



Towards a Food Strategy for Saskatoon

Saskatoon Regional Food System Assessment and Action Plan

Prepared by Kouri Research for the
Saskatoon Regional Food System Assessment and Action Plan Team

December 2013



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Foreword

This report was prepared by Denise Kouri of Kouri Research for the Saskatoon Regional Food System Assessment and Action Plan Team. The process followed the plan and guidelines established by the Saskatoon Regional Food System Assessment and Action Plan Team, who placed an important emphasis on engaging participants in the community and the food sector.

Acknowledgements

We appreciate the time and effort provided by participants in the community and the food sector, who attended focus groups, responded to surveys, provided interviews and agreed to be observed and photographed.

We acknowledge the time and effort provided by members of the team, whose expertise and logistical support were key to the process. We acknowledge in kind support from the Spatial Initiative at the University of Saskatchewan.

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Contributors

Research assistance was provided by Lise Kossick-Kouri, and Don Kossick of Kouri Research, Darrin Qualman, food and energy systems researcher, Scott Mantyka, Master of Science student of the University of Saskatchewan, and Veronica Rohr, Master of Arts student at the University of Saskatchewan and intern at the City of Saskatoon. Most photos are from Kouri Research (Don Kossick and Lise Kossick-Kouri). Additional photos were courtesy of CHEP and the City of Saskatoon.





Executive Summary

Saskatoon and area residents are aware that food is a key part of our daily lives. It can play an important role in promoting health, building communities, protecting the environment and strengthening the economy. Individuals are making personal choices to shop locally; farmers are connecting directly with local businesses; and organizations are taking a leadership role within their local food systems and are partnering with communities as they pursue sustainability.

Many cities across Canada have conducted food assessments or adopted a food strategy. Saskatoon has a Food Charter that was adopted in principle in 2002. The creation of a food strategy is a step forward from that.

In conducting the assessment, we were asking one principal question, with two equally important parts: How can we design our food system - from production to consumption – to ensure that over the long term, all residents will eat nutritious food and that we are able to produce more of that food ourselves? Our strategy aims for more food self-reliance. We want to retain and indeed improve our capacity to feed ourselves, through skills and infrastructure. Over the long term, this capacity will ensure food availability. Our strategy includes a cultural component because in the end, our goals are public choices, and will depend on our community wanting a vibrant food culture, where no one goes hungry.

The assessment was based on four goals for a regional food strategy:

Enrich Saskatoon's food culture. Enriching our food culture is a goal for the food strategy, and one that can serve as its overarching theme. Having a vibrant food culture makes sense socially and economically. It is positive and energizing. Although other, also important, goals related to the economy and health are more pragmatic, the attraction of working toward a vibrant food culture came out quite strongly in the focus groups. As one key informant stated, Food is culture is community.

Ensure everyone has nutritious food. Nutritious food is the foundation of good health. All residents should eat well. Saskatoon's boom means more of us can afford nutritious food. But the boom also increases prices for housing and other goods, so people on lower incomes have less money to spend on food. Health disparities have increased in our city but our food strategy can help to reduce them.

Boost the hybrid food economy. Food exports are vital to Saskatchewan's economy and food imports provide us with a rich and varied diet. However, locally-produced food is critical to our long term self-sufficiency and our community. We support the concept of a hybrid economy, which includes import and export, but seeks a larger role for local.

Minimize food's ecological footprint. The environmental impacts of food production, processing, storage, transport and preparation are large, as are the financial costs of food waste. Our food strategy seeks to minimize food's ecological footprint, from production to disposal of waste.

Specific questions and issues we explored were: What and how much food do we produce in the Saskatoon region and what is the potential for expanding production for regional consumption? What is the current demand for regionally produced food, including institutional procurement? What are relevant food policies from elsewhere that we can use as models?



Although available resources did not permit an in-depth assessment or consultation process, we believe the assessment is a significant effort to examine the food situation in Saskatoon from a food system perspective. Conceptualizing the food economy as a system within a city or region, with the goal of meeting our nutritive and community needs, means asking new questions and proposing new solutions.

Saskatoon has the delightful distinction of being named for a food – the name "saskatoon" derives from the Cree word *misâskwatomin* for a local berry. Over the last decade, we have experienced several trends driving an interest in more diverse food options, healthier and from more local sources. The trends show that people want a diverse range of benefits from the food system. This diversity argues for change -- new and emerging drivers require a change in direction and focus for our food system.

In moving forward toward a food strategy, we identified the following trends that we consider to be levers for change:

- Residents are more educated about nutritious food and demanding more healthy food, and more local food.
- There is a recognized need to decrease diabetes and obesity rates and to reduce health disparities in Saskatoon.
- School meal programs are expanding and diversifying as a way to help more children learn.
- Many Saskatoon residents have more spending power.
- Local food producers and processors are actively pursuing local markets, improved infrastructure and support.
- Urban residents are actively pursuing food production in the city and organizations are supporting them.
- Health concerns are emerging from large-scale food processing.
- There is growing concern about impacts on the environment and that climate change will mean food shortages everywhere, making food self-sufficiency imperative.
- Local and provincial organizations are working to improve the Saskatoon food system.

Our assessment presents a complex picture. The food system is being pulled in different directions by different forces, and food is the raw material of diverse projects: socialization and family building, economic development and job creation, ecological conservation, watershed protection, and cultural differentiation. In addressing the food system in its full complexity and in all its roles, solutions cannot be singular or one-dimensional.

We have raised more questions than we have answered. Although there are data and information about agriculture and the food industry, these data are not in a form that can help us plan for self-sufficiency, in particular for a region such as Saskatoon. Similarly, although there are data about health and nutrition, there is less information on the way available food meets our nutritional needs, here, where we live. And although the topic of food is everywhere around us in the media, there are not many studies of what food policies and systems will best achieve the goals people seek for better fed communities.

Our assessment has documented many of the factors, organizations, and enterprises already supporting change in the Saskatoon food system. In formulating recommendations and suggestions, our focus is to build on existing strengths:



1. Our first overarching recommendation is to create a mechanism for ongoing food system action: A Saskatoon Community Food Council.

The Council would have members from different parts of the community and of the food sector, all committed to the basic goals and vision. Its purpose would be to foster and oversee the implementation of the food strategy. Based on the responses in the assessment, we suggest that an explicit commitment to healthy food produced regionally and in a sustainable environment, accessible to community members in diverse ways would be a message consistent with residents' values.

The Food Council would promote collaborations in the community, among and between producers and residents, and their organizations, building on existing strengths. From the findings, the need emerges for increased collaboration among those involved. Given the nature of the movement's strength, any collaborations that are formed should retain flexibility, openness and responsiveness, but alliances can lead to more effective use of resources with better economies of scale, and improve the potential to leverage additional investment from outside sources. Alliances also enable the delivery of a coherent message for promotion.

In the report, we have noted and described emerging collaborations within and among local producers, processors and consumers. We have made recommendations for how these collaborations can become stronger. We have also recommended new collaborations, in particular a Saskatoon Healthy Food Hub, which would be a social enterprise site for demonstration/promotion of collaboration among local producers, consumers, food organizations, researchers and others, a local food broker and bulk buyer and a clearinghouse to share information about the provision of healthy accessible food in Saskatoon. We have also recommended increased collaboration with and within the University of Saskatchewan and related research resources.

The Saskatoon Community Food Council would act on the recommendations we have made in the following areas, and upon which we elaborate in the report. Taken as a whole the recommendations form the basis for a food strategy and corresponding action plan for Saskatoon:

2. Promote Saskatchewan foods and food production as a healthy community-minded choice.
3. Garden everywhere: expand capacity in urban agriculture.
4. Increase collaboration among producers and the development of needed supports.
5. Increase ways to obtain local food products.
6. Feed the children: substantially increase school meals and snacks.
7. Educate residents about healthy food and teach good food skills.
8. Increase availability and affordability of good food.
9. Increase people's ability to buy good food: reduce inequality.
10. Reduce food waste in the home and reduce energy input in food production.
11. Preserve water and land for the future.
12. Build knowledge of regional food systems.



The Team has already committed itself to following up on the first recommendation, and will initiate a Saskatoon Community Food Council, inviting participation from other individuals and organizations, to foster the vision and strategy in this report. The Council will require financial and logistical resources to support its activities. Until the formal establishment of the food policy council, the Team will continue to promote the food strategy and invite feedback from the public at saskatoonfood.ca.

Our Vision

Our city is nourished by healthy and tasty food produced regionally. Good food is part of our traditions as prairie people, both as First Nations and newcomers. Making the most of our northern climate and fertile lands, we have a hybrid food economy that takes advantage of our local bounty as well as importing and exporting healthy food.

Our city creates opportunities for residents to grow and harvest food to eat. Our markets, stores and restaurants sell food from our region. We provide good jobs and fair returns to farmers, linked to our agricultural prosperity, encouraging local opportunities for food harvesting, processing, and distribution.

All residents have access to safe, nutritious food, and partake in the local bounty. All of our children are nourished properly so they can grow physically and mentally.

We are good stewards of the land and water, minimizing waste and preserving the ecosystem. We celebrate our bounty and appreciate its benefits to our community.



