

# ECONOMIC AND SOCIAL BENEFITS ASSESSMENT

## FINAL REPORT

### Prince George Farmers' Market

Prince George, British Columbia

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

November 20, 2012

Prepared by:

**David J. Connell, PhD RPP**  
**Michael S. Dewar, MA Candidate**

*Funding provided by:*

Canada



**Vancity** Community Foundation

## 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 assessment completed for the Prince George Farmers' Market on September 8, 2012. It includes results of a province-wide assessment of BC's farmers' markets and incorporates some results from a national study of farmers' markets completed in 2008<sup>i</sup>.

The provincial 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 community 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 builds upon the success of a similar project completed in 2006. Six years later, by using similar methods we were able to assess some changes that have taken place during this time<sup>ii</sup>. In total, 33 assessments were completed across the province in 2012.

Highlights of results for the Prince George Farmers' Market:

- **The estimated economic benefit of the Prince George Farmers' Market to the local economy is approximately \$1.4 million annually**
- **The estimated number of market customers on assessment day: 2,190 customers**
- **Over 400 market visitors participated in the study**
- **Average customer spending per visit: \$27.22**
- **49.8% of the survey respondents visit the market either 'regularly' (almost weekly) or 'frequently' (2-3 times per month)**

The Prince George Farmers' Market has been operating since 1996. As the results of this study show, the market has grown significantly over the past six years, with an estimated annual economic benefit of \$1.4 million in 2012 compared to \$865,000 in 2006. This growth can be attributed to increases in the average amount spent by customers and the total number of customers. In 2012, customers spent \$27.22 each on average, compared to \$22.55 in 2006. This average customer spending at the Prince George Market is lower than the provincial average and the national average for large-sized markets. The Market gets about 45,500 shopper visits annually, including an estimated 2,190 shoppers on the day of the assessment

(September 8, 2012). The average number of visitors per hour to the market is comparable with other markets of its size in BC.

Overall, the Prince George Farmers' Market has a solid customer base. About 50% of respondents visit the market at least two to three times per month. The 2012 results are very similar to the 2006 percentages of customer visits, although slightly lower in regular visitors and slightly higher in first-time visitors.

As part of this year's assessment, the Prince George Farmers' Market asked their customers how often they would visit the market when it moves to its new location downtown. The responses to this question are very similar to shopping patterns at the current location, which suggests that the location of the market may not be a significant factor when deciding to attend the market.

## DESCRIPTION OF MARKET

### Prince George Farmers' Market:

Market Website:

<http://www.farmersmarketpg.ca/web/index.php>

<http://www.bcfarmersmarket.org/markets/marketdetails.asp?marketID=171>

We are open Year Round! Every Saturday we have vendors eager to show you their talents. All goods for sale are home made, baked or grown locally or within the Province of British Columbia. Over eighty vendors offer wares that change with the seasons, including fruits, vegetables and herbs, bread and baked goods, sweet and savoury preserves, specialty meats, bedding plants, cut flowers, soaps, woodcrafts, art, clothing, home and garden decor and jewelry and so much more! We have food to purchase onsite...sit at our cozy tables and join us for lunch! Entertainment monthly and weekly draws for Market Bucks. See you at the Market!

|                      |   |
|----------------------|---|
| <b>Availability:</b> | Every Saturday, Year-round<br>8:30am – 2:00pm   |
| <b># Vendors:</b>    | 80  |
| <b>Location:</b>     | 3rd and George St, Prince George  |
| <b>Contact Info:</b> | Nancie Krushelnicki, President<br>Prince George Farmers' Market Association<br>PO Box 2812<br>Prince George, BC V2N 4T6 |

## RESEARCH METHOD

The assessment of individual markets in BC was organised around two sets of activities: rapid market assessment and market surveys. These are the same methods 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' markets. 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 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. 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. 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?
5. How often would you visit the Prince George Farmers' Market when it moves to its new location downtown?

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

## 2) Market surveys

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

- a) Customer surveys. 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. The small sample size means 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 the market and neighbouring businesses. Some of the customer survey data was aggregated at the provincial level.
- b) Business surveys. Businesses located near the farmers' market 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 will lend insight to how relations might be further developed. The business information will also help to understand the relation between farmers' markets and businesses generally. Surveys were not completed at farmers' markets that did not have other businesses located nearby.

Together, the market assessment and the more detailed market surveys improved our understanding of what makes the Prince George Farmers' Market successful and how it contributes to the local area, in terms of both its economic and social benefits.

## RESULTS

This section reviews 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

The weather on the day of the assessment was sunny and about 28 degrees Celsius by mid-day. There were approximately 80 vendors present.

#### *Crowd count*

The total estimated number of people attending the Prince George Farmers' Market on September 8, 2012, was 2,190.

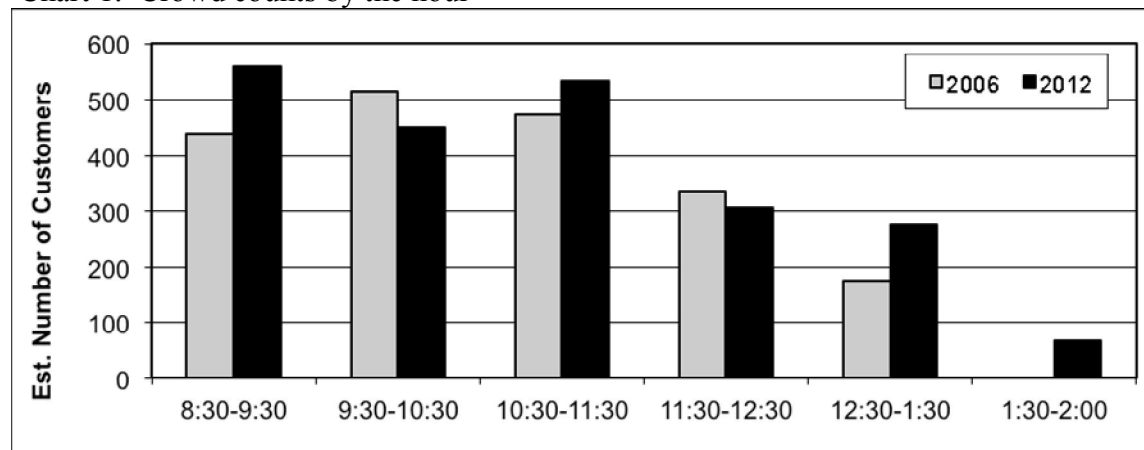
The actual and extended counts for the assessment are shown in Table 1. The total estimated counts are also shown in Chart 1.

