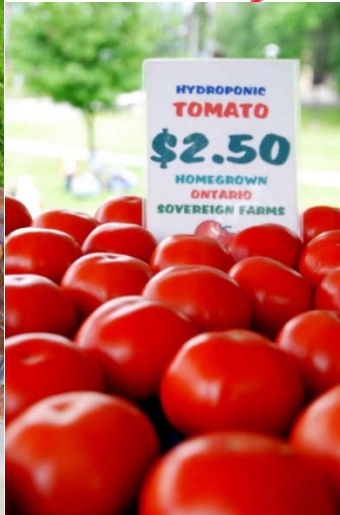




ECONOMIC IMPACTS OF FARMERS' MARKETS IN THE PROVINCE OF ONTARIO



Executive Summary

Farmers markets are a traditional, much enjoyed facet of small town and rural life. Over time they have retained a role in large urban centres. Recently, with growing interest in local food and an appreciation for knowing who produces the food we eat, the number of farmers' markets both in urban centres and in small town and rural Ontario has grown.

There is an implicit understanding that farmers markets contribute to quality of life by providing a relaxed enjoyable retail experience and by promoting interaction between rural and urban citizens. What is less clearly understood are the economic benefits these markets have for participants and for the economy in general.

The research conducted for this study confirms that farmers do benefit from participation in farmers' markets. The opportunity to connect directly with consumers allows small producers access to the market, and the ability to sell retail as opposed to wholesale increases profits for farmers. Also clear is the fact that farmers' markets convey benefits, across many dimensions (including the economic), to the municipalities/communities that host them.

Assessing economic benefits is difficult because of a lack of data related to farmers' markets. To address this, Farmers' Markets Ontario has commissioned ongoing research focusing on the sector. One such exercise quantified the economic activity attributable to farmers' markets.

Based on this data collected by Experience Renewal Solutions Inc. in 2008¹ the estimated level of economic activity associated with farmers' markets in Ontario on a yearly basis was estimated to be, approximately \$792 million. Our research shows that this level of activity translates into **a provincial economic impact of more than \$2.47 billion dollars** including direct, indirect and induced economic impacts of \$400,855,035, \$1,115,520,627, and \$956,315,155 respectively. In addition, these activities are estimated to generate (on an annual basis) nearly \$593 million in labour income, nearly 21,000 jobs and nearly \$1.27 billion in Gross Domestic Product (GDP) across Ontario.



¹ Experience Renewal Solutions Inc. 2009a.

Economic Impacts of Farmers' Markets

In the Province of Ontario

Table of Contents

Executive Summary	i
1.0 Introduction.....	1
2.0 Conceptualizing the Benefits of Farmers' Markets	1
2.1 Benefits to Farmers.....	3
2.1.1 Higher Financial Return on Products	3
2.1.2 Learning New Skills	4
2.1.3 New Markets & Promotional Opportunities.....	4
2.1.4 Reduce Waste of Potentially Salable Product	5
2.2 Social Benefits	5
2.3. Benefits to Consumers	7
2.4 Environmental Benefits.....	8
2.5 Benefits to the Local Economy.....	8
3.0 Measuring Economic Impact of Farmers' Markets in Ontario	12
3.1. Methodology: The Synthetic Regional Input-Output Model	12
3.2 Measuring the Activities Associated with Farmers' Markets.....	15
3.3. Estimating the Economic Impact Associated with Farmers' Markets in Ontario	16
4.0 The Economic Impacts of Farmers' Markets in Ontario	16
4.1. Overall Impacts	16
4.2. Impacts Across Industries	17
4.3. Impacts Across Occupations	22
4.4. The Multiplier Effect Associated with Farmers' Markets in Ontario (Top 50)	23
5.0 Discussion Conclusions	26
6.0 Bibliography.....	27

LIST OF PHOTOS

COVER PAGE

Photo 1	http://www.flickr.com/photos/mopani/3826179579/
Photo 2	http://www.flickr.com/photos/mopani/2866572379/in/set-72157605862016356
Photo 3	http://www.flickr.com/photos/mopani/4614274796/
Photo 4	http://www.flickr.com/photos/mopani/2617749748/
Photo 5	Catharine @ Farmers' Markets Ontario
Photo 6	http://www.flickr.com/photos/mopani/4742973060/
Photo 7	http://www.flickr.com/photos/mopani/2616476837/
Photo 8	Catharine @ Farmers' Markets Ontario
Photo 9	http://www.flickr.com/photos/mopani/2617302962/sizes/o/in/photostream/
Photo 10	http://thesceneinto.com/wp-content/uploads/2010/06/St.Lawrence_Market_2.jpg

FARMERS' MAKET LOGO PAGE

Photo 1	http://www.windsoreats.com/blog/wp-content/uploads/2010/06/aburgmarket.gif
Photo 2	Catharine @ Farmers' Markets Ontario
Photo 3	http://indepthgraphics.com/Indepth%20Graphics/Portfolio/26270B0C-FC19-463C-AEB1-4BFF797F4A0D_files/farmers_market_logo.jpg
Photo 4	http://profile.ak.fbcdn.net/hprofile-ak-snc4/41566_94975069028_8833_n.jpg
Photo 5	http://www.colorbrightongreen.org/site/uploads/images/logo-farmers-market.gif
Photo 6	http://www.tcgn.ca/wiki/uploads/Events2010/WithrowFarmersMarket-logo_revised2-2010-sm.jpg
Photo 7	http://hotpotatocompany.files.wordpress.com/2010/04/ottawa-farmers-market-logo.jpg
Photo 8	http://www.orilliafarmersmarket.on.ca/Upload/image/OrilliaLogoSmall.gif
Photo 9	http://www.hortonfarmersmarket.ca/
Photo 10	http://www.cloverbeltfarmersmarket.ca/
Photo 11	http://en.wikipedia.org/wiki/Hamilton_Farmer's_Market
Photo 12	http://www.farmersmarketatthevillage.ca/index.cfm
Photo 13	http://www.brampton.ca/en/Business/edo/Downtown-Queen-Street/PublishingImages/Farmersmarketlogo2009.jpg

LIST OF PHOTOS

Executive Summary - Photo	http://www.flickr.com/photos/mopani/4742310375/
Photo 1	Catharine @ Farmers' Market Ontario
Photo 2	http://en.wikipedia.org/wiki/File:Hamilton_Farmers_Market.JPG
Photo 3	http://www.flickr.com/photos/mopani/3826058911/
Photo 4	http://www.flickr.com/photos/mopani/2617303430/in/set-72157607098294064
Photo 5	http://www.naumanfarm.com/images/farmers-market.jpg
Photo 6	http://www.flickr.com/photos/mopani/3938069848/in/set-72157622417885644/
Photo 7	http://www.flickr.com/photos/mopani/5042951594/
Photo 8	http://www.flickr.com/photos/mopani/2617308268/
Photo 9	http://www.flickr.com/photos/mopani/2617752338/
Photo 10	http://www.flickr.com/photos/mopani/5023174177/
Photo 11	http://en.wikipedia.org/wiki/File:Hamilton_Farmers_Market_B.JPG
Photo 12	http://www.stlawrencemarket.com/shopping/images/sonwest.jpg
Photo 13	http://forums.steves-digicams.com/attachments/travel-photography/160859d1281732638-st-jacobs-ontario-dsc05158_a.jpg
Photo 14	http://www.visualphotos.com/photo/2x4146522/byward_market_ottawa_ontario_canada_600-02080150.jpg
Photo 15	http://www.maryanncolihan.com/wp-content/uploads/2008/01/horton-front.jpg
Photo 16	http://www.flickr.com/photos/mopani/4742310375/
Photo 17	http://www.flickr.com/photos/mopani/3826179579/
Photo 18	http://www.flickr.com/photos/mopani/5041797145/sizes/l/in/set-72157624947375913/
Photo 19	http://www.flickr.com/photos/mopani/2616931843/in/set-72157605858427193
Photo 20	http://www.flickr.com/photos/mopani/2616932121/in/set-72157605858427193
Photo 21	http://www.flickr.com/photos/mopani/4848918277/
Photo 21	http://www.flickr.com/photos/mopani/5023975730/
Photo 22	http://www.flickr.com/photos/mopani/5041577759/
Photo 23	http://www.flickr.com/photos/mopani/4613768500/
Photo 24	http://www.flickr.com/photos/mopani/3827613556/

1.0 Introduction

Farmers' Markets have been a fixture in many Ontario towns and cities for centuries. While their prominence as vital market and provisioning locations has certainly changed over the decades, they continue to be an important generator of economic, social and environmental benefits at all spatial scales – from the local to the global. The purpose of this report is to quantify the economic impacts stemming from farmers' markets in the Province of Ontario on the basis of a market census taken by Experience Renewal Solutions Inc. for Farmers' Markets Ontario (FMO) in 2008.