Contents

A. TOWARDS A FOOD STRATEGY FOR SASKATOON	1
1. What this project is about	1
2. The assessment team	5
3. Project background	5
4. What we did	6
5. Strengths and limitations of the assessment	7
B. Assessment findings	8
1. Saskatoon and food	8
a. A changing city	8
b. Attitudes to food	10
c. What are we eating?	14
d. The cost of food	14
2. The larger context	15
a. The provincial context for agriculture	15
b. What is the Saskatoon region?	17
c. The potential for self-sufficiency	18
3. Food production and processing	20
a. Urban agriculture in Saskatoon	20
b. Food production in the 100-kilometre radius	26
c. Decline in large-scale processing	29
d. Small and medium scale processing	32
e. Urban-rural connections	33
f. Restaurants	34
g. Scaling up	35
4. Access to nutritious food	39
a. Food and health	39
b. Location of food stores	42
c. Bulk-buying	43
d. Food in schools	44
e. Poverty	45
5. Food and the environment	47
a. Reducing food waste	47
b. Reducing energy use	48
c. Conserving water	50
d. Conserving land	50
6. Knowledge about food systems	51
C. RECOMMENDATIONS AND NEXT STEPS	52
1. Levers for change	52
2. Recommendations	53
3. Next steps	60



References	61
Appendix 1: Team Members	64
Appendix 2: Methods	65
Appendix 3: Examples of Food Strategy Initiatives from Other Cities	67



Tables

Table 1: Examples of food assessments in other Canadian cities	1
Table 2: Team members	5
Table 3: Key factors in food shopping (other than price)	10
Table 4: Focus group responses to <i>Why Buy Local?</i>	11
Table 5: Canada, food availability (after adjustment for waste), 1990-'92 average vs. 2010-'12 average	14
Table 6: Saskatchewan top agricultural exports	15
Table 7: Size of Saskatchewan farms, 2011 and 2006	16
Table 8: Examples of urban agriculture	20
Table 9: Number of farms reporting production of various products, Saskatoon 100-km radius, 2011	27
Table 10: Examples of how to obtain local food	33
Table 11: Proposals for increasing the market for local products	36
Table 12: Improving school food programs	45

Figures

Figure 1: Elements of a food system	1
Figure 2: Our goals	2
Figure 3: Saskatoon population, Census Metropolitan Area (CMA), 2001-2012	8
Figure 4: Saskatoon population by age group, CMA, 2001-2012	9
Figure 5: Saskatoon average and median income, CMA, 2001-2011	9
Figure 6: Saskatoon Consumer Price Index (CPI) for housing, food and all items, 2001-2012	9
Figure 7: Children under 6 years living in low-income by neighbourhood, Saskatoon, 2006	10
Figure 8: Survey respondents' concurrence with food shopping trends	13
Figure 9: Saskatchewan, food price indices and Consumer Price Index (2002=100), 2001-2012	14
Figure 10: Canadian horticultural farm cash receipts by province, 2011	16
Figure 11: Saskatchewan, farmland price index (1991=100), 1991-2013	17
Figure 12: Saskatchewan, farm debt, adjusted for inflation, per farm, 1991-2012	17
Figure 13: Survey responses to <i>What is the Saskatoon Region?</i>	17
Figure 14: Canada, portion of the grocery-store dollar spent on various food categories, 2010	18
Figure 15: Survey responses to gardening possibilities	20
Figure 16: Proposed community gardens in Saskatoon	22
Figure 17: Land in Saskatoon not occupied by buildings; residential and commercial neighbourhoods, acres, 2013	23
Figure 18: Corman Park-Saskatoon Planning District, 2010	24
Figure 19: Map showing a 100 kilometre radius around Saskatoon and the boundaries of the 36 Consolidated Census Subdivisions (CCSs) that approximate the 100 km radius	26
Figure 20: Number of farms with organic products for sale, by product, Saskatoon 100-km radius, 2011	27
Figure 21: Area around Saskatoon (CARs 6A, 6B, and 8B), number of farm operators, 1991-2011	28
Figure 22: Area around Saskatoon (CARs 6A, 6B, and 8B), number of farm operators under 35 years of age, 1991-2011	28
Figure 23: Canadian food processing capacity	31



Figures, cont'd

Figure 24: Interactive Local Food Guide 33

Figure 25: Diabetes rates by year, 2002-2007 and by neighbourhood income level, 2007, Saskatoon Health Region 39

Figure 26: Life expectancy in years, Saskatoon Health Region, 1997-2004 39

Figure 27: Food Balance Ratio in Saskatoon (Blue is best, red is worst) 42

Figure 28: Strategies to cope with food insecurity..... 46

Figure 29: Canadian food waste by category, 2009. 47

Figure 30: Saskatoon Community Food Council: Foster the food strategy and promote collaboration..... 53

Boxes

Box 1: Our vision 2

Box 2: The self-sufficiency equation 19

Box 3: The City of Saskatoon as a food strategy asset 25

Box 4: The Food Centre as a food strategy asset 32

Box 5: Saskatchewan Grocery Retail and Foodservice Value Chain Initiative 37

Box 6: The Saskatoon Health Region as a food strategy asset 41

Box 7: CHEP as a food strategy asset 43

Box 8: Food strategy goals..... 52



A. TOWARDS A FOOD STRATEGY FOR SASKATOON

1. What this project is about

Saskatoon and area residents are aware that food is a key part of our daily lives. It plays an important role in promoting health, building communities, protecting the environment and strengthening the economy. Individuals are making personal choices to shop locally; farmers are connecting directly with local businesses; and governments are taking a leadership role within their local food systems and are partnering with communities as they pursue sustainability.

Many cities across Canada have conducted food assessments or adopted a food strategy (Table 1). Community food assessments bring together information on resources and problems about the food situation in an area – accessibility, affordability, health concerns and production potential. They seek to involve community members and include consumers and producers, as well as conducting research. The assessment is a tool to improve the community's food system – including distribution, production, and other elements (Figure 1).

The next phase is an action plan that brings city organizations and residents together in thinking and acting to improve the community's food system in a food strategy. A community-based food strategy depends on the new awareness that good food creates healthy people and healthy cities. Multiple actors must work together to create space; design interactions; broker relationships and leverage resources.

Saskatoon has a food charter that was adopted in principle in 2002 (Engler-Stringer and Harder, 2011). The creation of a food strategy is a step forward from that. We want to update the vision and assess the conditions in our city and region to create a feasible and energized plan of action. Therefore, our project had three related objectives:

- create a plan of action to address gaps and improve Saskatoon's regional food system, and in doing so,
- conduct a regional food system assessment, developing an understanding of the current state of regional food production and consumption in the Saskatoon region and its potential, and
- engage with the community and stakeholders in developing this understanding, so as to obtain members' knowledge and views, increase their knowledge of the region and each other's current and potential contributions, and to increase their ongoing support and collaboration in the action plan.

This report provides findings from our assessment, followed by recommendations and next steps toward creating a food strategy for the Saskatoon region. In the report we have examined trends and factors for change, seeking to identify levers to improve the food system. We have tried to provide locally relevant information, be action oriented and build on strengths.

Table 1: Examples of food assessments in other Canadian cities

- Calgary
- Edmonton
- Winnipeg (North End)
- Vancouver
- Victoria
- Toronto
- La Ronge
- St Vital
- Waterloo

Figure 1: Elements of a food system



Adapted from fresh: Edmonton's Food and Urban Agriculture Strategy (2012).



Our goals and vision

In conducting the assessment, we were asking one principal question, with two equally important parts: How can we design our food system - from production to consumption – to ensure that over the long term, all residents will eat nutritious food and that we are able to produce more of that food ourselves? Our strategy aims for more food self-reliance. We want to retain and indeed improve our capacity to feed ourselves, through skills and infrastructure. Over the long term, this capacity will ensure food availability. Our strategy includes a cultural component because in the end, our goals are public choices, and will depend on our community wanting a vibrant food culture, where no one goes hungry.

The assessment was based on four goals for a regional food strategy (Figure 2) and an accompanying vision (Box 1).

Enrich Saskatoon's food culture. Enriching our food culture is a goal for the food strategy, and one that can serve as its overarching theme. Having a vibrant food culture makes sense socially and economically. It is positive and energizing. Although other, also important, goals related to the economy and health are more pragmatic, the attraction of working toward a vibrant food culture came out quite strongly in the focus groups. As one key informant stated: *Food is culture is community.*

Ensure everyone has nutritious food. Nutritious food is the foundation of good health. All residents should eat well. Saskatoon's boom means more of us can afford nutritious food. But the boom also increases prices for housing and other goods, so people on lower incomes have less money to spend on food. Health disparities have increased in our city but our food strategy can help to reduce them.

Boost the hybrid food economy. Food exports are vital to Saskatchewan's economy and food imports provide us with a rich and varied diet. However, locally-produced food is critical to our long-term self-sufficiency and our community. We support the concept of a hybrid economy, which includes import and export, but seeks a larger role for local.

Minimize food's ecological footprint. The environmental impacts of food production, processing, storage, transport and preparation are large, as are the financial costs of food waste. Our food strategy seeks to minimize food's ecological footprint, from production to disposal of waste.

Figure 2: Our goals



Box 1: Our vision

Our city is nourished by healthy and tasty food produced regionally. Good food is part of our traditions as prairie people, both as First Nations and newcomers. Making the most of our northern climate and fertile lands, we have a hybrid food economy that takes advantage of our local bounty as well as importing and exporting healthy food.

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We are good stewards of the land and water, minimizing waste and preserving the ecosystem. We celebrate our bounty and appreciate its benefits to our community.



Questions and issues addressed

Specific questions and issues we explored were: What and how much food do we produce in the Saskatoon region and what is the potential to expand production for regional consumption? Although we know most of what Saskatchewan farms produce is destined for export, it is important to establish the potential for self-sufficiency. We documented farm production in the province and in the approximately 100 kilometres surrounding the city. We also looked at the urban agriculture situation in Saskatoon. As to the potential, we inquired of key informants, including producers and residents, about what they perceived to be the potential and how to increase the potential.

What is the current demand for regionally produced food, including institutional procurement? In other words, what is the appetite for such food here in the city? This entailed us examining food shopping trends, and inquiring of key informants, including producers and residents, about their experience and intentions regarding purchasing regionally produced food.

What were relevant food policies from elsewhere that we can use as models? We know that other cities are ahead of Saskatoon in looking at regional food systems. What can we learn from them?

Emerging issues

In carrying out the assessment, supplementary issues emerged about our focus:

Is the food strategy only about regional or local food? What about exports and imports? In the context of Saskatchewan's large agricultural economy, these questions recurred. We clarified that a focus on regional food systems does not preclude exports or even increasing exports. Indeed, our region's food production far exceeds the needs of Saskatoon and Saskatchewan residents, and therefore exports are critical to our economy. However, it is important to track what proportion of our region's food production residents consume and why this is so. To help clarify this issue, we started to talk about a hybrid food system—one based on a mix of foods from the region and from further afield—and about boosting the regional share.