Table 1. Estimated Crowd Count

| Time period   | Count period  | Actual count | Extended total |
|---|---------------|--------------|----------------|
| 8:30-9:30   | 8:55-9:05am   | 93           | 558            |
| 9:30-10:30  | 9:55-10:05am  | 75           | 450            |
| 10:30-11:30   | 10:55-11:05am | 89           | 534            |
| 11:30-12:30   | 11:55-12:05pm | 51           | 306            |
| 12:30-1:30  | 12:55-1:05pm  | 46           | 276            |
| <b>Estimated total crowd count on September 8, 2012</b> |               |              | <b>2,190</b>   |

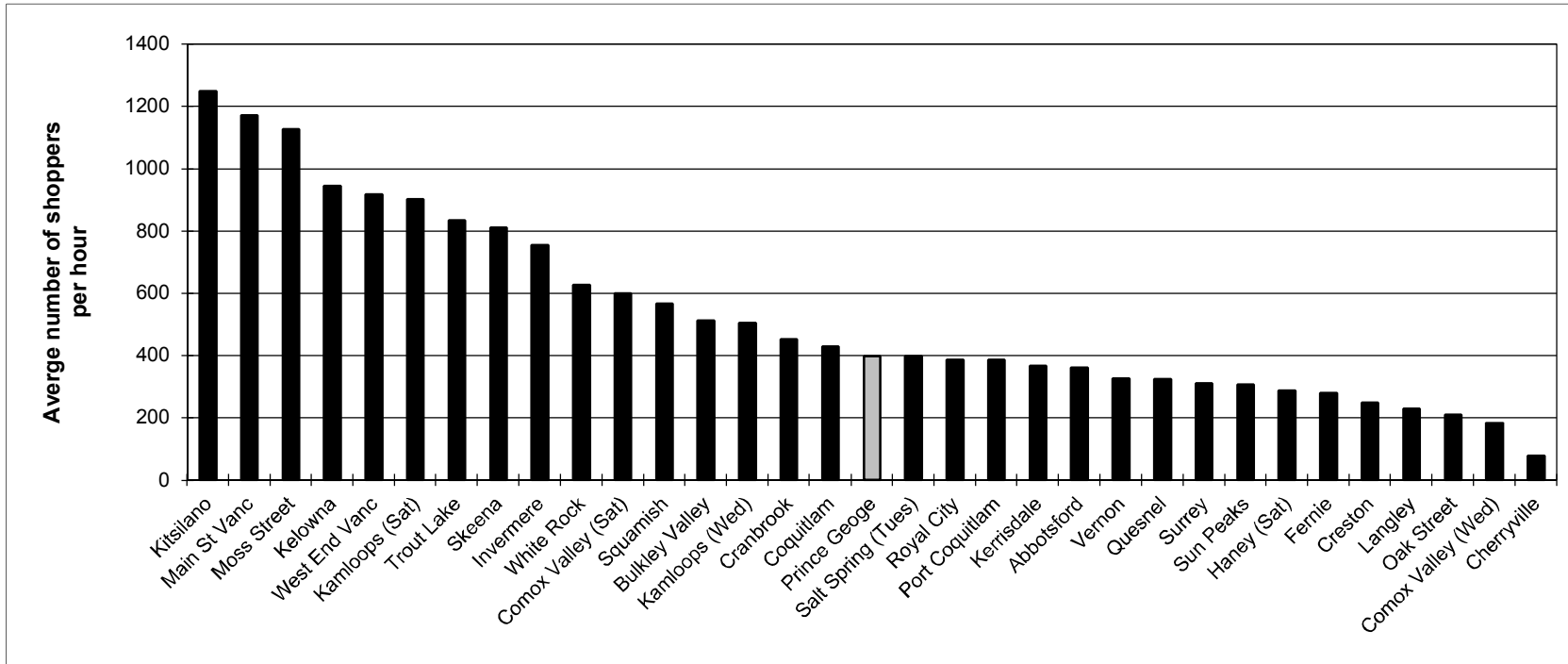
Chart 1 (below) shows the estimated crowd totals for each hour for both 2012 and 2006. Market attendance was fairly steady for the first hours before decreasing during the late morning. Market attendance drops off significantly during the final half hour. These results are similar to the results from 2006.

Chart 1. Crowd counts by the hour



As shown in Chart 2 (next page), the number of shoppers attending the Prince George Farmers' Market is similar when compared to other markets that we assessed in BC. The data are based on the average number of shoppers attending a market on an hourly basis (not on the total number of shoppers).

Chart 2. Number of shoppers at BC farmers' markets (average hourly crowd at peak of season)





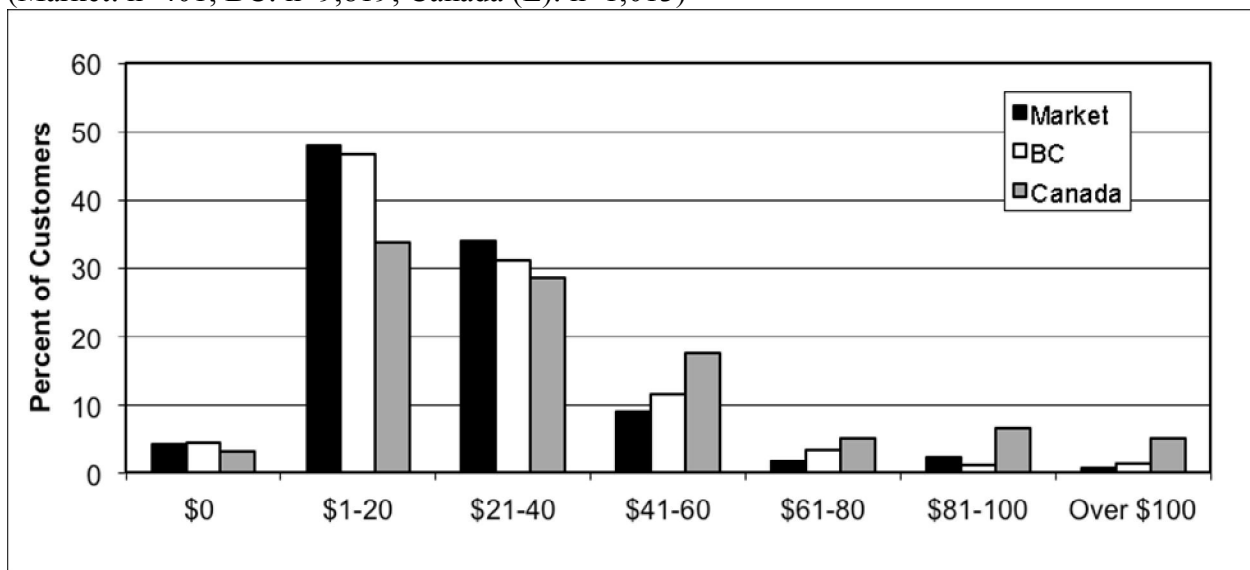
*Flip-chart survey*

Approximately 400 people responded to the dot survey, which is about 18% of the estimated crowd count. The following five charts show the results for each of the flip chart survey questions.