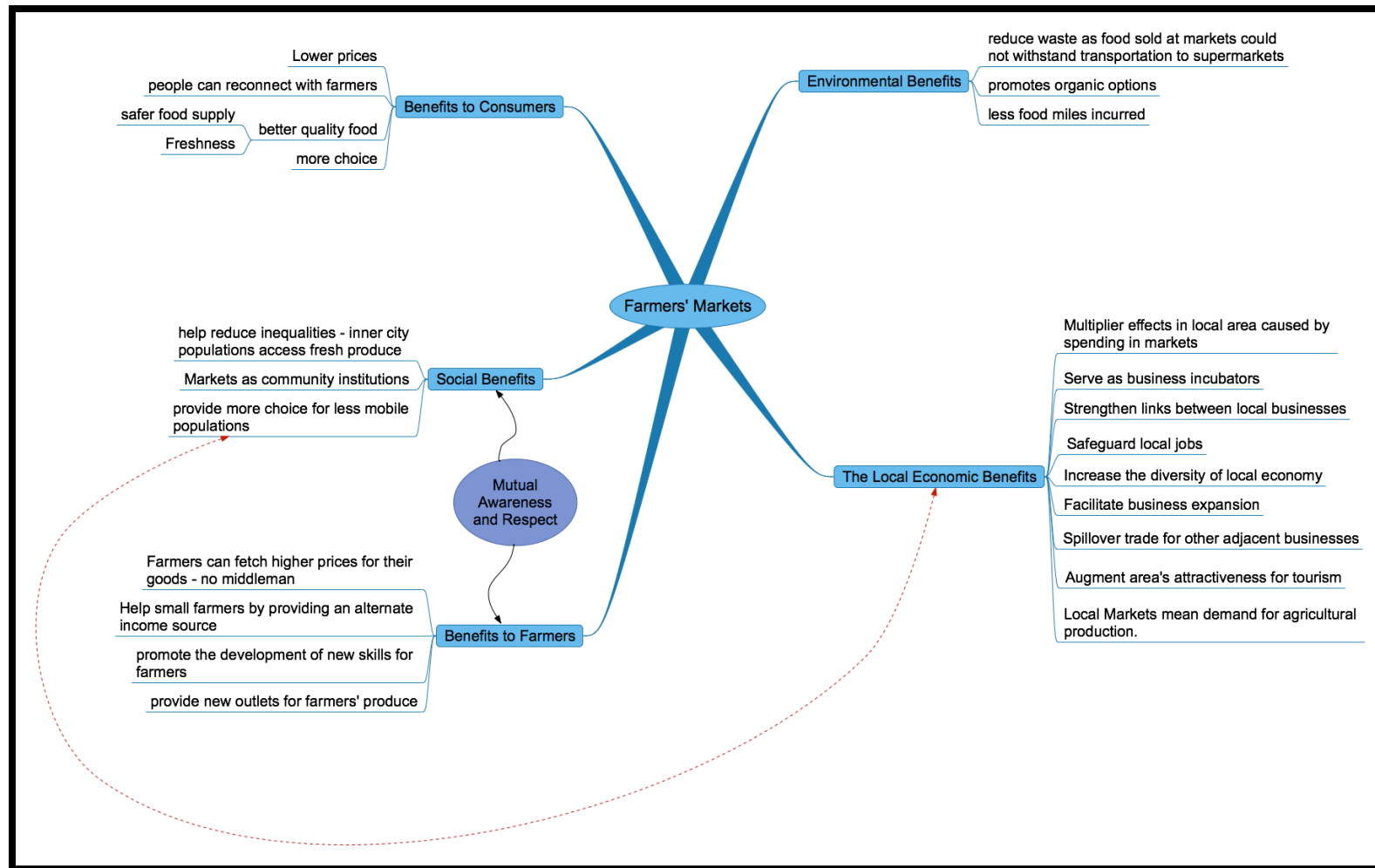
2.0 Conceptualizing the Benefits of Farmers' Markets

Quantifying the benefits associated with farmers' markets in Ontario first requires that we understand the ways in which these markets and the broader social and environmental systems interact. **Figure 1** presents a simplified schematic of the manner in which farmers' markets are connected to broader systems. This view of the system was used to conduct a detailed review of available international literature to validate our conceptual model and collect available evidence vis-à-vis these connections.

Figure 1 presents farmers' markets at the centre of a complex system generating many types of benefits including benefits to the farmers themselves, benefits to local communities which host markets, as well as broader social and environmental impacts. The overwhelming preponderance of evidence points to the fact that farmers' markets are having an overall net benefit in Ontario on all of these dimensions; and that in a context of ever increasing fuel prices and mounting concern regarding the deleterious effects of burning fossil fuels, farmers' markets are becoming even more attractive.



Figure 1: Understanding the Benefits of Farmers' Markets



2.1 Benefits to Farmers²

Evidence suggests that farmers' markets offer many benefits to farmers that are not available through standard marketing channels (e.g., brokers, supermarket chains, etc.). These benefits include, but are necessarily limited to:

Higher financial return on products (i.e., direct producer to consumer - no middle-men);

Learning new skills (e.g., marketing, entrepreneurship, economic principles, etc.);

Ability to diversify the markets for their products and reduce reliance on a single outlet (e.g., brokers);

Promotional opportunities; and,

The reduction of unsalable (i.e., wasted) product (due to non-conforming shape, size, colour, etc., or degree of ripeness).

2.1.1 Higher Financial Return on Products

International evidence exists to suggest that vendors at farmers' markets generally benefit from higher returns on products offered for sale at markets relative to traditional channels dominated by brokers or large supermarket corporations.³ Some

research into the North American context suggests that farmers may realize 40 to 80 percent more in financial return on product by participating in farmers' markets over traditional channels.⁴ On a dissenting note, the Alberta Department of Agriculture and Rural Development, in a 2008 report, tempered this optimism regarding the returns from farmers' markets by noting that these venues can also be extremely competitive and that this can drive down prices, especially if vendors are not aware of the collective costs of their singular actions. However, overall, it appears as though the evidence supports the view that farmers' markets offer growers the potential for higher profits and a better standard of living.



² The author would like to acknowledge the extremely capable research assistance provided by Mr. Kevin Roy (Undergraduate Student, Urban Studies Program, University of Toronto) in the production of this literature review.

³ Feenstra and Lewis, 1999; Sanderson et al., 2005; Brown et al., 2007).

⁴ Sanderson et al., (2005),

2.1.2 Learning New Skills

Farmers' markets, to some extent, represent a natural extension of something farmers have long practiced – direct sales. Relative to the more traditional road-side stand however, farmers' markets offer vendors the opportunity to acquire skills that they would not normally develop. For example, in their 2005 report⁵, the Metcalf Foundation discusses the skills required by vendors at markets to be successful. Basic economic literacy, marketing savvy, and the sensing of and responding to trends in changing tastes and preferences are classic and important examples. It has also been shown that farmers' markets, as



competitive environments (especially when multiple sellers of the same seasonal crop attempt to sell at the same location), promote the development of marketing skills and the nurturing of entrepreneurial talent.⁶ Research results from Manitoba point to the fact that these markets offer farmers the opportunity to test various entrepreneurial ventures and possibly incubate business ideas that may prove to be capable of migrating from the markets to more permanent environs⁷.

2.1.3 New Markets & Promotional Opportunities

Evidence exists to support the notion that farmers' markets offer farmers new outlets for their produce. These new outlets can serve to reduce reliance on traditional marketing channels, allow for higher profits for farmers, and provide opportunities for promotion and networking for farmers. Some dated but interesting results from California (c. 1999) indicate that many vendors were able to expand their businesses by adding accounts with local stores and restaurants on the basis of contacts made at farmers' markets⁸.