The goal of self-sufficiency is, however, relevant to food we import from elsewhere. We want to increase the proportion of regional food in our diets, and therefore, this does imply a relative reduction of imported food, whether it is from outside the province or from outside Canada. That being said, our goal is not to exclude imported food. In our climate, there are many foods we cannot grow to meet our nutritional needs. In addition, there are many foods from other places that add diversity and interest to our diets, and have become part of the Saskatchewan culture as our resident composition integrates newcomers from other lands, and as we expand our knowledge of other cuisines.

Will relying more on local or regional food increase the cost of food? This recurring question is important in the Saskatoon context. As a community already suffering from health disparities between rich and poor, we do not want to exacerbate the situation by promoting a food system that risks making food less affordable. We asked this question of key informants, including producers and residents, and explored ways to make local or regional food accessible to all. We found there are different parts to this question. First, is the cost of local food actually higher and by how much? Why is this so? Is it because it is produced for the most part by small or



medium-scale enterprises, with fewer economies of scale? Is it because the product is actually of higher quality and therefore of better value? What level of price difference will richer consumers tolerate? What about poorer consumers? Are there food programs that can mitigate the impact of an extra cost? Conversely, can non-commercial local food production—gardening, for instance—be a way to reduce a family’s overall cost of food? Also, if we welcome imported food as part of our diets, another question becomes how to maintain the nutritional, safety and ethical standards of the food we import? Might the lower costs of some imported foods be a function of too-low pay for food system workers in other nations or of other shortfalls in ethical or food safety standards? These were questions we explored as we conducted the assessment.



What is the difference between regional and local? Conceptually, “regional” and “local” have similar meanings— they refer to what is relatively nearby. In practice, they need to be defined more precisely. In the early phase of the Assessment, we avoided the term “local”, feeling the word to be unclear, and referred only to “regional,” defined as a 100-kilometre radius around the city. This distance was the Canadian equivalent of the “100-mile diet” and corresponded to an hour’s drive. However, one of the questions we asked people was: what is your concept of the Saskatoon region? As we discuss below, the large majority told us “the province”. Indeed this corresponds to the most recent definition from the Canadian Food Inspection Agency (CFIA), in

which local refers to the province (CFIA, 2013). Throughout this report, we will use ‘local’ and ‘regional’ interchangeably to refer to food that comes from within the province, and often from locations even closer to our city.



2. The assessment team

An initial group of four organizations, including CHEP Good Food Ltd., the Saskatoon Food Coalition, the Saskatoon Health Region and the City of Saskatoon, created a larger team of representatives that included 11 organizations (Table 2).

Team members bring a range of interests and experience to the project. For example, CHEP is a non-profit corporation active in increasing food accessibility in the city, partly by linking local producers to consumers. The interest of the Saskatoon Health Region's Population and Health Promotion Branch is to increase healthy eating in the region, and the City of Saskatoon's Neighbourhood Planning was responding to requests by community groups and members, most recently a recommendation in the Westmount Local Area Plan that the City conduct a food assessment. The Agriculture Council of Saskatchewan and the Food Centre joined the team because of their respective interests in promoting local (provincial) production and processing. The Grocery People's interest is in increasing the marketability for local products. Other team members bring expertise about aspects of the food system, including the University of Saskatchewan's research resources and Pineview Farms' experience in producing and marketing local, healthy foods.

Table 2: Team members¹

- Agriculture Council of Saskatchewan
- CHEP Good Food Inc.
- City of Saskatoon Neighbourhood Planning
- Federation of Saskatchewan Indian Nations
- The Grocery People
- Pineview Farms
- Prairie Women's Health Centre of Excellence
- Saskatchewan Food Industry Development Centre (Food Centre)
- Saskatchewan Ministry of Agriculture
- Saskatoon Food Coalition
- Saskatoon Health Region Population and Public Health
- University of Saskatchewan Department of Community Health and Epidemiology

3. Project background

CHEP was founded in the late 1980s in response to concerns about food insecurity in Saskatoon. CHEP takes a systems approach to food security, not only addressing immediate concerns but also addressing the systemic causes of the problems that they see. CHEP has always affirmed that it is not enough simply to fill empty bellies, but that the quality of the food being provided is also important. CHEP's local purchasing has brought them into contact with many local farmers and given CHEP the opportunity to hear firsthand about farmers' challenges and successes, as well as those surrounding larger-scale food sourcing, transportation and distribution. In the late 1990s, CHEP and the Saskatoon Food Coalition (SFC) helped develop the Saskatoon Food Charter.

In 2002, Saskatoon City Council adopted in principle the Saskatoon Food Charter which outlines five key food security principles and action areas of production, health, culture, justice and globalization. In the fall of 2010, Saskatoon City Council adopted the Westmount Local Area Plan. Local Area Plans (LAPs) are community-based neighbourhood plans that give residents an active role in determining the future of their neighbourhood. One of the key health recommendations stemming from this plan was the need for a city-wide food system

¹ This list is composed of the original members of the Team. Over the course of the assessment, representatives from the Federation of Saskatchewan Indian Nations and the Saskatchewan Ministry of Agriculture withdrew from the process because of the time required.



assessment. Other LAP neighbourhoods have identified issues through their local area plans—food security and “food deserts” (areas without access to supermarkets) within Saskatoon core areas. The “opportunity to buy and grow healthy and affordable food in all communities,” was a key part of the vision and a key measure of success identified in the 2010 *Saskatoon Speaks: Shape Our Future* community visioning process.

In the fall of 2011, CHEP, the SFC and the City of Saskatoon began discussing the potential for a regional food system assessment. The conversations revealed that some assessment work had already been done and many local groups were already involved in efforts to address gaps in the regional food chain.

The Team obtained funding from three sources to support the assessment, the McConnell Foundation, the Saskatoon Health Region Community Grants Program and the City of Saskatoon. Although available resources did not permit an in-depth assessment, the project generated interest and was successful in gathering information that is significant and indicative for moving toward a regional food strategy for Saskatoon.

4. What we did

The project was initiated in November 2012 and a final report released in December 2013. The consulting firm Kouri Research was contracted to carry out the plan developed by the Team, under its guidance and support. A combination of community interaction, group and individual interviews, and research was undertaken. Efforts were made to be present at events such as the Saskatchewan Vegetable Growers’ Conference, Seedy Saturday, a consultation session hosted by the Conference Board of Canada for its national food strategy and the 2nd Saskatchewan Food Summit. Two focus groups with city residents were held, organized with the help of the City of Saskatoon and a third was held at a CHEP Grub and Gab event. Group interviews were held with different groups including CHEP producers, the Saskatoon Public School Division Nutrition Coordinators, First Nations and Métis community animators and MyWay immigrant women. A web site and Facebook page were established and online surveys posted to invite people’s ideas. Surveys included a food shopping survey, a producer survey, and a poll about people’s perspective on what a “region” should be in the context of a food system.



Key informant interviews were held with representatives of relevant organizations, including Team members. Organizations included SIAST, the Saskatoon Food Bank and Learning Centre, Wanuskewin, the Greater Saskatoon Catholic School Board, the University of Saskatchewan (Economics and Horticulture Departments), Tourism Saskatchewan, Tourism Saskatoon, and the Aboriginal Friendship Centres of Saskatchewan. Reports on what Saskatoon and other cities have done were reviewed, and research carried out based on Statistics Canada and other data and reports. Several individual key informants were also interviewed.



A preliminary assessment and set of recommendations were prepared for public feedback at two sessions, one held in June at the Saskatoon Farmers' Market and another at the Centre Mall in August. The informational materials were also posted on the website along with an online questionnaire.

5. Strengths and limitations of the assessment

Available resources did not permit an in-depth assessment or consultation process. Online surveys were conducted, but intended as more of an opportunity for interested people to provide feedback, as resources did not provide for extensive and systematic outreach. The surveys were not expected to provide an indication of the general opinion of the Saskatoon community nor of the Saskatoon region's production capacity. The survey responses were presented in this report in the same way as our focus group data: indicative of the opinions of those people more interested in the food sector. For the producer survey, respondents were mostly Farmers' Market producers so we considered the responses accordingly.

Being restricted to secondary research to analyze broader trends, the assessment was consequently subject to the limitations of the poor availability of data for Saskatoon and region. Although sociodemographic data are available for Saskatoon, economic and agricultural production data for the region are limited. There were no data on the food industry in Saskatoon for example, to show employment trends for specific food sectors, volume of food sales, and so on, either from Statistics Canada or from private industry. Further, although the Census of Agriculture does provide agricultural production data by consolidated Census subdivision (CCS), which we have used here, where production is too low, the data are not provided by Statistics Canada due to confidentiality concerns. Finally, the Census production data do not show where products are sold, which is critical for our study. Our action plan has recommendations to address the gaps in information that would allow a good analysis of these questions.

Notwithstanding these limitations, we believe the assessment is a significant effort to examine the food situation in Saskatoon from a food system perspective. In Saskatchewan's agricultural economy, analysts have tended to look at food as a commodity for sale, to focus on overall volumes and sales, especially for grains and livestock, and to focus increasingly on food exports. Conceptualizing the food economy as a system within a city or region, which focuses on meeting our nutritive and cultural needs as a community and optimizing local resources, means asking new questions and proposing new solutions. The project assembled data from various sources and conducted a wide range of expert and community consultations. The strength of this assessment is that it reframes the conversation about food in Saskatoon. This assessment collected the information that is available, pointed out the gaps, engaged residents and producers, and developed a strategy for further action.