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

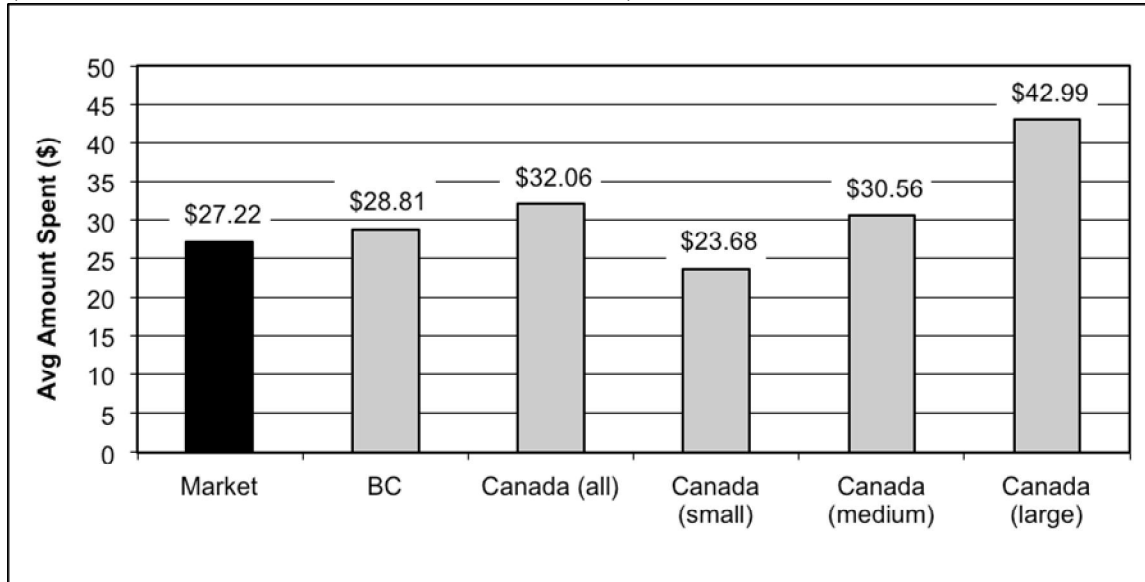
Overall, respondents spent an average<sup>iii</sup> of \$27.22 each on the day of the assessment. As shown in Chart 3, most customers surveyed (47.9%) said they would spend up to \$20 at the market that day. The average amount spent by shoppers at the Prince George Farmers' Market in 2006 was \$22.55.

Chart 3. How much have you spent, or do you plan to spend, at the market today?  
(Market: n=401; BC: n=9,819; Canada (L): n=1,013)



The results shown in Chart 4 (next page) illustrate how the Prince George Farmers' Market compares to the average amount spent by customers at all BC markets and at small (<20 vendors), medium (20-39 vendors), and large farmers' markets (40+ vendors) in Canada. As a large market, Prince George Farmers' Market has a higher percentage of shoppers who spend between \$1-\$40, and a lower percentage of shoppers who spend more than \$40.

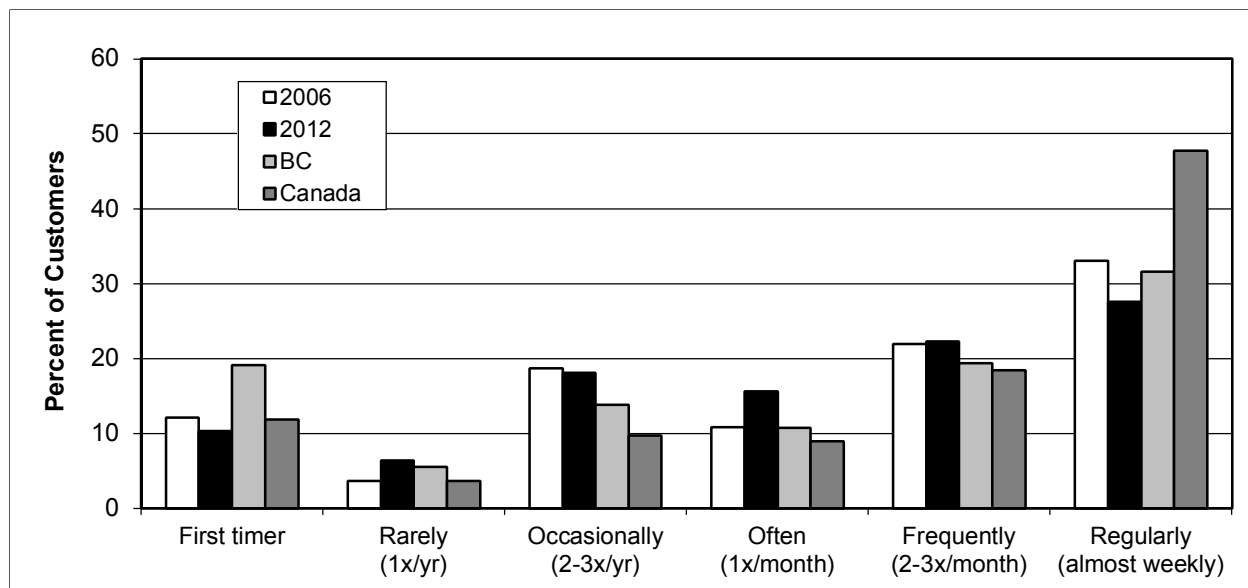
Chart 4. Average amount spent by market shoppers  
(Market: n=401; BC: n=9,819; Canada: n=3,167)



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

As shown in Chart 5, about 50% of respondents visit the market at least two to three times per month, which means that Prince George has a solid core of regular customers. First-time visitors to the market accounted for 10.2% of respondents. This pattern is similar to the results of the assessment in 2006. The chart also compares the Prince George results with provincial and national averages.