While these results point to a benefit associated with the diversification of the marketing



⁵ Metcalf Foundation (2008).

⁶ Sanderson et al. (2005)

⁷ Dunganon Consulting Services (2008)

⁸ Feenstra and Lewis (1999)

channels available to farmers, a much more recent study of farmers' market vendors in the Ontario Greenbelt in 2010 indicates that many vendors at markets in the Greenbelt view this potential for increased farmer-restaurant/store interaction less optimistically.⁹ In particular, the study notes that the small size of the deliveries and the time and other costs associated with the logistics of making many small deliveries reduces the economic attractiveness of this line of business. It is important to note that the farmers interviewed as part of the 2010 report are located in the Greenbelt, adjacent to the largest urban conurbations in Canada. If farmers here are less than optimistic about the potential in linking with restaurants and stores locally, then this sort of interaction is likely to make even less economic sense in the less densely populated portions of Ontario.

2.1.4 Reduce Waste of Potentially Salable Product

There is certainly much to the idea that making a small number of very large deliveries of product provides opportunities for scale economies to producers (indeed, this is part of the logic behind the formation of cooperatives and supply management associations). However, the fact of the matter is that many smaller farmers simply do not have access to these high-volume distribution channels, for a variety of reasons.¹⁰ Farmers' markets therefore offer certain growers a venue for selling product that may otherwise go to waste (e.g., if product does not meet criteria for ripeness, size, colour, uniformity, etc.). This not only increases revenues to farmers, it also represents a more sustainable outcome, especially if these locally grown items replace imported product that would otherwise be purchased and consumed.

2.2 Social Benefits

In addition to providing a variety of benefits to farmers, farmers' markets result in myriad social benefits in the communities hosting them. Evidence from Manitoba points to the fact that the type of work offered at farmers' markets as well as the services the markets provide to host communities leads to an overall increase in the quality of life in host communities.¹¹ These markets help build the impression that there is 'something happening' in the area. With respect to improvements in the overall quality of life in host communities, other research has noted that farmers' markets contribute to the social development of local areas.¹² In their study of farmers' markets in British Columbia, Connell et al. (2006) found that 80 percent of market visitors visited the host communities precisely for the markets.

The above findings are of particular importance when considered against the chilling backdrop that is the forecast future of small and largely rural communities in Canada.¹³ Specifically, Bourne (2004) notes that Canada's smaller and rural communities are destined to a future characterized by economic decline and an aging demographic profile. Farmers' markets have some potential to breathe life back into these smaller communities outside of the large urban centres and contribute to the maintenance of a viable rural segment of Ontario.

⁹ INFORMA (2010)

¹⁰ Sanderson et al. (2005); INFORMA (2010).

¹¹ Dunganon Consulting Services Inc. (2008).

¹² Connell et al. (2006)

¹³ Bourne (2004).



Other researchers have echoed the opinion that farmers' markets can play a vital role in terms of community sustainability.¹⁴ Gurin (2005) in particular notes that farmers' markets have the potential to address problems of access to healthy food products in the poorer areas and recommends using farmers' market locations to address social inequities in space. Specifically, he recommends locating farmers' markets at locations between high- and low-income

communities to simultaneously address issues of community access to fresh food while allowing vendors to maintain reasonable prices for their products. It is possible that such a strategy would help bolster farmers' profits while simultaneously creating more inclusive spaces. Indeed, some have even recommended the creation of a food couponing program for use at farmers' markets to promote access to healthy food choices for lower income individuals and families.¹⁵ In this way, farmers' markets would seem to have some potential for narrowing the gaps between rich and poor in terms of access to healthy food choices, and thereby contribute to overall community sustainability.

These findings support the commonly held anecdotal impression that farmers' markets are important as foci for social interaction and the development of a sense of place in addition to their role as income earners for farmers.¹⁶ Taken together, these results suggest that farmers' markets exert a significant positive social impact on their surrounding communities.

Another social benefit that is mentioned frequently in the literature, on the economic impact of farmers' markets in Ontario and Canada respectively, is the support generated for local farmers. Specifically, Experience Renewal Solutions (2009a, b) note that 67



¹⁴ Gurin (2005) and Connell et al. (2006)

¹⁵ Feenstra and Lewis (1999); INFORMA (2010)

¹⁶ Cummings et al. (1998), Pp. 31

percent of consumers surveyed at farmers' markets across Ontario in the summer of 2008 and across Canada in 2009¹⁷, indicated that they believed it is important to support local primary producers, and specifically to support actual producers as opposed to re-sellers. The majority of customers polled perceived that the farmers' markets were responsible for giving host communities a strong sense of community and local pride.

While it appears that the urban-rural divide presents challenges for all levels of government in Canada - on topics as disparate as equal representation, firearms, voter rights and food,¹⁸ farmers' markets represent one of the few places that urban and rural dwellers can interact with one another. The available research indicates that the experience provides positive results for both parties. Indeed, communication between urban and rural dwellers at farmers' markets may further mutual understanding and respect among both groups.



2.3. Benefits to Consumers

Farmers' markets are widely recognized for their ability to provide the consuming public with fresh, wholesome, safe, and optimally nutritious and flavourful products. Research confirms that farmers' market customers seek/demand the high-quality, flavour and nutrition of products sold at farmers' markets.¹⁹ These same studies show that while farmers' markets are widely seen as providing these benefits to consumers, the consumers also see the limited diversity of product at farmers' markets as a weakness. Indeed, at certain times of the year, local food provided at

¹⁷ Experience Renewal Solutions Inc. (2009b). "National farmers' Market Impact Study 2009 Report."

¹⁸ Ibitson, J, 2009, November 6; Delacourt, S., 2009, July 25; Robertson, P., 2009, March 2; Webb, M., 2009, October 15.

¹⁹ Alberta Agriculture and Rural Development (AARG), 2008; Brown *et al*, 2007; Connell, 2006; Cummings, Kora & Murray, 1999; Dunganon Consulting Services, 2008; Henneberry, 2008; INFORMA, 2010; Fullerton & McNeil, 2004

farmers' markets cannot match the variety offered through the globalized system used by the major grocery chains.²⁰

While this is a reality of our growing seasons and our northern climate, it is a challenge for attracting and maintaining a customer base. Encouraging year round producers such as greenhouse growers could be considered to address this issue.

2.4 Environmental Benefits

Farmers' markets also offer environmental benefits over more conventional food delivery channels. Some very recent research notes that farmers' markets typically practice "...zero or minimum waste behavior..." and substantially reduce the amount of packaging taken home by patrons when compared to supermarket patrons.²¹

The traditional use of long-distance commodity trading to maximize per-unit cost efficiency in the food industry fails to adequately consider (and incorporate) associated environmental costs (including transportation related externalities and packaging) associated with this mode of production.²² Production suited to farmers' markets typically involves custom harvest and quick delivery thereby reducing loss due to spoilage. This type of production often makes use of coordinated, diversified planting schemes in an attempt to avoid product gluts and the resulting waste associated with crop destruction.

Another environmental benefit often associated with farmers' markets is that they promote the growth of organic crops.²³ As discussed earlier, food safety is a major concern of farmers' markets customers; organic foods can help satisfy that demand in part.²⁴ Also, organic production tends to occur on smaller farms which produce the smaller volumes well suited to the commercial model represented by farmers' markets. By acting as foci for the sale of organic products, farmers' markets offer growers an outlet at which they can command the higher prices associated with truly organic products.

2.5 Benefits to the Local Economy

Farmers' markets are widely regarded as being a benefit to the local economies of the areas they serve. In a study conducted in the Ontario Greenbelt, Gurin (2006) notes that a food-dollar spent at a farmers' market has a larger local multiplier effect than does a food-dollar spent at a globally integrated grocery chain store.



²⁰ When one considers the fact that the large and dominant super-market chains also control many of the smaller food stores in rural areas, the pervasiveness of this global food chain becomes apparent.

²¹ INFORMA (2010)

²² Brown (2002)

²³ Fullerton and McNeil (2007), INFORMA (2010).