B. Assessment findings

1. Saskatoon and food

a. A changing city

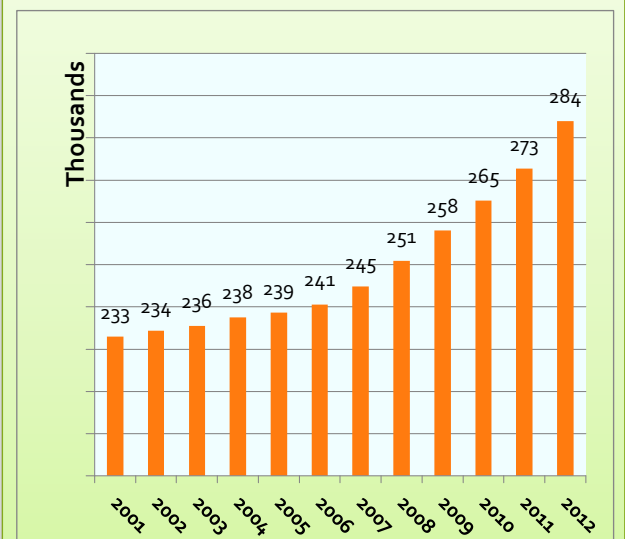
Saskatoon has the delightful distinction of being named for a food – the name "saskatoon" derives from the Cree word *misâskwatomin* for a local berry. With 280,000 residents, Saskatoon is the province of Saskatchewan's largest community. Situated in Treaty 6 territory, it lies along a bend of the South Saskatchewan River and is central Saskatchewan's crossroads; a hub for water, rail, and highway crossings east and west, north and south. The Saskatoon area has been inhabited for at least 8,000 years. Buffalo kill sites, teepee rings and a medicine wheel can still be seen today and form an important link with the past. Although Saskatoon settlers came mostly from Europe, from other provinces, and from the United States, the city is now home to people from around the world as well as to a large First Nations and Métis population (City of Saskatoon, 2013).



Dependent on agriculture for many years, Saskatoon has experienced many "booms and busts" throughout its history. The expansion of the mining industry in the 1970s and 1980s, particularly potash, reduced this to some extent, although economies based on export of raw materials remain vulnerable to external commodity markets. Nevertheless, there is now a more diversified manufacturing base and a large biotech industry.

Since the turn of the millennium, Saskatoon has been experiencing renewed growth and its population has been increasing over the last decade (Figure 3). Following a more long-standing trend, our education levels are rising. In 2011, only 8% of those 25 to 44 years old had no certificate, diploma or degree compared to 31% of individuals aged 65 years and over (Statistics Canada, 2011). This is important to our assessment, because educated people tend to know more about nutrition and health and are more concerned about obtaining healthy food.

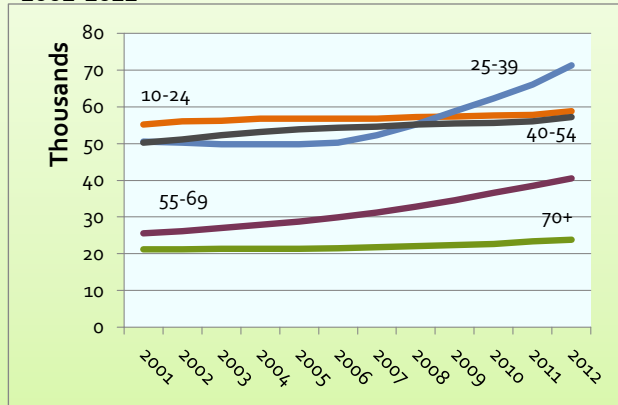
Figure 3: Saskatoon population, Census Metropolitan Area (CMA), 2001-2012



Source: Statistics Canada Cansim Table 051-0046.



Figure 4: Saskatoon population by age group, CMA, 2001-2012

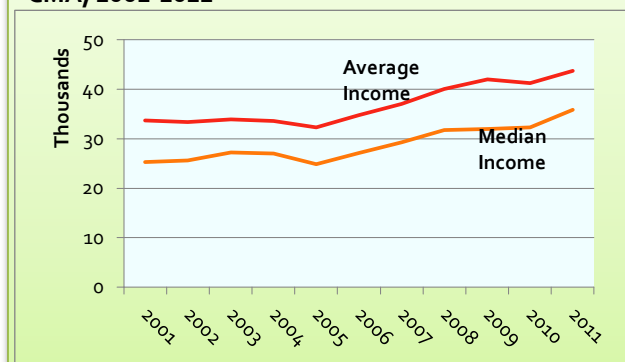


Source: Statistics Canada Cansim Table 051-0046.

Saskatoon’s age distribution is also changing. Our fastest-growing population group is those 25-39 years old (Figure 4). As we said above, this age group is highly educated. In 2011, 70% of those 25-44 years old had a post-secondary credential compared to 48% of those aged 65 years and over. Persons in this age group typically have children at home. Food trend research suggests that, for this reason combined with their higher education level, those in this age group are most knowledgeable about and interested in, healthy food for their families. Further, in the Saskatoon CMA, the average income of two-parent households with children living at home has increased more than other census-family types over the last several years (Statistics Canada Cansim Table 202-0410).

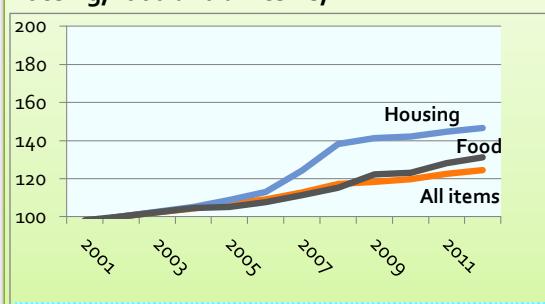
Since 2005, Saskatoon’s average income has been steadily rising, from \$32,000 per year in 2005 to \$44,000 in 2011, with a corresponding rise in median income (Figure 5). The number of people employed has increased steadily throughout the decade, from 115,000 in 2001 to 152,000 in 2012 (Statistics Canada Cansim Table 282-0110). Skilled workers are migrating to Saskatoon from other provinces and from outside Canada. The trends have implications for the food industry, as higher incomes give people the ability to buy more expensive food. In addition, more working people mean an increased demand for restaurant meals.

Figure 5: Saskatoon average and median income, CMA, 2001-2011



Source: Statistics Canada Cansim Table 202-0402.

Figure 6: Saskatoon Consumer Price Index (CPI) for housing, food and all items, 2001-2012



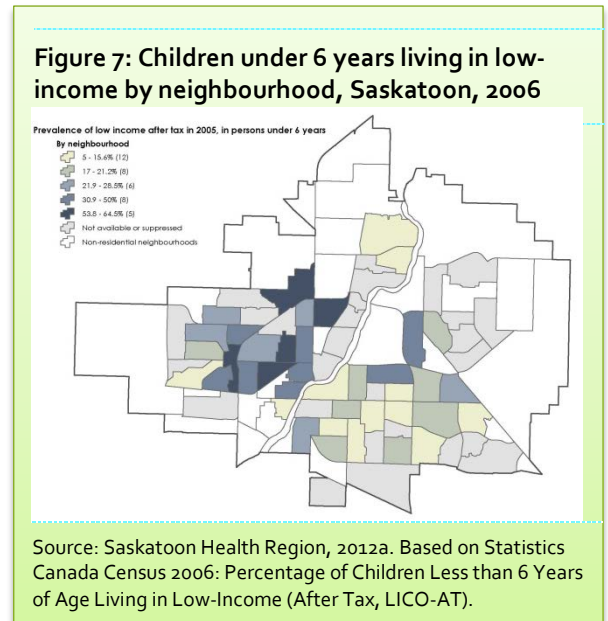
Source: Statistics Canada Cansim Table 326-0021.

However, in a boom economy, prices for all goods tend to go up, and so incomes do not reach as far. In Saskatoon, both food and housing have increased more than other goods (Figure 6). Housing (including rental) prices especially have risen substantially so people on lower incomes have less money to spend on food.



Saskatoon’s low-income population is concentrated in certain areas of the city, mainly in what is termed the core neighbourhoods (SHR, 2009). However, there are also low-income families in other parts of the city.

Inequalities in income are reflected in higher death rates for low-income communities (SHR, 2008). The Saskatchewan Health Region (SHR) reported that in 2004, those living in the core neighbourhoods could expect to die 5 years earlier than other residents (SHR, 2009). Further, the death rate in the core had actually increased in the years preceding 2004, while it had improved elsewhere. Counter-intuitively, in the midst of our recent prosperity, this situation has worsened. The most recent report in 2012 stated that “from an equity standpoint, we are doing worse. [The] gap between highest and lowest socio-economic quintile [is] widening” (SHR, 2012b). These trends imply that any recommendations we make for the food system must include a focus on those factors that will improve the health of low-income residents.



b. Attitudes to food

There are no research data available on Saskatoon people’s attitudes to food. For Canadians as a whole, the Conference Board of Canada (CBoC) identifies food price as the most important factor in people’s decisions about what to buy.

Attitudinal surveys show that basic market value considerations are more important than secondary considerations in shaping consumer spending. The recent recession has made consumers more value conscious in their buying decisions. (CBoC, 2011).

Notwithstanding the ever-present issue of cost, the same source refers to additional recent trends that are significant in people’s attitudes to food.

Today, more Canadians think about all aspects of food (from how it is produced and what is in it, to where and when they eat it) than ever before. However, the two-earner household is a busy household that puts a premium on convenience. That gets expressed in two ways: first, through value-added groceries that minimize post-purchase preparation, and second, in dining out at restaurants, especially fast-food restaurants.

Table 3: Key factors in food shopping (other than price)

- Health and wellness
Products that are seen to provide healthier choices, including organics, fresh produce, and local produce.
- Premium
Higher end products and treats.
- Preparation time
Products that require less preparation once purchased.
- Social
Foods that respond to ethical concerns: fair trade, environmental impact and buying local.

Source: ACS, 2012.

The Agriculture Council of Saskatchewan (ACS) has published a Canadian Grocery Retail Guide that identifies four emerging trends in food shopping (Table 3) based on national data: health is the most important, others are higher-end products, products with less preparation time, and social or ethical concerns.