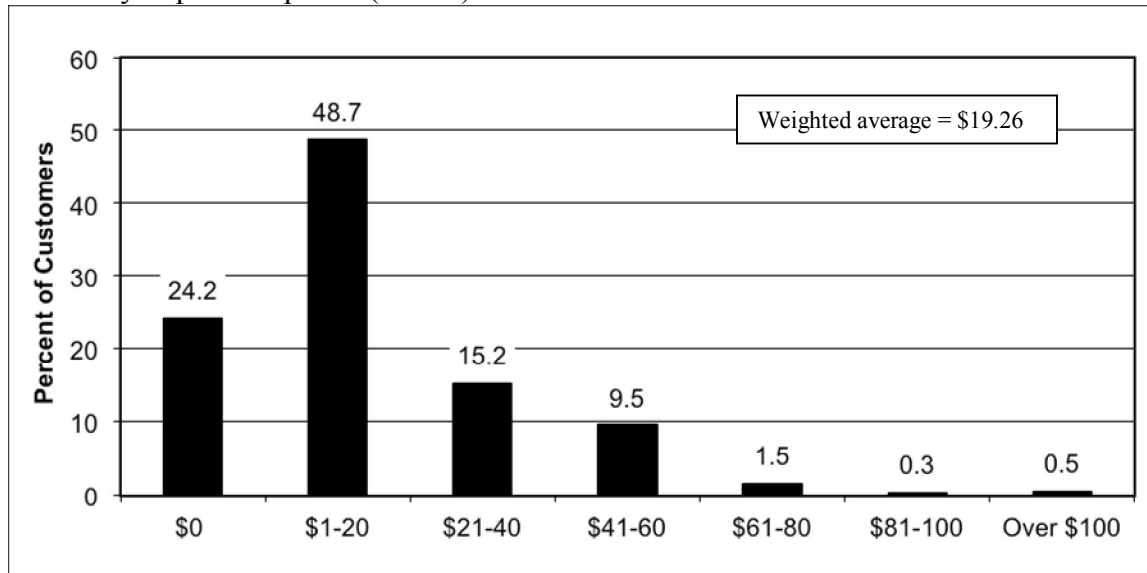
Chart 5. How often do you come to this market?  
(Market (2006): n=306; Market (2012): n=410; BC: n=9,874; Canada (L): n=1,013)



**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 6 shows the range of additional spending by market customers, with 75.8% of respondents saying they would do additional shopping at neighbouring businesses that day. The results are similar to the results of the 2006 assessment. The average amount spent per customer at neighbouring businesses was \$19.26 in 2012, compared to \$16.94 in 2006.<sup>iv</sup> Given the variability among markets, no comparison is made with BC or national results.

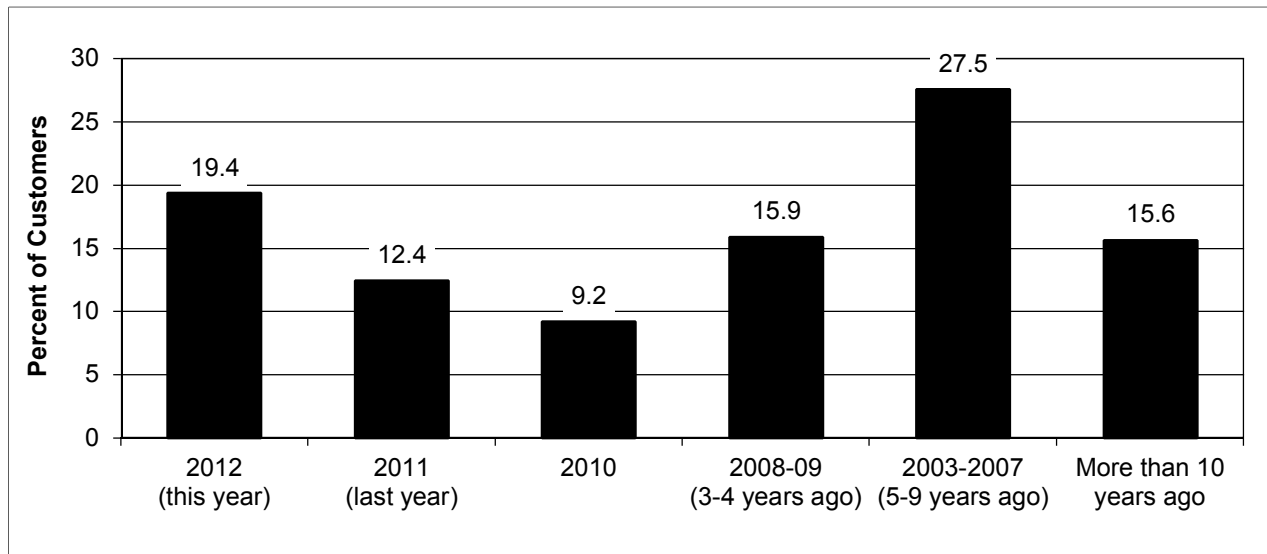
Chart 6. If you plan to do additional shopping or eating while in this area of town today, how much do you plan to spend? (n=388)



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

As shown in Chart 7 (next page), your market has a good portion of long-time, loyal customers. Over forty percent (43.1%) of all customers surveyed have been coming to this market for five years or more, and 15.6% of all respondents have been coming to this market for more than 10 years.

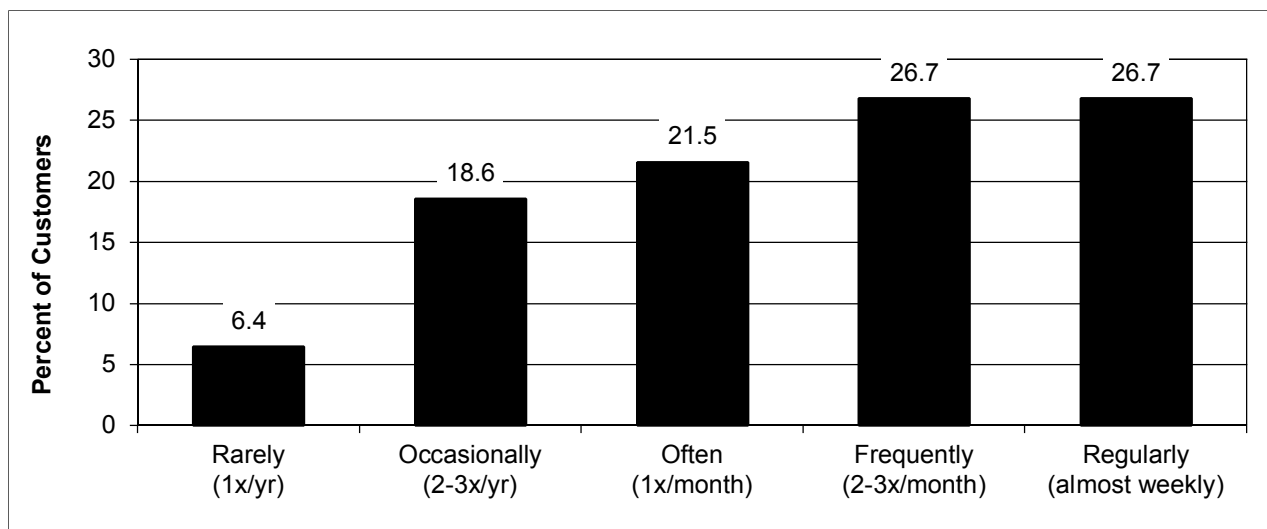
Chart 7. When did you start shopping at this farmers' market? (n=403)



**Question 5. How often would you visit the Prince George Farmers' Market when it moves to its new location downtown?**

As shown in chart 8, the Prince George Farmers' Market can still expect a high frequency of regular (almost weekly) and frequent (2-3x/month) visitors when it moves to its new location downtown. Over a quarter (26.7%) of market shoppers said they would shop regularly at the new market location and 26.7% of shoppers said they would shop frequently at the new downtown location. Only 6.4% of respondents said they would visit the new location rarely. These results are similar to the shopping patterns of customers at the current location.

