 to get to the market (e.g., seeds, feed, ingredients, etc.).

Economic benefits, which can include direct, indirect, and some induced effects, are measured in terms of revenue (\$), output (\$), and employment (jobs). In this study we measure only

revenues. We chose to calculate revenue benefits using a multiplier of 1.5^v. This multiplier means that for every dollar spent at the market, another \$0.50 is spent in the local economy. Compared to some other studies of farmers' markets, this multiplier is conservative.

The annual economic benefit is calculated by multiplying direct annual sales by the multiplier (1.5). Direct annual sales are calculated as follows:

$$\text{Average expenditure by customer} \times \text{Number of spending customers per session}^{\text{vi}} \times \text{Number of sessions per year}^{\text{vii}} \times \text{Seasonal factor}^{\text{viii}}$$

For all farmers markets in BC, seasonally adjusted annual direct sales are \$113.69 million. Using a multiplier of 1.5, the annual economic benefit is approximately:

Annual economic benefits (2012): \$170.5 million

This calculation means that BC's markets contribute substantially to the provincial economy each year. These monies benefit not only market vendors but also the local businesses that supply these vendors. In 2006, the economic benefit of BC's farmers' markets was estimated at \$69.02 million.^{ix} This supports the general view that farmers' markets in BC have grown over the past six years.

Acknowledgements

The BC Association of Farmers' Markets and Dr. David Connell would like to thank all the farmers' markets that participated in this assessment and for providing a team of volunteers to help conduct the assessments. Financial and in-kind support was provided by participating farmers' markets. The BCAFM wishes to acknowledge the financial assistance of Agriculture and Agri-Food Canada and the Investment Agriculture Foundation of BC for making this study possible. We would also like to acknowledge the Vancity Community Foundation's contribution to the study.

The work of this project would not have been completed without a great project team. Georgia Stanley provided invaluable assistance to get the project underway and to coordinate activities through to the end. The following people were responsible for conducting the market assessments throughout the province:

Dani Craig, MSc (Research Associate)
Michael Dewar (Research Associate)
Jenica Frisque, MA MSc (Research Associate)
Anna Melnik, MA (Research Associate)

Without their commitment, creativity, and resourcefulness, the project would not have been a success.

End notes

ⁱ Source: Experience Renewal Solutions and David J. Connell (2009). National Farmers' Market Impact Study 2009 Report. Prepared for Farmers' Markets Canada.

ⁱⁱ Lev, Larry, Linda Brewer and Garry Stephenson 2004. *Tools for Rapid Market Assessments*. Corvallis, OR: Oregon State University Extension Service.

ⁱⁱⁱ The average spent per customer is weighted by category based on results of a national study of farmers' markets completed in 2008.

^{iv} The average spent at nearby businesses is weighted by category based on results of a national study of farmers' markets completed in 2008.

^v The number used for multipliers for farmers' markets varies, ranging from 1.21 to 3.0. A multiplier of 2.0 is commonly used for convenience. We chose to use a multiplier of 1.5 as this appears to be more accurate based on studies by Hughes, Brown, Miller, and McConnell (2008) and Otto and Varner (2005). We used a multiplier of 2.0 in the 2006 study; the results from the 2006 study that are cited in this report have been revised based on a 1.5 multiplier.

^{vi} This is based on the estimated crowd count. However, not all people attending the market are included in the calculation. Some people may not spend any money while other people included in the crowd count are members of the same household and should not be double-counted. Based on results of the national study of farmers' markets in Canada in 2008, we estimate that 75 per cent of the crowd count is considered a paying customer.

^{vii} Includes special days, if any, such as 'Christmas markets'.

^{viii} The seasonal factor accounts for varying sales/crowd levels during the season. For the outdoor season, markets generally start off slow and peak for a number of weeks during the summer and then decline. The seasonal factor is calculated for each market based on data collected from the market's manager and long-time vendors. A seasonal activity chart for your market is included in the Appendix.

^{ix} The results of the 2006 study have been revised to reflect updated and more accurate assumptions about estimating the economic benefits of farmers markets. For example, some of the assumptions are based on the results of the national study of farmers markets completed in 2008, which included interviews with 3,174 market shoppers across Canada.