As is the case in most sectors across the industry, increasing awareness on the health benefits and risks associated with the food and drink we consume has led to a drive towards buying healthier and more nutritious products. Consumers in most demographic and psychographic groups are becoming increasingly concerned about not only their own health but their family's health and wellness. (ACS, 2012)

These trends show diversity in what people want from their food systems. On the one hand, the trends suggest a smarter, more educated shopper who reads labels and is concerned about the quality, source and impact of food products. On the other hand, lower price is critical, especially for those with less income, just as reduced preparation time is also important, especially for those with less time, such as families with two parents in the labour force. Finally, notwithstanding these factors, the trend toward increased purchases of higher-end products reflects that certain sub-populations can afford them.

The focus groups and online surveys carried out in this assessment corroborate some of these trends for Saskatoon. As we discussed earlier in the report, our respondent numbers were not sufficient to be representative of the general population. However, they are indicative of a subgroup within Saskatoon that is very interested in food and local food. Our respondents confirm that health is a strong factor in their shopping decisions and that local food is seen to be healthier, better for the environment and more supportive of the local economy (Table 4).

The importance of food as a component of our culture was also reinforced by many. There were several aspects to this. One is that there are many urban residents who have rural roots, either having migrated from farms and small towns themselves, or having families still there. Those residents want to stay connected with food production, if not directly or through their families, then through farmers' markets. Second, there are many residents who, while having no personal rural connections, have come to be concerned about the quality and sources of food through the growing environmental movement – this is especially but not exclusively the case among younger residents. Third, Saskatoon residents reflect the growing North American pre-occupation with culinary activities of all sorts – exemplified by the number of television programs about cooking, books and media articles about food and restaurants, and many social events about cooking and food.

In the last several years, Saskatoon has almost doubled the number of immigrants from outside Canada. Census data reported over 11,000 immigrants to Saskatoon in the 5 years up to 2011, a number that is about 40% of the 27,000 immigrants who live here. The large majority are from Asia – 4,000 from the Philippines and 4,500 from other parts of Asia. There were 1,500 from Africa and the Americas, while 1,400 were from Europe. Immigrants bring more diversity to our food culture. Newcomer communities offer more diverse options in specialty stores and "ethnic" restaurants, as well as increasing demand from established retailers for "ethnic" products. Historically, ethnic food traditions have been a complementary contribution to our culture, as Habeeb Salloum explained in describing his experience on a southwestern Saskatchewan homestead in the 1930s.

Table 4: Focus group responses to *Why Buy Local?*

- Higher quality – taste is better; helps you eat seasonally.
- Builds community; supports the local economy; employ people in the area.
- More ethical; know the farmers' practices regarding pesticides (smaller ecological footprint); can talk to producers/trust them; don't need organic; can look at operation; know what's in the food.
- Healthier, not been shipped.
- Socially more interesting (e.g. Farmers Market).
- Tradition (family) to do it; keep the knowledge; intergenerational benefit – parents, kids, farm, -- better practices passed down; learn about food.
- Connects you with season and land; expands diversity.
- Decreases dependency on global/international economy; In the future, imported food will cost more.
- Price can be a challenge but not always.



Like many Arab immigrants, we were able to survive better than many members of various ethnic groups due to the subsistence-level living that had been practiced by my parents in their homeland. In the Biqa' Valley, my parents had grown chickpeas and lentils – vegetables that had, through the centuries, adapted to desert climate. These we now seeded, and every year our garden of chickpeas and lentils thrived, aided by hand-drawn water from our well.

(Arab Cooking on a Saskatchewan Homestead, 2005)

Also part of the multi-cultural fabric in Saskatoon and area are the francophone communities. They have food traditions that are identifiably theirs and that are based in local ingredients. In the area east of Saskatoon, they are currently framing their agricultural and food traditions under the term “terroir”, which implies a local area that brings together food, agriculture and cultural customs.

First Nations and Métis

A special opportunity is developing in Saskatoon and the province with First Nations and Métis communities, who are reviving their food cultures and traditions for social and economic development. Social benefits are being gained from re-establishing knowledge and skills in harvesting, hunting, cultivating and preparing food in ways that are traditional to the area. The process brings a sense of pride, as well as providing important information to the wider society about local food. Economic benefits are gained from a new focus on market and community gardens on reserves. Provincially, there is interest among the First Nation and Métis leadership for building on the potential provided by reserve lands, coupled with the increased demand in urban areas for culturally reflective and nutritious foods.



Respondents told us that there is a diversity of views within First Nation and Métis communities. These include a value that profit should not be made from food as well as a belief that youth should be encouraged to participate in the community and seek financial success with creative entrepreneurial programs, especially food projects. University courses and social media are influencing the younger generation to become more aware of food issues and to make better informed choices around food.

Finally, there are economic opportunities from tourism, as interest in First Nations and Métis cultures grows. It will be important to embrace First Nations and Métis involvement and leadership in developing our regional food system.



Food in the media

Our assessment has shown that Saskatoon’s cultural life is strongly affected by food. Our tourism agency is keen to highlight this feature for Saskatoon. The major daily newspaper, the Star Phoenix, has a food writer/reviewer who promotes local food (see photo at right), as has another Saskatoon magazine, Planet S. Saskatoon has an association of chefs who promote and celebrate local food, restaurants that do likewise, as well as food groups such as the recently formed local branch of Slow Food.

Soup sings when the ingredients are summer-fresh

AMY JO SHAMAN
Home for Dinner

It's a warm and breezy summer day, bees buzzing in the garden and chickens pecking before my very eyes. On such a day, I'm inspired to go into the kitchen and make a soup.

Who says soup is cold-weather food? There's no better time to make soup than when the ingredients are at their prime. Every season has its soup, from cool gazpacho of summer to hearty squash soup of winter to the first fresh dill potato soup of spring.

Recently, I had the plea-

Ingredients:
 2 tbsp. olive oil
 2/2 onion, chopped
 2 cloves garlic, finely chopped
 2/4 small zucchini
 1 bunch of baby carrots
 1 bunch of green beans
 1/2 bunch of radish and peas
 1 bunch of baby spinach and chard
 1/4 cup herbs: parsley, rosemary, oregano, thyme, basil
 6 Roma-style tomatoes
 2 cups cooked white beans
 Salt and pepper
 6 cups chicken broth (or water)
 2 cups short pasta, cooked

Minestrone
 Chop green beans, peas, spinach and chard into 1/4-inch chunks. Add these vegetables to the pot. Finely chop a mix of herbs, tasting it to ensure a pleasing balance. (Don't let the parsley overtake!) Stir the herbs into pot. Chop the tomatoes and add them with the beans. Season with 1 tsp. salt and many grinds of pepper. Cook until the vegetables and herbs are warm and fragrant. Add the broth and simmer for 20 minutes. Taste and add more seasoning as needed. To serve, place cooked noodles (I used little bow ties) in each little bowl (see) in each soup bowl and pour on the hot soup. It's quite stable to sprinkle on a bit of Parmesan cheese.

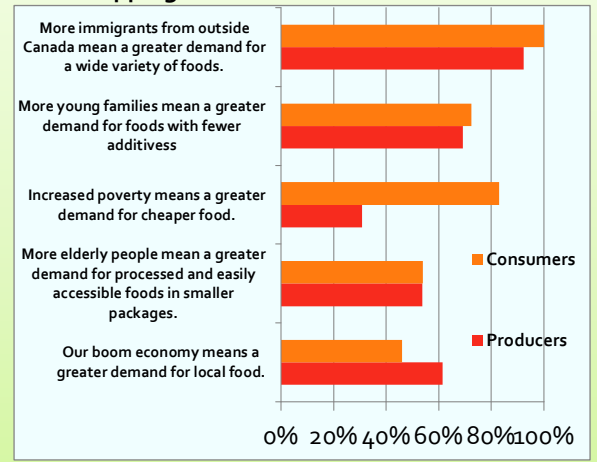
Results from our online surveys

As we discuss above, our online surveys do not provide a representative view of Saskatoon residents. However, they provide an indication of attitudes of a subgroup most interested in a food culture. Of the 94 respondents to our online "Food shopping survey", most respondents (91%) came from Saskatoon, the others from farms, acreages and communities nearby. About half the people shop once a week, and another 36% more than that. Only 12% shop less than once a week. When shopping, about half often look for food that is grown or processed in Saskatchewan; and when eating at restaurants, 35% often do so. 38% of respondents visit the Farmers' market regularly, although for about half of them, only during the summer. About one quarter of respondents said that not being able to find regional/local food was a serious problem for them; one-fifth said that the cost of healthy food was a serious problem.

Of the 15 persons who answered the producer questionnaire, most were part of the Saskatoon Farmers' Market. Most (80%) were vegetable producers, with 3 of those being greenhouse growers. Among the others, products were grains and cereals, seeds, meat (beef, lamb, pork), fish, poultry and eggs. In addition to selling at the Farmers Market, some of the producers sold at the farm gate, delivered to individuals or provided products by mail. Some also sold to wholesalers or brokers, including CHEP.

We posed questions about shopping trends to both groups of survey respondents. Almost all agreed with the point that more immigrants from outside Canada mean a greater demand for a wide variety of foods, and about 70% of both groups agreed that more young families mean a greater demand for foods with fewer additives. Where the two groups differed is on the economic implications. Producers were more likely to agree that our boom economy means a greater demand for local food, while consumers were more likely to agree that increased poverty means a greater demand for cheaper food (Figure 8).

Figure 8: Survey respondents' concurrence with food shopping trends





c. What are we eating?

Table 5 lists per-capita Canadian supplies of selected foods. Food availability data is our best window into food consumption. These figures are derived from gross supplies that have been adjusted for retail, household, cooking, and plate losses: “food waste.” The units are kilograms per person per year, unless litres are specified. The right-hand column shows that over the past 20 years, food consumption patterns have changed significantly. For instance, we’re eating almost twice as much yogurt, but half as much unskimmed milk.