Chart 8. How often would you visit the Prince George Farmers' Market when it moves to its new location downtown? (n=404)



## Market surveys

### *Customer Survey*

We conducted interviews with 291 customers at 33 markets in BC. The following charts show results of all the customers surveyed across the province. 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). The flip chart surveys show a wider representation of market shoppers. The results in Chart 9 show the age range of farmers' market customers in BC. The household income of shoppers at farmers' markets in BC is shown in Chart 10 (next page). The results show that people from households with a range of incomes shop at BC's markets.

Chart 9. Age of respondents (BC: n=274)

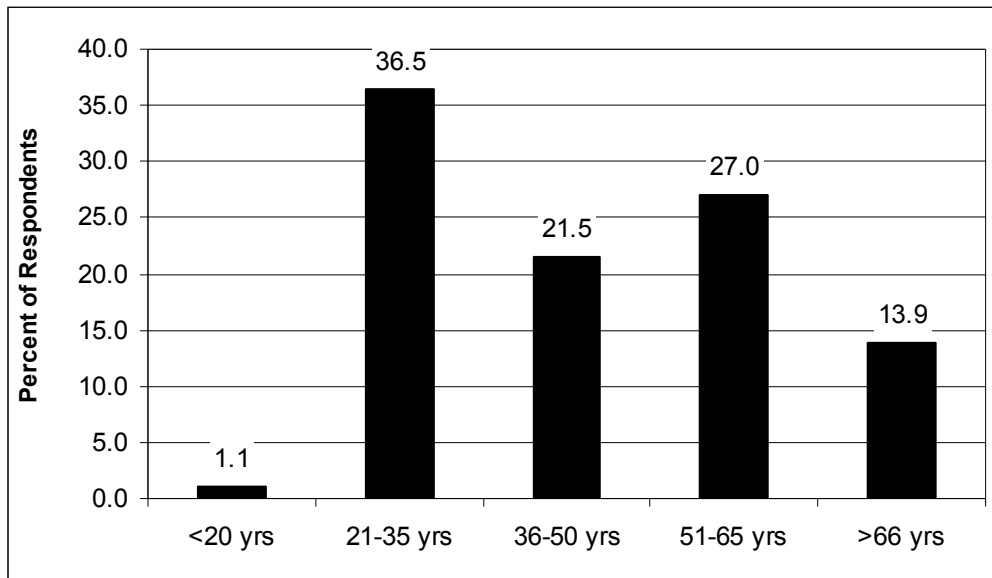
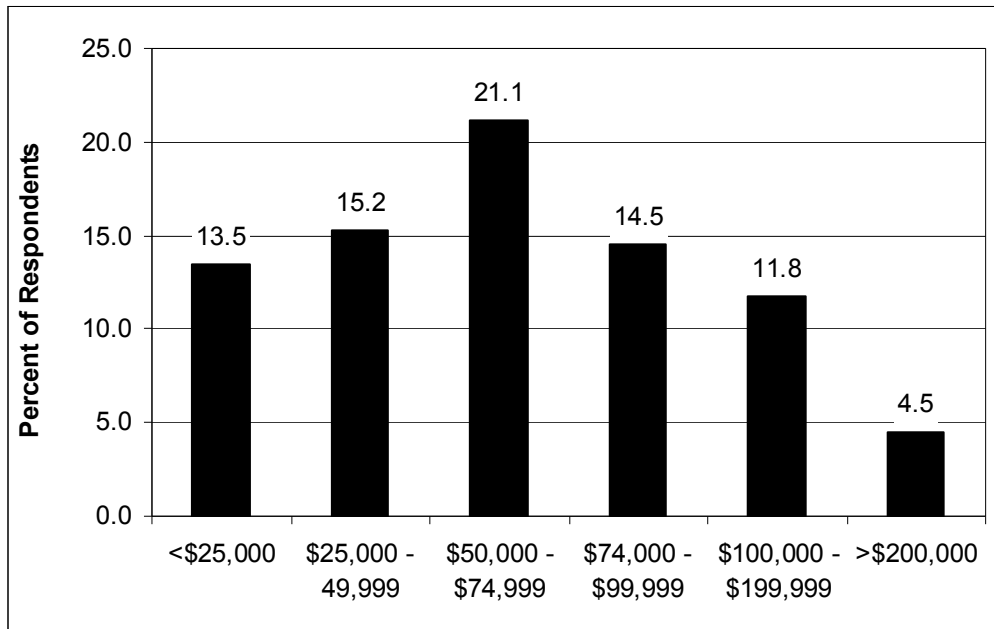
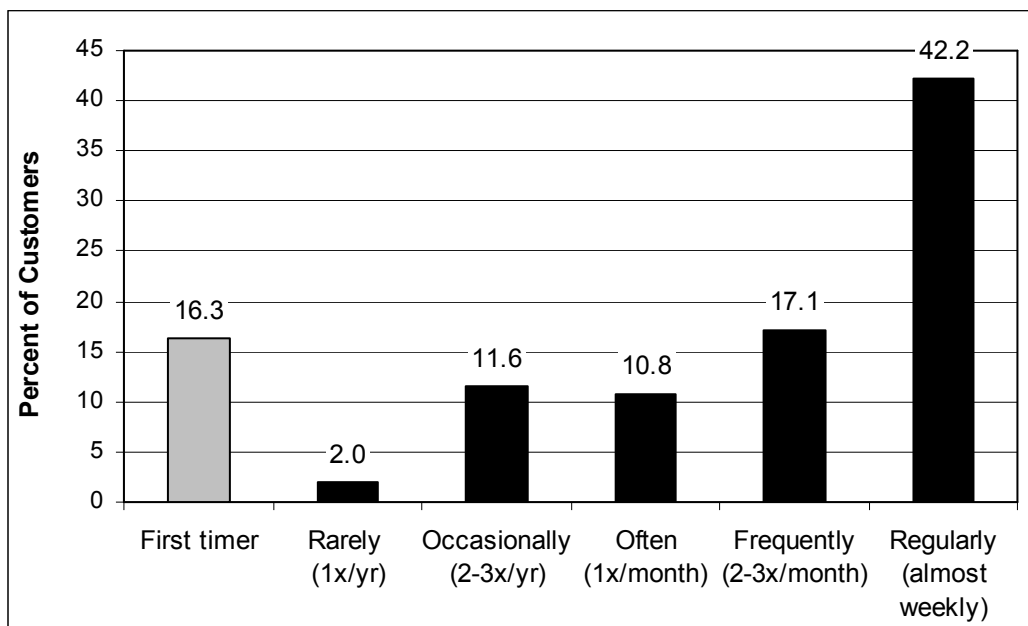