²⁴ Sanderson *et al*, 2005

The precise magnitude of the multiplier effects associated with farmers' markets however, has been the subject of several studies over the recent past. These efforts have been hampered in no small way by the lack of reliable sales figures for farmers' markets in any given jurisdiction, including Ontario. **Table 1** presents a summary of multiplier values found in our review of the literature.

Table 1: Summary of Estimated farmers' Market Multipliers

Study	Multiplier(s) Used	Rationale
Connell et al (2006)	2 (p. 13)	Commonly used in other studies on farmers' markets (p. 12-13)
Cummings et al (1999)	3 (p. 57)	Suggested by multipliers associated with agriculture and other special events like agricultural fairs (p. 57)
Dunganon (2008)	3 (p. 3)	Determined after review of studies in 7 other jurisdictions (p. 3)
Econsult (2007)	Various	Multipliers produced for different types of market sizes, locations and management using Sticky Economics Evaluation Device (SEED) (p. 2-3)
Fullerton & McNeil (2006)	3 (p. 21)	Suggested by multipliers associated with agriculture, fairs, craft events and similar activities (p. 21)
Gurin (2006)	3 (p. 41)	Uses a multiplier of 3 based on multiplier values used/assumed in other studies (p. 41)
Henneberry (2008)	2.36 Gross sales (p. 14) 2.44 Vendor hhld income (p. 15) 2.55 Employment (p. 15) 3.08 visitor expenditure in others sectors (p. 15)	Calculated from IMPLAN model using 2001 data on Oklahoma industries (p. 13)
Marketumbrella.org (2010)	1.9 (p. 6)	Based on Regional Input-Output Modeling System II multiplier for retail in Louisiana (p. 2)
Otto & Varner (2005)	1.58 Gross sales (p.13) 1.47 Income (p.13) 1.45 "Jobs" (p. 14)	Used IMPLAN model for Iowa economy (p. 12)

The inconsistency in multiplier values across studies and the tendency to borrow multipliers from other studies or sectors suggests that much remains to be done in terms of understanding the quantitative and qualitative nature of the economic impact of farmers' markets on host communities.

Specific findings vis-à-vis economic multipliers notwithstanding, research indicates that most market managers and surrounding proprietors recognize that farmers' markets have a positive effect on surrounding businesses. Feenstra and Lewis (1999) for example, assert that 78 percent of the farmers' market managers surveyed in California felt that the markets were beneficial to local businesses. The Pike Place Market Preservation and Development Authority (PPMPDA) in Seattle notes that beyond being a major contributor to business growth and economic activity, the market has helped revitalize downtown Seattle by having a strong positive impact on residential development in the area.²⁵ Generally, it appears that local businesses too feel that farmers' markets have an overall positive impact on local commercial structures.²⁶

Evidence also suggests that visitors to farmers' markets fully intend to interact with the commercial area that contains the market, in a variety of ways. For example, Cummings et al., (1999) found that 50 percent of farmers' market customers in Ontario would "...make additional shopping stops during their outing to the market." Similarly, Connell *et al* (2006) found that 74.5 percent of farmers' market customers in British Columbia intend to shop at other businesses in the area on market day. On the basis of a survey of farmers' market customers from across Canada, Experience Renewal Solutions Inc. (2009b) asserts that farmers' market customers spend between \$14.14 and \$19.80 on purchases elsewhere on days when they visit the market. Finally, Dunganon Consulting Services (2008) estimate that the \$2.2 million in annual Manitoba farmers' market sales generate \$1.1 million in sales in other sectors as a result of excursions to farmers' markets. There is strong evidence, based on responses from market managers, surrounding business owners and customers, that farmers' markets have a positive impact on surrounding businesses.

Farmers' markets also offer an opportunity for farmers to expand their businesses by providing an outlet for selling value-added products, and thereby further diversify their operations.²⁷ Examples of agricultural value added activities include food processing, drying, canning, juicing,



²⁵ Pike Place Market Preservation and Development Authority. (2004) *A business, economic and public policy assessment of the PDA's properties*. Retrieved from http://www.pps.org/pdf/pike_place_economic_impact_study.pdf

²⁶ Connell et al. (2006); Cummings et al. (1999).

²⁷ Planscape (2009).

handcrafting, unique packaging, labeling and marketing. In California, 52 percent of market managers surveyed reported seeing an increase in the production of value-added products by farmers over the preceding three years²⁸. One-third of vendor respondents in Oklahoma said that they sold value-added products.²⁹

Another potential economic benefit of farmers' markets discussed in the literature is an increase in an area's attractiveness for tourism. While there is some evidence to suggest that farmers' markets may attract tourism to an area, the potential may not be applicable to all markets.³⁰

While most agree that farmers' markets have a positive impact on surrounding businesses, there is evidence to suggest that not all interests share this view.³¹ Negative impacts alluded to in the literature include the lack of parking spaces available to customers because of market traffic, concerns regarding the differential in terms of overhead costs (market vendors versus year-round "bricks and mortar" retailers) and fears about the potential for these markets to become a type of "race to the bottom" whereby farmers' markets morph into flea markets as growers are replaced with resellers and all sorts of transient vendors.³²

To this juncture, several points are clear:

- farmers' markets are generally considered to be beneficial to local areas on several dimensions including economic; and
- the multiplier effects associated with farmers' markets are not well researched, but all indications are that they are substantial, especially at the local level.



In what follows we make use of primary data gathered at farmers' markets in Ontario in the summer of 2008 by Experience Renewal Solutions Inc. for Farmers' Markets Ontario to estimate the economic impact (i.e., the multiplier effect) associated with farmers' markets in the Province of Ontario.

²⁸ Feenstra and Lewis (1999)

²⁹ Henneberry *et al.*, (2008)

³⁰ Feenstra and Lewis (1999); Tourism British Columbia (2004); Econsult (2007); Pike Place Market Preservation and Development Authority (2004).

³¹ Connell *et al.* (2006); Cummings *et al.* (1999); INFORMA (2010).

³² *Ibid.*

3.0 Measuring Economic Impact of Farmers' Markets in Ontario

3.1. Methodology: The Synthetic Regional Input-Output Model

The Synthetic Regional IO (SRIO) model used here is based on the most recent Link (L) level Input-Output (IO) tables for Canada as a whole and adjusted to represent the structure of the Ontario economy. The link-level IO data will allow the study region's economy to be represented with an unparalleled level of industrial detail (105 4-digit NAICS industries).



The SRIO model has the following general structure:

Equation 1

$$\Delta \dot{X}^R = \left(I - \Omega \hat{\Phi} \dot{A} \right)^{-1} \Delta \dot{Y}^R$$

where

$$\Delta \dot{X}^R = \begin{bmatrix} \Delta x_1^R \\ \Delta x_2^R \\ \Delta x_3^R \\ \vdots \\ \Delta x_n^R \\ \Delta x_h^R \end{bmatrix} \text{ and where; } \Delta \dot{Y}^R = \begin{bmatrix} \Delta y_1^R \\ \Delta y_2^R \\ \Delta y_3^R \\ \vdots \\ \Delta y_n^R \\ \Delta y_h^R \end{bmatrix}$$

where

$$\hat{\Phi} = \begin{pmatrix} \phi_1 & \square & 0 \\ \vdots & \ddots & \vdots \\ 0 & \cdots & \phi_n \end{pmatrix}$$

where

$$\phi_i = \left(\frac{\frac{e_i^R}{\sum_i e_i^R}}{\frac{e_i^{CAN}}{\sum_i e_i^{CAN}}} \right)$$

where

$$\Omega = \begin{pmatrix} \omega_{11} & \square & \omega_{1n} \\ \vdots & \ddots & \vdots \\ \omega_{m1} & \cdots & \omega_{mn} \end{pmatrix}$$

where

$$\omega_i = \left(1 - \left(\frac{M_i}{D_i} \right) \right)$$

where

$$D_i = X_i - E_i + M_i$$

where the matrices $\hat{X}$, $\hat{Y}$ and $\hat{A}$ denote standard IO matrices that have been augmented to allow for the endogenous treatment of consumption expenditures. In the above equations:

- X denotes a vector of industry gross output;
- Y denotes a vector of industry final demand;
- M denotes imports;
- e denotes employment;
- i and j represent industries where i is typically a row (selling) industry and j is typically a column (purchasing) industry;
- ϕ_i denotes an employment-based index of relative specialization;
- $\hat{\phi}$ is a diagonal matrix of ϕ_i 's;
- ω_i denotes a domestic production share;
- Ω is a matrix of ω_i 's
- I typically denotes occupations;
- V denotes total employment;
- E denotes exports;
- K denotes a matrix of occupation- and industry-specific employment multipliers; and,
- D denotes "domestic availability".