Table 5: Canada, food availability (after adjustment for waste), 1990-’92 average vs. 2010-’12 average

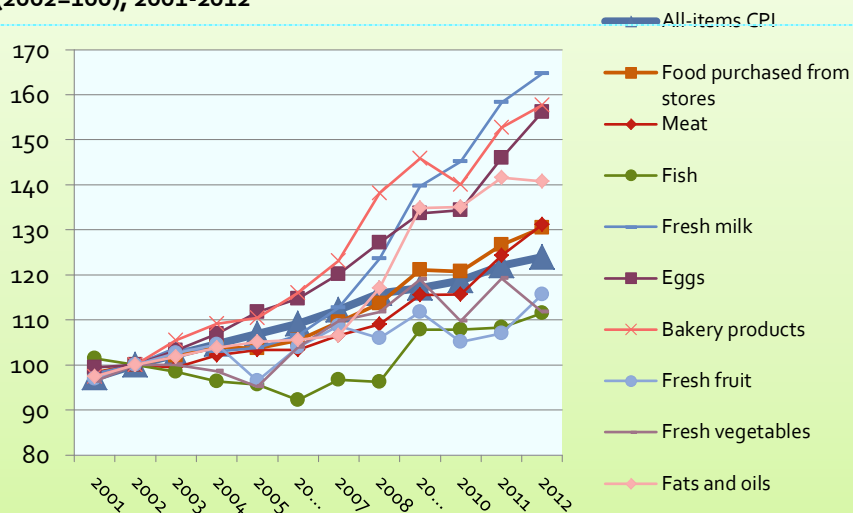
		1990-1992 average quantity	2010-2012 average quantity	Percent change, early 1990s vs. recent years
Wheat flour	kgs / person / year	38.6	42.3	+10%
Rice	kgs / person / year	3.7	4.7	+26%
Cheddar cheese	kgs / person / year	2.5	2.7	+7%
Ice cream, ice milk, & sherbet	litres / person / year	8.4	5.3	-37%
Standard milk 3.25%	litres / person / year	14.2	7.3	-48%
Partly skimmed milk 2%	litres / person / year	39.1	25.3	-35%
Yogurt	litres / person / year	2.1	5.9	+178%
Chicken & stewing hens, boneless weight	kgs / person / year	8.1	11.2	+38%
Beef and veal, boneless weight	kgs / person / year	14.6	12.0	-17%
Eggs	kgs / person / year	8.0	9.0	+13%
Butter	kgs / person / year	2.4	2.2	-10%
Margarine	kgs / person / year	4.3	2.7	-36%
Salad oils	litres / person / year	3.6	8.5	+137%
Apple juice	litres / person / year	7.5	5.5	-26%
Carrots fresh	kgs / person / year	5.8	5.3	-8%
Cucumbers fresh	kgs / person / year	1.6	2.7	+70%
Lettuce fresh	kgs / person / year	5.7	5.5	-3%
Potatoes white, fresh & processed	kgs / person / year	31.0	24.7	-20%

Source: Statistics Canada, CANSIM Table 002-0011.

d. The cost of food

For the last ten years, and especially the last five, food prices in Saskatchewan rose slightly faster than overall inflation. Figure 9 compares the Saskatchewan All-Items CPI since 2001 to that for all food items purchased from stores, and also to various types of grocery-store food. Prices for meat, milk, eggs and bakery products have increased the most, while those for fish, fresh vegetables and fruit have increased less.

Figure 9: Saskatchewan, food price indices and Consumer Price Index (2002=100), 2001-2012



Source: Statistics Canada CANSIM Table 326-0021.



2. The larger context

a. The provincial context for agriculture

Saskatchewan's primary agriculture sector is large. Our farm sector alone—not counting food processing, retailing, or food services—makes up 12% of our provincial GDP and 7% of our workforce (AAFC, 2013). When processing, retailing, restaurants, and food services are added in, the employment share rises to 15%. On top of employment in these sectors, comes “upstream” employment in fertilizer and pesticide and seed production and sales, machinery production and sales, fuel production and sales, and agriculture-related banking and insurance. All of these percentages are much higher than averages in other provinces (with the possible exception of Prince Edward Island) or for Canada as a whole.

In addition to being large, the agriculture sector is export oriented. According to the provincial Ministry of Agriculture, Saskatchewan exports over \$1 billion in each of cereal grains (wheat, oats, rye and barley), oilseeds (canola and flax) and pulses (peas and lentils). Saskatchewan is the second largest beef-producing province in Canada with 1.3 million beef cows, or just over 30% of the Canadian beef cow herd. In 2010, Saskatchewan's total cattle and calf receipts were approximately \$1 billion; Saskatchewan's hog industry generated over \$228 million; and Saskatchewan had approximately 33% of the Canadian bison herd. As the Ministry declares on its website:

Agriculture is big business. Agriculture is the root of Saskatchewan's economy and accounts for over one-third of the province's total exports. We have over 40% of Canada's farmland, totaling more than 60 million acres. Approximately 33 million acres of agricultural land is used for crop production each year.

Saskatchewan has a significant agricultural biotechnology sector (30% of Canada's), with more than 700 scientists working in 30 private, public and academic facilities, most of which are linked to the University of Saskatchewan (U. of S.).

The size and nature of Saskatchewan's agricultural sector brings advantages and challenges to a food strategy. While there is no shortage of food, most of it is destined for export either outside our country or to other provinces. And for Canadian products, the way that food processing is organized means that it is difficult to tell for most products, such as beef, bread, or chickpeas whether we are getting Saskatchewan product or not.

We looked for studies that tracked produce in a way that would show the extent of food self-sufficiency. One such analysis for vegetables at the province level, by the Canada-Saskatchewan Irrigation Diversification Centre in 2005 found the following:

Table 6: Saskatchewan top agricultural exports

In 2010, Saskatchewan was the leading Canadian exporter of the following agri-food products:

- Non-durum wheat - \$1.733 billion
- Canola Seed - \$1.658 billion
- Lentils - \$983 million
- Canola Oil - \$787 million
- Pea - \$742 million
- Durum Wheat - \$572 million
- Canola Meal - \$260 million
- Flaxseed - \$255 million
- Oats - \$204 million
- Barley - \$204 million
- Canary Seed - \$83 million
- Mustard Seed - \$62 million
- Chickpeas - \$47 million

In terms of world exports, Saskatchewan in 2010 produced the following percentage of world exports:

- Lentils 61 %
- Peas 57 %
- Flaxseed 55 %
- Durum 34 %
- Canola seed 34 %
- Mustard 40 %

Source: Saskatchewan Ministry of Agriculture.

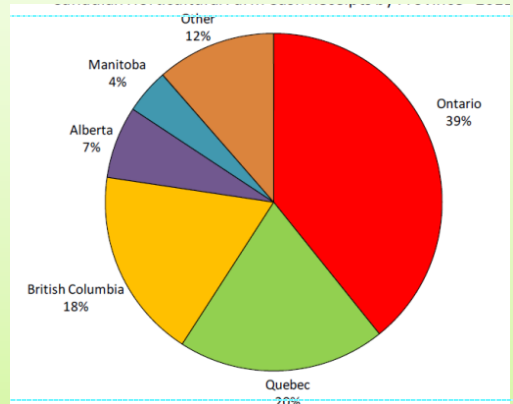


An analysis of "in-season" self-sufficiency found that Manitoba supplied 57% of its needs, Saskatchewan was at 7% and Alberta was 33% self-sufficient. Saskatchewan consumers spend an estimated \$25 million annually on fresh vegetables that could be grown within the province. (AAFC, 2005)

Indeed Statistics Canada data corroborate that the horticulture industry in Saskatchewan is underdeveloped compared to neighboring provinces (Figure 10). Saskatchewan is not included in the pie chart because our receipts are less than 1% of the total.

The 2007 Status Report by Agriculture and Agri-Food Canada noted that "the increasing consumer interest in local food around the globe could shut Canadian producers out of the export markets we have come to rely upon," making it imperative for Canada to create its own markets for locally-grown food (AAFC, 2007). It further noted that "Canada's historical focus on an export food system has impeded efforts to build a healthy domestic food system;" and that the policy framework "is a significant barrier to local food systems."

Figure 10: Canadian horticultural farm cash receipts by province, 2011



Source: Agriculture and Agri-Food Canada 2012 based on Statistics Canada CANSIM table 002-0001.

A separate contextual issue is the change occurring in the farm economy. On average, Saskatchewan has the largest farms in Canada. Saskatchewan's average farm grew 15% to 1,668 acres between 2006 and 2011 (Saskatchewan Ministry of Agriculture, 2012). This increase is larger than those in the rest of Canada, where average farm size increased by 7%, from 728 acres to 778 acres. As a corollary, the number of farms and farm operators decreased, continuing a 71-year downward trend. Between 2006 and 2011 (Table 7), the number of farms in Saskatchewan decreased from 44,329 to 36,952, a decline of 17%. Farms of all sizes decreased in number, except those in the largest category represented in the Saskatchewan Ministry of Agriculture table.

As farm size has grown and as farms have become increasingly mechanized, so too has the price of land increased (Figure 11) and farm debt grown (Figure 12). In the past six years, steep increases have doubled land prices. High land prices make it harder for new and young farmers to enter farming. High prices can also spur older farmers to exit. The overall effect is to reduce farm numbers.