Chart 10. Household income (BC: n=233)



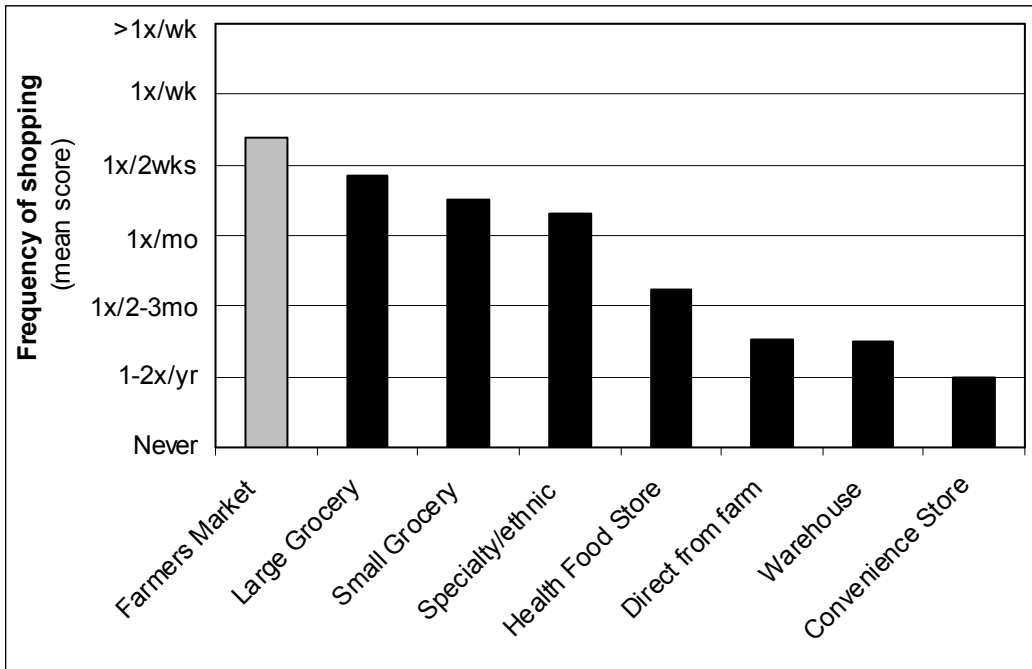
Over 40% of customers surveyed in BC shop at the market regularly (almost weekly), with an additional 17% shopping at least two to three times per month (Chart 11). Together, these results indicate that almost six of ten shoppers can be considered among the core group of market shoppers at BC markets, although, as noted, the results do over-represent regular shoppers. The actual results are likely to be lower but still significant.

Chart 11. Frequency of shopping at farmers' markets (BC: n=251)



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 12).

Chart 12. Where shoppers shop during the outdoor market season (BC: n=290)  
Note: a higher bar means shopping more often at the corresponding store.

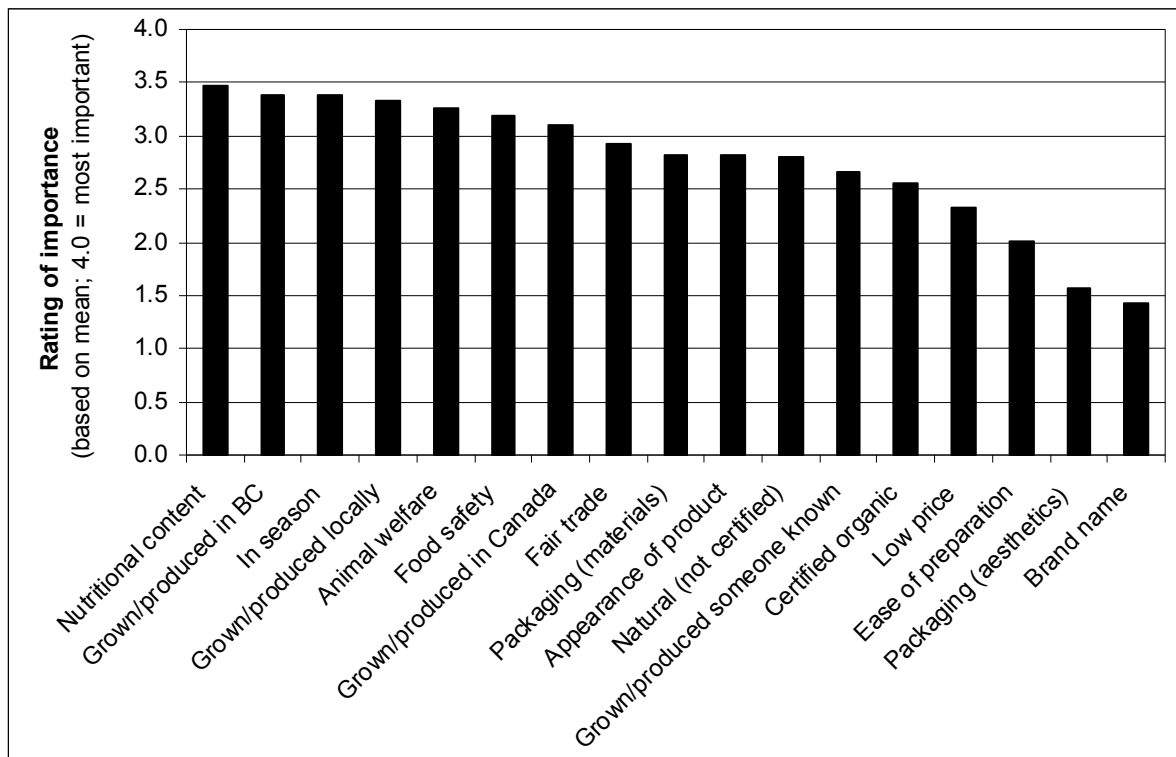


Part of the answer to explain the shopping pattern of market customers is evident in Chart 13 (next page), which shows the relative importance of factors customers consider when buying food. During the farmers' market season the five most important factors to market customers are:

- 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 food purchasing decisions.