The impact model shown in Equation 1 translates estimates of provincial activity levels (i.e., farmers' markets) by specific industries, into economy-wide total impacts, inclusive of direct, indirect and induced impacts in terms of gross output, employment and Gross Domestic Product (GDP) by industry.



3.2 Measuring the Activities Associated with Farmers' Markets

Using a sample of 36 farmers' markets across Ontario, surveys of some 300 vendors, and 1,800 plus market patrons, Experience Renewal Solutions (2009a) estimate that the level of sales at farmers' markets province-wide in 2008 amounted to between \$427,364,872 and \$641,047,308. In addition, Experience Renewal Solutions (2009a) report that some 90 percent of vendors at farmers' markets across Ontario were in fact the primary producers or producers/dealers (see **Table 2**).

To represent the total level of activity associated with primary producers selling at farmers' markets, we start with the sales estimates provided by Experience Renewal Solutions (2009a). We argue that the action of producing product for the markets is largely indistinguishable from farmers' normal productive activities with the exception, perhaps, of paying for stall rental fees at markets, and in some cases, doing some minimal processing. We argue that the inputs used to produce for farmers' markets are largely blended with those of the normal farming operation and hence are indistinguishable. Using this logic, we used estimates of sales at Ontario farmers' markets as the basis for our estimate of the level of activity of primary producers working to supply sales at farmers' markets.



Table 2: Estimating Production Associated with Farmers' Markets in Ontario³³

	Farmers' Market Sales from Experience Renewal Solutions (2009a)	Share Represented by Resellers	Share Represented by Primary Producers	Estimated Extra- market spending by market patrons
Low Estimate	\$427,364,872	\$42,736,487	\$384,628,385	
High Estimate	\$641,047,308	\$64,104,731	\$576,942,577	
Average	\$534,206,090			\$257,700,000

³³ Taken from Experience Renewal Solutions Inc. (2009a).

In addition to the economic impacts associated with producing and selling products at farmers' markets, a significant portion of the total economic impact of farmers' markets stems from the tourism and related spending that takes place in host communities as a result of the primary trip to the market. Experience Renewal Solutions (2009a) note that some 15 million shopper-visits to farmers' markets across Ontario in 2008 yielded an average additional expenditure (i.e., in the locality but outside of the market itself) of \$17.18 per shopper-visit. Using this information, we estimate a total amount of extra expenditure as a result of market attendance in 2008 to be on the order of \$257,700,000 across Ontario.

3.3. Estimating the Economic Impact Associated with Farmers' Markets in Ontario

The SRIO model described above and illustrated in Equation 1 was used to translate the average level of sales by primary producers at farmers' markets and the associated extra-market spending (see Table 2) into total economic impacts across 105 industries in the Province of Ontario, inclusive of direct, indirect and induced effects. Specifically, the average sales figure was input as a shock to Crop and Animal Production and the extra-market sales estimate was split between the Retail Trade and Accommodation and Food Services Industries. These values were taken as input by the SRIO model and translated into the associated levels of production required of all industries across Ontario to satisfy the direct, indirect and induced effects associated with this level of farmers' market-related economic activity in Ontario.

4.0 The Economic Impacts of Farmers' Markets in Ontario

4.1. Overall Impacts

Table 2 presents our estimate of the provincial economic activity that is directly attributable to farmers' markets in Ontario. Experience Renewal Solutions Inc. (2009a) provided sample-based estimates of total sales at farmers' markets and additional expenditures made in the vicinity of markets per visit in 2008. The average total sales estimate and the estimated total extra-market sales are presented in **Table 2** and repeated in **Table 3** below. These activities translate into nearly \$792 million (2008 Cdn \$) in economic activity province-wide. We take this to be the best estimate of yearly activity levels going forward.

Table 3 shows that the estimated level of economic activity associated with farmers' markets in Ontario on a yearly basis is substantial: specifically, nearly \$792 million in farmers' market-related activity translates into a total economic impact in Ontario (including direct, indirect, and induced effects) of more than \$2.47 billion dollars. In addition, these activities are estimated to generate nearly \$593 million in labour income province-wide, nearly 21,000 jobs and nearly \$1.27 billion in Gross Domestic Product (GDP).

Table 3: Results Summary	
Estimated Farmers' Market Sales (Average)	\$534,206,090
Estimated Extra-market Sales by Market Patrons	\$257,700,000
Estimated Yearly Farmers' Market-Related Economic Activity	\$791,906,090
Total Output Impact	\$2,472,690,818
Direct Output Impact	\$400,855,035
Indirect Output Impact	\$1,115,520,627
Induced Output Impact	\$956,315,155
Labour Income Impact	\$592,974,014
GDP Impact	\$1,268,975,232
Employment Impact	20,953

4.2. Impacts Across Industries

The SRIO model used to estimate the impacts associated with farmers' market-related activities in Ontario is designed to estimate economic impacts on a detailed industry basis (i.e., 105 industries). Table 4 presents the top 25 industrial sectors in Ontario, ranked in terms of the magnitude of the economic impact experienced as a result of farmers' market-related activities in Ontario.



Table 4: Industry-Specific Impacts

Industry	Gross Output	GDP	Employment
Crop and Animal Production	\$579,362,546	\$252,453,218	3,896
Retail Trade	221,858,467	\$140,445,840	4,145
Accommodation and Food Services	\$176,796,813	\$87,172,323	3,546
Wholesale Trade	\$111,925,818	\$66,410,366	860
Other Finance, Insurance and Real Estate and Management of Companies and Enterprises	\$102,522,191	\$47,788,358	400
Owner-Occupied Dwellings	\$90,338,065	\$79,859,512	338
Monetary Authorities and Depository Credit Intermediation	\$69,910,110	\$48,512,495	264
Lessors of Real Estate	\$69,080,142	\$43,628,709	258
Oil and Gas Extraction	\$66,925,774	\$48,387,399	5
Animal Food Manufacturing	\$61,664,332	\$12,743,374	179
Computer Systems Design and Other Professional, Scientific and Technical Services	\$47,782,188	\$27,749,294	657
Pay TV, Specialty TV and Program Distribution and Telecommunications	\$47,771,257	\$30,811,952	176
Petroleum and Coal Products Manufacturing	\$42,513,093	\$3,853,302	10
Legal, Accounting and Architectural, Engineering and Related Services	\$39,921,840	\$25,711,134	566
Administrative and Support Services	\$39,355,742	\$25,485,283	609
Insurance Carriers	\$39,345,589	\$21,086,140	142
Electric Power Generation, Transmission and Distribution	\$37,427,777	\$27,798,557	70
Pesticides, Fertilizer and Other Agricultural Chemical Manufacturing	\$36,613,928	\$9,820,432	49
Meat Product Manufacturing	\$29,849,220	\$6,659,508	100
Miscellaneous Food Manufacturing	\$28,637,093	\$9,370,653	94
Truck Transportation	\$27,902,855	\$12,670,337	159
Repair Construction	\$26,662,794	\$14,284,273	168
Motor Vehicle Manufacturing	\$26,044,278	\$4,145,300	98
Publishing Industries, Information Services & Data Processing Services	\$19,950,982	\$10,648,061	187
Air Transportation	\$16,869,296	\$4,471,274	473

Table 4 shows how the total economic impact presented in Table 3 above is distributed across industries (the top 25 industries) in Ontario. The top 25 industries in Ontario capture more than 83 percent of the total provincial impact across all 105 industries. Even by looking at only the top 25 industries, the broad-spectrum economic impact associated with farmers' markets is clear to see. Specifically, \$534,306,090 in Crop and Animal Production (producing product for sale at farmers' markets) combined with \$257,700,000 in extra-market expenditures in the vicinity of markets by market patrons results in more and \$2.47 billion in output across 105 different industry groups that comprise the Ontario economy. Table 4 shows that sizeable impacts are felt by industries as diverse as Crop and Animal Production (nearly \$580 million), Retail Trade (nearly \$222 million), Accommodation and Food Services (nearly \$177 million), and Legal, Accounting and Architectural, Engineering and Related Services (nearly \$40 million).