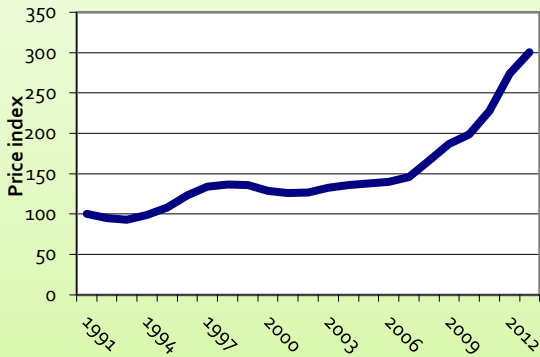
Table 7: Size of Saskatchewan farms, 2011 and 2006

	2011	2006	Absolute	Percentage	2011
acres	Number of Farms		Change	Change	Distribution
less than 10	345	431	(86)	-20%	1%
10-69	967	1,254	(287)	-23%	3%
70-129	975	1,084	(109)	-10%	3%
130-179	3,780	4,447	(667)	-15%	10%
180-239	632	732	(100)	-14%	2%
240-399	3,969	4,698	(729)	-16%	11%
400-559	2,755	3,542	(787)	-22%	7%
560-759	2,808	3,668	(860)	-23%	8%
760-1119	4,066	5,448	(1,382)	-25%	11%
1120-1599	4,146	5,589	(1,443)	-26%	11%
1600-2239	4,152	5,103	(951)	-19%	11%
2240-2879	2,521	2,946	(425)	-14%	7%
2880-3519	1,724	1,795	(71)	-4%	5%
3520 and over	4,112	3,592	520	14%	11%
Total Farms	36,952	44,329	(7,377)	-17%	100%

Source: Saskatchewan Ministry of Agriculture, based on Statistics Canada 2006 and 2011 Census data.

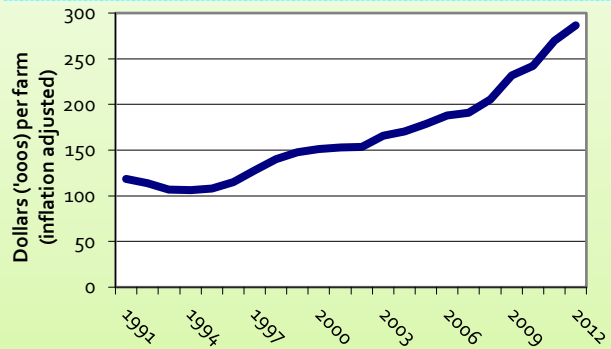


Figure 11: Saskatchewan, farmland price index (1991=100), 1991-2013



Source: Farm Credit Canada, data obtained by request.

Figure 12: Saskatchewan, farm debt, adjusted for inflation, per farm, 1991-2012



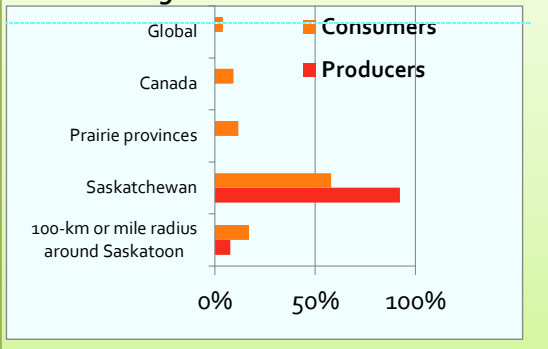
Source: Statistics Canada "Farm Debt Outstanding" (Cat. No. 21-014-X).

b. What is the Saskatoon region?

At first, we conceived of the *region* for Saskatoon's regional food system as a 100-kilometre radius around the city, or roughly one hour's drive away. The idea was related to the 100-mile diet, which carried the proposal

that as much of our food as possible should be obtained "locally". However, as part of the assessment, we asked people what they believed the Saskatoon region should be. Among our survey respondents, the majority of both consumers and producers preferred Saskatchewan as the region, the producers overwhelmingly so (Figure 13).

Figure 13: Survey responses to *What is the Saskatoon Region?*



In focus groups, people talked about not wanting to lose the notion that their region included not only Saskatoon berries, but also blueberries from northern Saskatchewan, and mustard from Gravelbourg. Interestingly, this notion of a socio-political dimension to the concept of local was

reinforced in a recent CFIA decision that local should be interpreted to mean the province (CFIA, 2013). The concept is also reinforced by logos of the Saskatchewan Value Chain Initiative (shown here) and the SaskMade Marketplace, which are provincial.

Conversely to the idea that northern blueberries can be considered local, is that some products such as loaves of bread or roast beef, may not. Although wheat and cattle surround Saskatoon, processing and packaging can strip their source and their localness. Ground beef, for example, is produced in large packing plants where the meat of hundreds of animals can be combined into one batch of ground beef — combining the meat of cattle from Saskatchewan, Alberta, Manitoba, B.C., and elsewhere.





produce our own chickens and noodles and the ingredients for other soups and prepared foods. It is not possible to calculate an exact number for the maximum feasible food self-sufficiency for Saskatchewan or Saskatoon, but this initial look shows it to be much higher than most people would initially suspect—probably in a range approaching 75%. Saskatchewan could perhaps meet nearly three-quarters of its own food needs.

For example, most Saskatoon residents consume significant quantities of meat, eggs, cereals, bread, dairy products—which we produce here. 100% of the ingredients for every bacon ‘n’ eggs breakfast could come from around Saskatoon. 100% of every breakfast of cereal and milk could too. 100% of every hamburger lunch (beef, bun, butter, mustard, relish, fries, onions, etc.) could come from around Saskatoon. So could 100% of every steak dinner. So could 90% of every lasagna or fettuccine alfredo, perhaps 80% of every pizza or lamb curry. When we think of food self-sufficiency, we too soon focus on the pineapples and bananas we can’t grow, and we fail to consider that most of the food that is served on Saskatoon tables—measured in kilos, dollars, or calories—is made up of ingredients that are growing around Saskatoon, or that easily could be grown here. The theoretical maximum for food self-sufficiency is very high, and large increases are attainable.

Although Figure 14 is based on dollars, not kilos or calories, it is likely that no matter what the measure—dollar value, nutritional value, volume—Saskatchewan’s food self-sufficiency potential is much higher than most people would at first assume. Saskatchewan could import a much smaller fraction of its food, mostly out-of-season vegetables and fruits, ocean fish, coffee, and a limited number of other items we cannot produce here.

As we pointed out earlier in the report, increasing self-sufficiency does not imply shrinking our economy. For our large export commodities, Saskatchewan residents are few enough and our agricultural exports large enough, that we can eat only a small portion of what we produce. The target of increased self-sufficiency is not reduced exports, but reduced imports. In fact, increasing self-sufficiency will diversify and likely expand our economy.

Box 2: The self-sufficiency equation

We can think of food self-sufficiency as an equation—one with several variables, each of which affects the ultimate percentage of the food we produce locally for ourselves. In a theoretical equation, those variables would include:

- **Production:** What percentages of our food needs are, or could be, met by local farm or greenhouse or garden production?
- **Processing:** Do we have facilities to process what we can grow?
- **Redundant trade and transport:** We may produce enough flour, for example, to supply our city, but we may be shipping much of that flour to other places, then shipping nearly identical flour back in.
- **The real and perceived value of diversity:** While one can imagine that local mills could make us self-sufficient in flour, it is harder to imagine that we wouldn’t still want to enjoy imported cheeses.
- **Cultural and ethnic preferences:** Saskatoon residents who come from Greece may want a particular olive oil; residents from China may want a particular condiment.
- **The effects of advertising and the promotion of national brands:** There will probably always be demand for Campbell’s soups or Ritz crackers, and it is unlikely that production of those products will be radically decentralized.
- **Restricted access to wholesale and retail channels:** To a significant degree, large retailers shape our food system, what is on offer, and where it comes from.



3. Food production and processing

a. Urban agriculture in Saskatoon

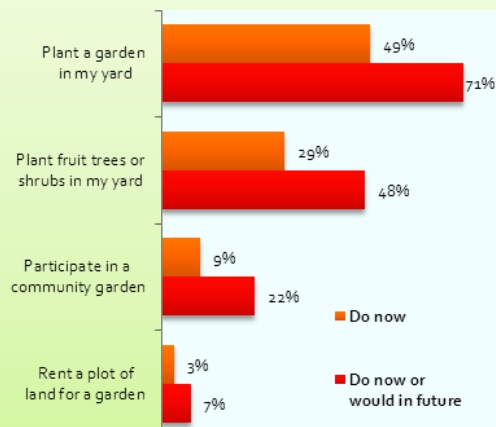
By urban agriculture in Saskatoon, we mean the production, processing, marketing, and distribution of food within or just outside the city limits. Urban agriculture is an important component of food policy and food system planning and has emerged as a strong component in plans in several Canadian cities. Urban agriculture can take many forms (Table 8), and can include food production for both non-commercial and commercial purposes.

In Saskatoon, interest in urban agriculture has intensified in recent years. An increasing number of residents are interested in gardening, including community gardening. Participants in our focus groups confirmed this, as did our key informants from CHEP and the U. of S. Our survey respondents as well showed a willingness to increase their gardening (Figure 15). The idea of gardening as a way to decrease food costs was a common theme in our focus groups and other discussions.

Table 8: Examples of urban agriculture

- Backyard or front-yard gardens
- Rooftop and balcony gardens
- Fruit trees and shrubs, private and public
- Backyard hens and bees
- Community gardens (including those by school and non-profit organizations)
- Boulevard gardens
- Allotment gardens
- Backyard sharing programs
- University and other institutionally-based plots
- Vegetable greenhouses
- Market gardens
- UPIC operations for fruit and vegetables

Figure 15: Survey responses to gardening possibilities



Home gardens

There are no data about private gardens maintained by residents in Saskatoon. We know, however, that many people do garden and it would be important to have an estimate of how much they produce, and whether it is increasing or decreasing.



We also know that backyard-sharing programs are increasing in popularity. Residents whose homes have yards but do not wish to garden themselves can make their yard accessible for gardening by others. Conditions vary, but often the yard-owner will receive a share of the produce in return. Knowing the demand for this is increasing, CHEP has added a service, helping to connect those who want to garden with those who want to share their yard.

Community gardens

Community gardens are an increasing form of urban food production. A community garden is a plot of land where community volunteers form a non-profit collective to produce food, flowers, native and ornamental plants, edible berries, and food perennials on public or private lands for private consumption or donation (City of Saskatoon, 2013). "The garden collective takes initiative and responsibility for organizing, maintaining, and managing the garden area. This participation builds skills and creates positive community development that is widely accessible to a diverse range of people" (City of Saskatoon, 2013).