Chart 13. Factors people consider when buying food: BC (n=289)



We also asked customers how long they spend at the market (Chart 14) and how much of that time they spend talking with vendors and friends (Chart 15). 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 14. Amount of time customers spend at the market (BC: n=290)

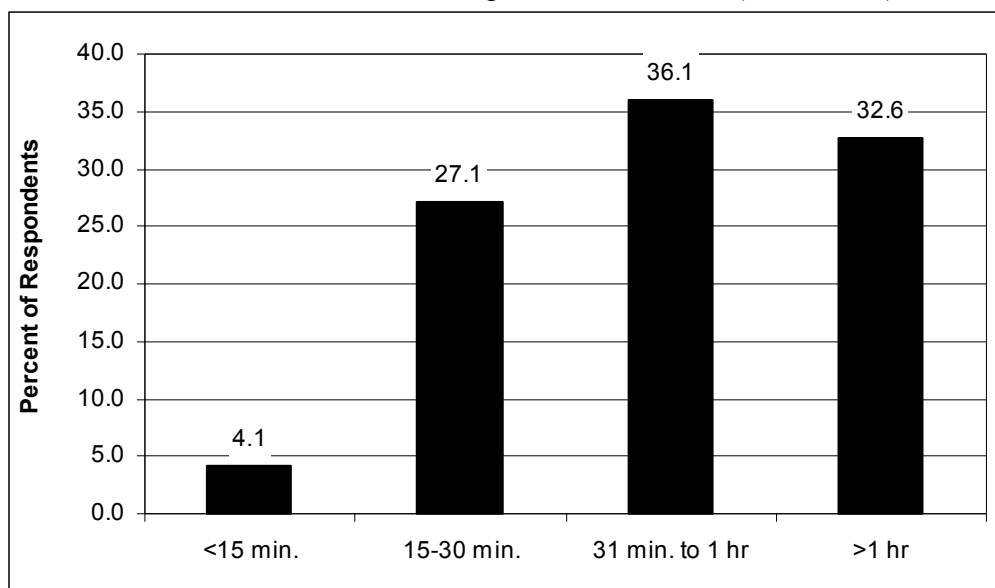
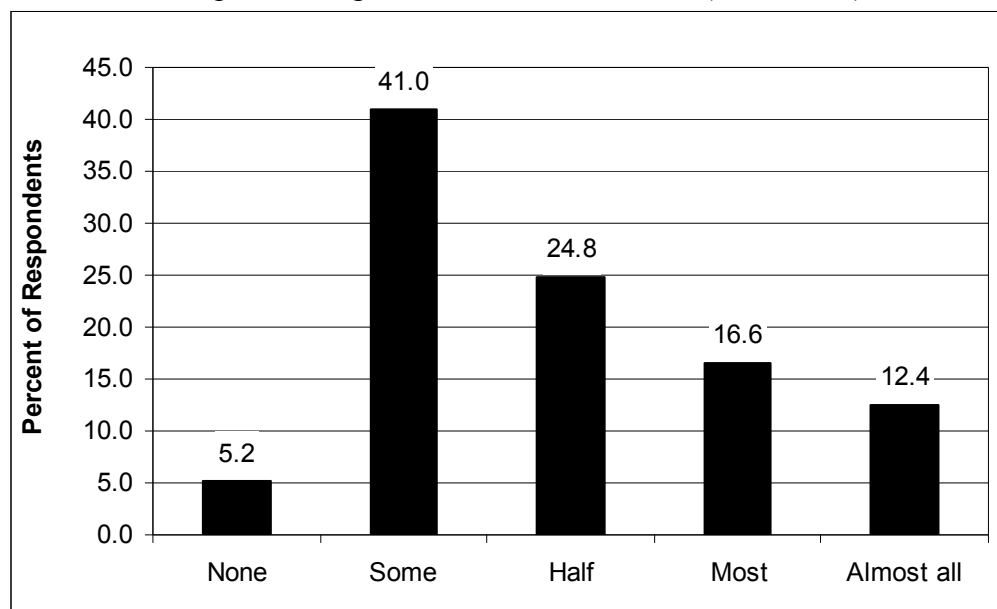




Chart 15. Time spent talking with others at the market (BC: n=290)



The results of the above two questions are combined in Table 2. 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 2. Time spent at market talking with others (percentage) (BC: n=290)

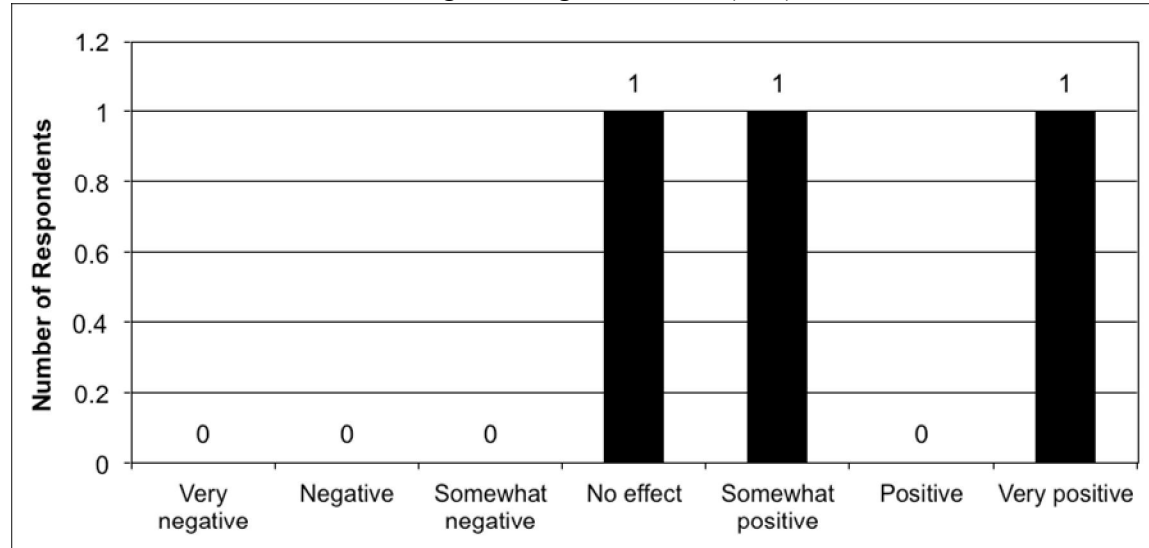
|                      |                 | How time spent |           |           |           |            | Total      |
|----------------------|-----------------|----------------|-----------|-----------|-----------|------------|------------|
|                      |                 | None         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

### *Business survey*

There were several businesses located within visible range of the Prince George Farmers' Market, including a café, restaurant and music store. Based on availability of businesses for interviews, and whether they are open on market days, we conducted surveys with three neighbouring businesses (Chart 16).