The overwhelming majority of industries listed in Table 4 are high value-added industries for which Ontario is well known. This speaks to the high potential of Ontario to capture the bulk of these impacts. Indeed, much of these impacts will be captured within the Greater Golden Horseshoe (GGH) region of Ontario.

Table 5 breaks the industry specific impacts down into their direct, indirect and induced components. *Direct impacts* are those that stem from the direct input requirements of the industry in question. Direct input purchases also stimulate additional rounds of spending as input providers purchase inputs from their input suppliers to produce their outputs (e.g., a producer of seeds purchases electricity, a diesel fuel wholesaler purchases labour and the services of legal and financial experts, etc.) and so on. These additional rounds of spending stimulated by the direct input purchases of the industry under study are referred to as the *indirect effects*. *Induced impacts* refer to those additional rounds of spending that stem from income earned by workers in the various industries in the economy that are impacted directly and indirectly by the initial shock (i.e., by the activities of the industries in question). An example of an induced effect in the context of an individual agricultural operation would be as follows:

Demand for organic fruits and vegetables is rising steadily in Ontario;

Fruit and vegetable operation X, to meet an anticipated 50 percent increase in demand for its product, places an order for 50 percent more raw seed (this purchase of seed would be part of the direct effect of the shock);



The seed wholesaler is experiencing larger orders for seed from all customers and has to buy more raw seed, more electricity, more natural gas, etc. (this is part of the indirect impact associated with the initial fruit and vegetable shock). In addition to raw seed, electricity and natural gas, the seed wholesaler would have to buy more of most inputs including labour.

A new employee hired by the seed wholesaler as a result of rising demand for whole grain foods in Ontario uses part of her/his net income to purchase food products, a variety of goods and services, a new automobile, and a new home. These purchases made by the employee of the seed wholesaler in-turn stimulate the economy yet again; the food stuffs must be produced, the vehicle (e.g., the Ford Edge) must be manufactured (in Oakville Ontario), and the home purchase represents a further stimulus to the housing industry in Ontario. These impacts that flow from the original shock via the earnings of a new employee are examples of induced impacts.

Table 5: Direct, Indirect and Induced Impacts (Top 25 Industries – in terms of Total Impact)

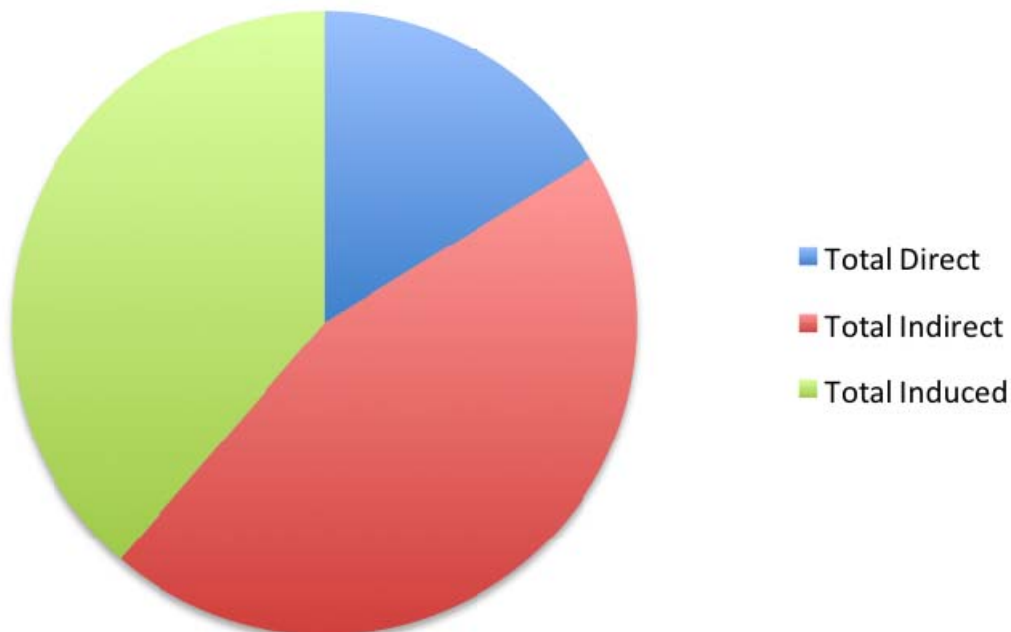
	Total Impact	Direct Impact	Indirect Impact	Induced Impact
Crop and Animal Production	\$579,362,545.57	\$28,140,648.88	\$541,545,047.31	\$9,676,849.38
Retail Trade	\$221,858,466.63	\$7,125,956.92	\$134,073,821.11	\$80,658,688.60
Accommodation and Food Services	\$176,796,812.78	\$1,432,485.27	\$132,313,000.13	\$43,051,327.37
Wholesale Trade	\$111,925,818.29	\$43,574,927.01	\$23,068,483.45	\$45,282,407.83
Other Finance, Insurance and Real Estate and Management of Companies and Enterprises	\$102,522,190.70	\$22,418,623.43	\$27,917,750.37	\$52,185,816.90
Owner-Occupied Dwellings	\$90,338,065.29	\$-	\$-	\$90,338,065.29
Monetary Authorities and Depository Credit Intermediation	\$69,910,110.19	\$17,901,460.08	\$12,145,629.83	\$39,863,020.28
Lessors of Real Estate	\$69,080,141.70	\$11,593,724.83	\$10,634,908.56	\$46,851,508.31
Oil and Gas Extraction	\$66,925,773.51	\$7,805,452.41	\$34,800,125.83	\$24,320,195.27
Animal Food Manufacturing	\$61,664,332.26	\$51,181,167.44	\$8,436,475.14	\$2,046,689.69
Computer Systems Design and Other Professional, Scientific and Technical Services	\$47,782,187.57	\$12,841,740.15	\$15,857,709.39	\$19,082,738.02
Pay TV, Specialty TV and Program Distribution and Telecommunications	\$47,771,256.74	\$7,849,212.22	\$10,857,977.48	\$29,064,067.05
Petroleum and Coal Products Manufacturing	\$42,513,093.42	\$14,944,446.18	\$8,430,514.97	\$19,138,132.27
Legal, Accounting and Architectural, Engineering and Related Services	\$39,921,839.73	\$15,196,568.88	\$10,419,081.01	\$14,306,189.84
Administrative and Support Services	\$39,355,741.64	\$6,374,841.32	\$13,467,617.64	\$19,513,282.69
Insurance Carriers	\$39,345,589.03	\$10,380,374.78	\$4,615,894.37	\$24,349,319.88
Electric Power Generation, Transmission and Distribution	\$37,427,777.11	\$12,661,347.89	\$5,929,664.98	\$18,836,764.24
Pesticides, Fertilizer and Other Agricultural Chemical Manufacturing	\$36,613,927.75	\$29,260,541.29	\$6,383,655.81	\$969,730.65
Meat Product Manufacturing	\$29,849,220.03	\$9,023,688.39	\$7,445,331.71	\$13,380,199.93
Miscellaneous Food Manufacturing	\$28,637,092.72	\$7,885,826.37	\$7,611,647.33	\$13,139,619.02
Truck Transportation	\$27,902,854.84	\$11,044,755.68	\$8,610,276.44	\$8,247,822.72
Repair Construction	\$26,662,793.97	\$10,140,976.56	\$4,575,464.24	\$11,946,353.16
Motor Vehicle Manufacturing	\$26,044,277.63	\$374,969.04	\$819,028.90	\$24,850,279.69
Publishing Industries, Information Services and Data Processing Services	\$19,950,981.71	\$2,922,375.87	\$6,043,453.93	\$10,985,151.91
Air Transportation	\$16,869,296.37	\$1,886,666.83	\$4,079,542.61	\$10,903,086.93

Table 5 shows us precisely what we expected to see: substantial indirect and induced impacts stemming from the farmers' market-related activities. In terms of the *direct effects*, Animal Food Manufacturing, Wholesale Trade, Pesticides, Fertilizer and other Agricultural Chemical Manufacturing industries show the largest impacts. These are the industries that provide direct input into the production of commodities for sale at farmers' markets, as well as into the ancillary extra-market activity that takes place in the vicinity of farmers' markets. Crop and Animal Production, Retail Trade, and Accommodation and Food Services dominate the indirect impacts. These three industries captured more than 72 percent of the total indirect effect across all 105 industries. These industries provide inputs to all industries called on to satisfy the direct input requirements of farmers' market-related production initially. Industries including "Retail Trade", "Other Finance and Insurance and Real Estate and Management of Companies and Enterprises" and "Lessors of Real Estate" capture the largest induced effects.



This finding underscores the fact that farmers' markets and the market-related activities ultimately impact the high value-added service industries in the provincial economy. Clearly, the activities associated with farmers' markets in Ontario are having a very substantial and broad economic impact. Over all 105 industries (only the top 25 are shown in **Table 5**), only 16 percent of the total impact is due to the direct input provisioning of farmers' market-related activities with the indirect and induced effects accounting for 45 and 39 percent respectively (see **Figure 2**).

Figure 2: Direct, Indirect and Induced Impacts as a Share of the Total Impact



4.3. Impacts Across Occupations

Table 6: Employment Effects by Occupation

NOCs	Jobs	
Intermediate sales and service occupations	2,769	13%
Elemental sales and service occupations	2,732	13%
Middle and other management occupations	2,077	10%
Skilled Occupations in Primary Industry	2,019	10%
Clerical occupations	1,756	8%
Skilled sales and service occupations	1,467	7%
Intermediate Occupations in Primary Industry	1,220	6%
Skilled administrative and business occupations	945	5%
Trades and Skilled Transport and Equipment Operators	823	4%
Professional occupations in natural and applied sciences	617	3%
Processing and manufacturing machine operators and assemblers	528	3%
Intermediate Occupations in Transport, Equipment Operation, Installation and Maintenance	514	2%
Professional occupations in business and finance	494	2%
Professional occupations in social science, education, government services and religion	437	2%
Technical occupations related to natural and applied sciences	411	2%
Labourers in processing, manufacturing and utilities	294	1%
Trades Helpers, Construction Labourers and Related Occupations	290	1%
Technical and skilled occupations in art, culture, recreation and sport	280	1%
Senior management occupations	229	1%
Labourers in Primary Industry	194	1%
Professional occupations in art and culture	190	1%
Paraprofessional occupations in law, social services, education and religion	186	1%
Professional occupations in health	165	1%
Assisting occupations in support of health services	147	1%
Technical and skilled occupations in health	97	0%
Processing, manufacturing and utilities supervisors and skilled operators	70	0%
Total	20,952	100%

Table 6 decomposes the employment impact presented above by National Occupation Classifications (or NOCs). Underscoring the broad-spectrum nature of the economic impact associated with farmers' markets in Ontario is the fact that the employment impacts, while concentrated in sales and service, management and skilled occupations in the primary industry, are also widely dispersed across all NOC categories. Indeed, the employment impact is spread over all occupations reflecting the full variation in skill and educational requirements.

4.4. The Multiplier Effect Associated with Farmers' Markets in Ontario (Top 50)

Table 7 presents total output multipliers (including direct, indirect and induced effects) for all 105 industries in the SRIO model. The industries targeted to represent farmers' markets and related activities are "Crop and Animal Production", "Retail Trade" and "Accommodation and Food Services"; these industries exhibit multipliers of 2.95, 3.53 and 3.45 respectively (see Table 7). These multipliers are perhaps higher than one would normally see because they include the induced effects of the initial shock. For example, the multiplier for "Crop and Animal Production", 2.95, means that for each dollar of demand for the output of this industry, \$2.95 worth of output is required across all other industries in the economy to satisfy all direct, indirect and induced requirements. The larger the multiplier, the larger is the stimulatory effect associated with the industry in question.



Table 7: Output Multipliers by Industry

1 Transit and Ground Passenger Transportation	4.26	22 Publishing Industries, Information Services and Data Processing Services	3.52	44 Railroad Rolling Stock Manufacturing	3.19
2 Postal Service and Couriers and Messengers	3.85	23 Arts, Entertainment and Recreation	3.48	45 Residential Building Construction	3.19
3 Other Non-Profit Institutions Serving Households	3.81	24 Water Transportation	3.46	46 Soft Drink and Ice Manufacturing	3.17
4 Other Finance, Insurance and Real Estate and Management of Companies and Enterprises	3.80	25 Accommodation and Food Services	3.45	47 Printing and Related Support Activities	3.16
5 Grant-Making, Civic, and Professional and Similar Organizations	3.78	26 Administrative and Support Services	3.43	48 Clothing Manufacturing	3.13
6 Insurance Carriers	3.75	27 Scenic and Sightseeing Transportation and Support Activities for Transportation	3.43	49 Monetary Authorities and Depository Credit Intermediation	3.12
7 Non-Profit Welfare Organizations	3.74	28 Advertising and Related Services	3.43	50 Ship and Boat Building	3.12
8 Computer Systems Design and Other Professional, Scientific and Technical Services	3.73	29 Wholesale Trade	3.41	51 Distilleries	3.10
9 Government Education Services	3.72	30 Warehousing and Storage	3.35	52 Pesticides, Fertilizer and Other Agricultural Chemical Manufacturing	3.07
10 Radio and Television Broadcasting	3.71	31 Truck Transportation	3.33	53 Pulp, Paper and Paperboard Mills	3.04
11 Government Residential Care Facilities	3.71	32 Basic Chemical Manufacturing	3.32	54 Fabricated Metal Product Manufacturing	3.03
12 Non-Profit Education Institutions	3.70	33 Repair and Maintenance	3.31	55 Furniture and Related Product Manufacturing	3.01
13 Non-Profit Sports and Recreation Clubs	3.63	34 Repair Construction	3.30	56 Rail Transportation	2.98
14 Air Transportation	3.56	35 Other Municipal Government Services	3.29	57 Rubber Product Manufacturing	2.97
15 Religious Organizations	3.55	36 Non-residential Building and Engineering Construction	3.28	58 Miscellaneous Chemical Product Manufacturing	2.96
16 Other Federal Government Services	3.53	37 Legal, Accounting and Architectural, Engineering and Related Services	3.27	59 Electrical Equipment and Component Manufacturing	2.96
17 Universities	3.53	38 Resin, Synthetic Rubber, and Artificial and Synthetic Fibres and Filaments Manufacturing	3.26	60 Crop and Animal Production	2.95
18 Retail Trade	3.53	39 Support Activities for Mining and Oil and Gas Extraction	3.23	61 Leather and Allied Product Manufacturing	2.93
19 Motion Picture and Sound Recording Industries	3.52	40 Support Activities for Agriculture and Forestry	3.23	62 Converted Paper Product Manufacturing	2.93
20 Other Provincial and Territorial Government Services	3.52	41 Personal and Laundry Services and Private Households	3.22	63 Miscellaneous Non-Metallic Mineral Product Manufacturing	2.93
21 Hospitals	3.52	42 Educational Services (except Universities)	3.21	64 Plastic Product Manufacturing	2.91
		43 Cement and Concrete Product Manufacturing	3.20		

Table 7: Output Multipliers by Industry – cont’d

65 Fruit and Vegetable Preserving and Specialty Food Manufacturing	2.90	79 Rental and Leasing Services and Lessors of Non-Financial Intangible Assets (except Copyrighted Works)	2.69	93 Wood Product Manufacturing	2.48
66 Motor Vehicle Body and Trailer Manufacturing	2.89	80 Miscellaneous Manufacturing	2.69	94 Primary Metal Manufacturing	2.47
67 Miscellaneous Food Manufacturing	2.86	81 Electronic Product Manufacturing	2.67	95 Lessors of Real Estate	2.45
68 Household Appliance Manufacturing	2.86	82 Meat Product Manufacturing	2.64	96 Fishing, Hunting and Trapping	2.40
69 Animal Food Manufacturing	2.86	83 Dairy Product Manufacturing	2.61	97 Non-Metallic Mineral Mining and Quarrying	2.39
70 Machinery Manufacturing	2.83	84 Seafood Product Preparation and Packaging	2.59	98 Other Activities of the Construction Industry	2.36
71 Motor Vehicle Parts Manufacturing	2.81	85 Sugar and Confectionery Product Manufacturing	2.58	99 Coal Mining	2.34
72 Pharmaceutical and Medicine Manufacturing	2.78	86 Other Transportation Equipment Manufacturing	2.56	100 Motor Vehicle Manufacturing	2.31
73 Textile and Textile Product Mills	2.76	87 Petroleum and Coal Products Manufacturing	2.55	101 Computer and Peripheral Equipment Manufacturing	2.22
74 Waste Management and Remediation Services	2.75	88 Aerospace Product and Parts Manufacturing	2.52	102 Electric Power Generation, Transmission and Distribution	2.18
75 Pay TV, Specialty TV and Program Distribution and Telecommunications	2.72	89 Wineries	2.52	103 Pipeline Transportation	1.92
76 Health Care Services (except Hospitals) and Social Assistance	2.72	90 Tobacco Manufacturing	2.52	104 Oil and Gas Extraction	1.81
77 Forestry and Logging	2.71	91 Natural Gas Distribution, Water, Sewage and Other Systems	2.51	105 Owner-Occupied Dwellings	1.40
78 Breweries	2.71	92 Metal Ore Mining	2.51		