Two of the three businesses that reported impacts from the market said that the market is good for getting people downtown and into their stores. One business said that the market is great for them, as people come in to their business to eat before, during and after the market. This business also reported a definite sales increase during the market season, as compared to the winter season. One business reported that the farmers market had no noticeable effect on their business.

Chart 16. Effect of market on neighbouring businesses (n=3)



### Economic Benefits

The information collected in this assessment enables us to measure the economic benefits of the Prince George Farmers' Market. 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<sup>v</sup>. 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 the Prince George Farmers' Market, seasonally adjusted annual direct sales are:

$$\$27.22 \text{ per customer visit} \times 1,643 \text{ spending customers} \times 24 \text{ (adjusted) sessions} = \$929,000$$

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

**Annual economic benefit (2012): \$1,394,000**

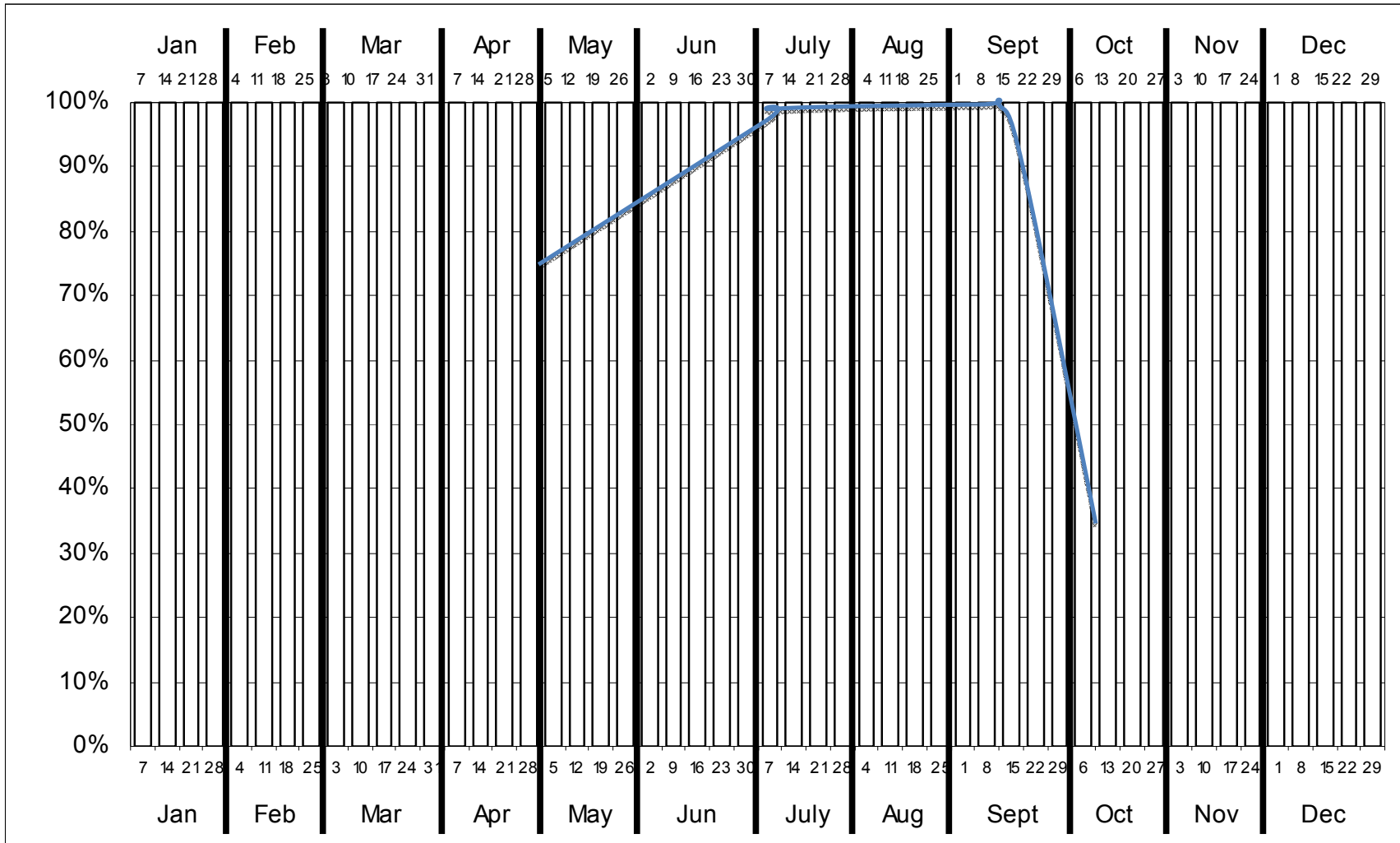
This calculation means that the Prince George Farmers' Market contributes an estimated \$1.4 million to the local economy each year. These monies benefit not only market vendors but also the local businesses that supply these vendors.

In 2006, the economic benefit of the Prince George Farmers' Market was estimated at \$865,000.<sup>ix</sup> This supports the general view that the market has grown over the past six years.

The total estimated annual economic benefit for all farmers' markets in BC is **\$170.5 million.**

We can also assess the 'spillover' effect that the Prince George Farmers' Market has on its neighbouring businesses. Based on survey results, we can estimate the benefits of market customers spending additional dollars at local businesses on the day of the market. Using the same formula as above, the annual economic benefit of additional spending at other neighbouring businesses is over \$725,000.

**Appendix: Seasonal activity chart for Prince George Farmers' Market**



## Acknowledgements

The BC Association of Farmers' Markets and the project team would like to thank the Prince George Farmers' Market for participating in this assessment and for providing a team of volunteers to help conduct the assessment. 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.

## End notes

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

<sup>ii</sup> The results of the 2006 study have been revised to reflect updated and more accurate assumptions.

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

<sup>iv</sup> The average spent at nearby businesses is weighted by category based on results of a national study of farmers' markets completed in 2008.

<sup>v</sup> 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.

<sup>vi</sup> 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.

<sup>vii</sup> Includes special days, if any, such as 'Christmas markets'.

<sup>viii</sup> 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.

<sup>ix</sup> 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.