5.0 Discussion Conclusions

Based on the total sales and extra-market activities associated with farmers' markets in Ontario estimated by Experience Renewal Solutions (2009a), we have measured the associated provincial economic impacts. Specifically, using a model of the provincial economy, we translated the estimated sales activities into total provincial economic impact, across 105 industries, inclusive of direct, indirect and induced effects. Experience Renewal Solutions (2009a) estimate that total yearly sales at farmers' markets in Ontario in 2008 was somewhere between \$427,364,872 and \$641,047,308. We took the average of these high and low values and used that as our estimate of yearly sales at farmers' markets in Ontario going forward. Experience Renewal Solutions Inc. (2009a) also estimated, on the basis of considerable survey data, that some 15 million shopper visits were made to farmers' markets in 2008 and that the average extra-market expenditure per shopper-visit was \$17.18. This amounted to \$257,700,000 in expenditures made in the vicinity of markets in host locales. These expenditures were combined in with the farmers' market sales estimate to represent the total amount of activity associated with farmers' markets.



On the basis of this information, we estimate a total yearly level of farmers' market-related activity of nearly \$792 million. Our impact model translated this level of activity into a total provincial economic impact (inclusive of direct, indirect and induced effects) of nearly \$2.473 billion, in addition to nearly 21,000 jobs, annually. Of the components of the farmers' market activity cluster that we define above, multipliers ranged from a low of 2.95 to a high of 3.53 for an average of 3.24. Every dollar of activity at farmers' markets in Ontario therefore generates \$3.24 worth of economic activity in the provincial economy inclusive of direct, indirect and induced effects.

6.0 Bibliography

- Alberta Agriculture and Rural Development. (2008a) *Fresh Vegetable market Gardening Industry*. Retrieved from [http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/agdex1152](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/agdex1152).
- Alberta Agriculture and Rural Development. (2008b) *Local Market Expansion Project: Alternative Agriculture Markets in Alberta 2008*. Alberta: Infact Research and Consulting Inc.
- Bentley S., Barker R. (2005). *Fighting global warming at the farmers' market: The role of local food systems in reducing greenhouse gas emissions*. Toronto: FoodShare.
- Brown, A. (2002) Farmers' market research 1940-2000: An inventory and review. *American Journal of alternative Agriculture*. 17(04) 167-176
- Brown, C. et al. (2007). The importance of farmers' markets for West Virginia direct marketers. *Renewable Agriculture and food Systems*, 22(1), 20-29
- Connell, D., et al. (2006). *Economic and community impacts of farmers markets In British Columbia: Provincial report*. Prepared for British Columbia Association of Farmers' Markets and School of Environmental Planning University of Northern British Columbia.
- Cummings, H., Kora, G., & Murray, D. (1999). Farmers' Markets in Ontario and their economic impact. *Ontario*: University of Guelph
- Dunganon Consulting Services. (2008). *"This little farmer went to market...": An economic impact study of the member markets of the Farmers' Markets Association of Manitoba Cooperative*. Retrieved from: http://www.manitobafarmersmarkets.ca/userfiles/file/fmam_final.pdf
- Econsult Corporation. (2007). *Estimating the economic impact of public markets*. New York, NY: Project for Public Spaces
- Experience Renewal Solutions Inc. (2009a). *"Farmers' Markets Ontario Impact Study 2009 Report."* For Farmers' Markets Ontario.
- Experience Renewal Solutions Inc. (2009b). *"National Farmers' Market Impact Study 2009 Report."* For Farmers' Markets Canada.
- Feenstra, G., & Lewis, C. (1999) Farmers' markets offer new business opportunities for farmers. *California Agriculture*. 53(6). 25-29

- Fullerton, D. and McNeil, S. (2004) *Farmers' markets and their economic impact in Nova Scotia: Customer and Vendor survey analysis*. The Farmers Market of Nova Scotia Co-operative Limited. Retrieved upon request from:
<http://www.gov.ns.ca/agri/marketing>
- Gurin, D. (2006) *Farmers' Markets: Opportunities for preserving greenbelt agriculture*. Toronto, On: Friends of the Greenbelt.
- Henneberry, S.R., et al. (2008). *The economic impacts of direct produce marketing: A case study of Oklahoma's farmers' markets*. 2008 Annual meeting. February 2-6, Dallas Texas.
- Hughes, et al. (2008) Evaluating the economic impact of farmers' markets using an opportunity cost framework. *Journal of Agricultural and Applied Economics*, (40)1, 253-265.
- Informa. (2010) *Greenbelt Farmers' Market Network 2010 research report*. Toronto, Ontario: Friends of the Greenbelt Foundation
- Marketumbrella.org. (2010) Crescent City Farmers Market 2010 Combined.
- Metcalf Foundation. (2008) *Food connects us all: Sustainable local food in Southern Ontario*. Toronto, On: Author. Retrieved from:
<http://www.metcalffoundation.com/downloads/Food%20Connects%20Us%20All.pdf>
- Niagara Region. (2009). *Niagara Region review of land use policy and related implementation measures regarding agricultural value added activities summary report and recommendations*. Retrieved from:
<http://www.regional.niagara.on.ca/living/ap/Pdf/ValueAddedFinalReport.pdf>
- Otto D., Varner, T. (2009) Consumers, vendors, and the economic importance of Iowa farmers' markets: An economic impact survey analysis. *Leopold Center for Sustainable Agriculture, Ames*.
- Pike Place Market Preservation and Development Authority. (2004) *A business, economic and public policy assessment of the PDA's properties*. Retrieved from:
http://www.pps.org/pdf/pike_place_economic_impact_study.pdf.
- Planscape (2009). "Niagara Region: Review of Land Use Policy and Related Implementation Measures Regarding Agricultural Value-Added Activities: Summary Report and Recommendations." Report prepared for the Niagara Regional Municipality.

Sanderson, K. et al. (2005) *Farmers' markets in North America: A background document*.
Saskatoon, Sk: Community-University Institute for Social Research

Tourism British Columbia. (2004) A profile of visitors to British Columbia's Okanagan Valley: Focus on cultural Tourists. Retrieved from:
http://www.tti.gov.bc.ca/research/ResearchbyActivity/pdfs/all_activity_reports/A_Profile_of_Visitors_to_BC_s_Okanagan_Valley_Focus_on_Cultural_Tourists_Full_Report.sflb.pdf.

Waterloo Region. (2003) *Growing food and economy: Economic impact study of the agriculture and food-related sectors in Waterloo region*. Retrieved from:
[http://www.region.waterloo.on.ca/web/health.nsf/0/4BB1ACEAADD5D9E885256DCE006768DA/\\$file/Food%20Economy.pdf?openelement](http://www.region.waterloo.on.ca/web/health.nsf/0/4BB1ACEAADD5D9E885256DCE006768DA/$file/Food%20Economy.pdf?openelement).



Report Prepared by:



Regional Analytics Inc.
2371 Heslop Street
Burlington, ON L7L 6N5

and



PLANSCAPE

BUILDING COMMUNITY THROUGH PLANNING

PLANSCAPE Inc.
104 Kimberley Avenue
Bracebridge, ON P1L 1Z8