CHEP began promoting community gardens in 1999 as a way to increase community capacity in food production and to help increase food security. Community and shared gardening provides a social benefit, bringing people together, as well as a food support. It is also a way to transfer horticulture skills to the next generation, to ensure such skills are not lost in the context of increased urbanization. A survey of those participating in community gardens, conducted by Armstrong (2000), identified the most common reasons for participating in a community garden, which were access to fresh fruits, health benefits, exercise, to enjoy nature, to become involved in the community, and to provide a food source for low income families. Community gardens can also improve the safety and esthetic of neighbourhoods by replacing vacant land.



Research has shown that household participation in a community garden is associated with an increase in fruit and vegetable consumption (Alaimo et al., 2008). A study conducted by Alaimo et al. (2008) found that 32.4% of individuals from gardening households consumed fruits and vegetables on average at least five times daily, compared to 17.8% of those from non-gardening households. (RRM 2013)

CHEP now partners with the City of Saskatoon in developing and maintaining gardens. There are currently about 30 community gardens in the city, but the number is increasing every year; and there is a waiting list of over 100 for community garden participation. It is important the gardens be resourced adequately so that those facing poverty and lacking food resources are not deterred. Another issue is accessing proper water resources. The following description by a student research project suggests that the process needs improvement.

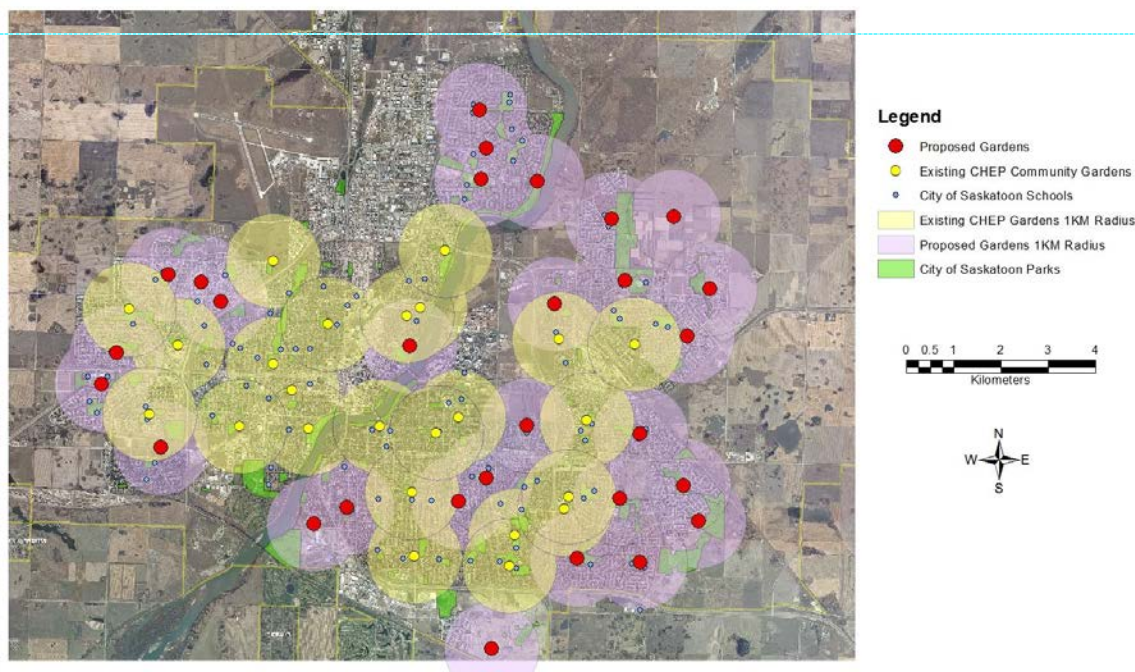


Volunteers form a community garden collective and take responsibility for organizing and managing the new garden (City of Saskatoon, 2012). New gardens can be created on municipal, park, or private land. If the garden collective wishes to create a garden on municipal or park land they must apply to the City of Saskatoon with the support of CHEP. The garden collective's application is submitted to the Community Services Department and the deadline for application is December 1st. This process can be slow, and applicants are often put onto a waiting list. This process may not be as accessible for areas of the city that are minority groups or in financial need of community gardens, and could discourage the creation of gardens in these areas. Private land owned by churches, individuals, or other groups does not have a defined application process, and these partnerships can be formed independently or with the assistance of CHEP. Policy to define the application process and improve the ability of community gardeners to acquire land would provide incentive for garden collectives and other groups to garden. Reducing the amount of time spent waiting for approval would also contribute to an increase in community gardens throughout Saskatoon. (RRM 2013)

Saskatoon schools have incorporated community gardens in schoolyards and school programs. Gardening is hands on and a good complement to environmental and science education. Gardens can also improve the school and create a safe space for students (Ozer, 2007).

Another type of community garden is the Garden Patch Project of the Saskatoon Food Bank and Learning Centre. It was initiated and is maintained by volunteers, on a piece of once-vacant land. All food that is produced goes to the Food Bank for distribution.

Figure 16: Proposed community gardens in Saskatoon



Source: RRM 2013.



Other shared gardening and harvesting

The City of Saskatoon has one allotment garden, and there are 80 people on the waiting list. An allotment garden is a series of garden plots rented out to individuals, for personal use, rather than for commercial production.

Fruit trees and fruit shrubs are getting more attention these days, especially as more varieties become available. Harvesting and using the fruit is the focus of a new organization in Saskatoon called Out of Your Tree. The organization's goal is to keep edible produce from going to waste through cooperative harvesting. Volunteers harvest the fruit, keep a third, give a third to the homeowner, and donate a third.

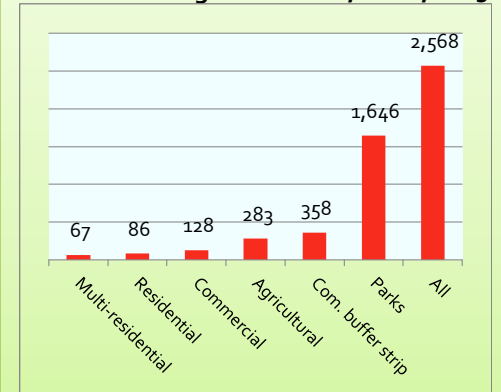
Vacant land

The future of urban agriculture will be shaped by the City of Saskatoon, because municipal bylaws and zoning regulations can enhance the role of private and public spaces in food production. The City of Saskatoon has a Strategic Goal of Environmental Leadership in which it states that in the future, the vision is that, "We grow more food in the city." (City of Saskatoon, 2013b) However, at present there is no urban agriculture component in the City's Official Community Plan.

Saskatoon is not a dense city – we have many single family dwellings with yards, and parks and other green space. If we chose, we could make better use of that land for food production. The area of Saskatoon as a whole is 56,000 acres, including industrial neighbourhoods and development and management areas. An internal analysis done by the City of Saskatoon that focused on a 20,000 acre portion of residential and commercial neighbourhoods to provide an estimate of land not occupied by buildings (i.e. "vacant land").² Within this

portion, about 2,500 acres (12.5%) was not occupied by buildings (Figure 17). However, not all of the land has the potential for food production, and some of the land may already contain some form of it. On the other hand, some of the land occupied by buildings may actually have parts available for production. This analysis is only a start in identifying more closely what and where the potential is to use land in the city for food production. Increasing our capacity in urban agriculture will provide additional sources for food. It will also help to retain food production skills and knowledge.

Figure 17²: Land in Saskatoon not occupied by buildings; residential and commercial neighbourhoods, acres, 2013



Source: City of Saskatoon, data by request.

² These data were based on internal analysis in the City of Saskatoon and represent only a rough estimate.

Definitions in the Figure are: Multi-residential: land zoned for multiple dwellings (e.g. apartment or condominium); Residential: land zoned residential; Commercial: land zoned for commercial use; and Parks: park space to be used by the public. (Most of the latter, but not all, is owned by the city. It includes all neighbourhood parks, playgrounds and public pools. It includes most but not all of the riverbank).

Exclusions: Industrial neighbourhoods are not included due to the high potential of soil contamination. The new neighbourhoods of Hampton Village, Blairmore Suburban Centre, Stonebridge, Rosewood, or Evergreen are not included due to the high level of planned development on vacant land. Also not included are the Forestry Farm and University of Saskatchewan land.



Saskatoon expansion

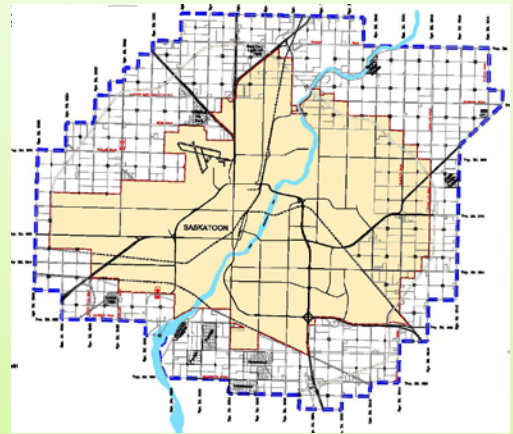
In 2013, the provincial government passed Bill 90, an amendment to the Planning and Development Act, 2007, that allows for the creation of Regional Plans and Regional Planning Authorities. Now on the table are discussions about how Saskatoon's expansion can be accommodated by adjacent municipalities. The negotiations over land use will have implications for peri-urban agriculture.

The Rural Municipality (RM) of Corman Park, which surrounds the City of Saskatoon in all directions, includes Martensville, Warman, Dalmeny, Langham and Osler. It was established in 1970 following the amalgamation of the three smaller rural municipalities of Cory, Warman and Park. Cory contained country residential development, industries with requirements for close proximity to a major urban centre as well as traditional agricultural uses, whereas Warman and Park were predominately agricultural. The Cory area, north of Saskatoon, continues to contain the largest concentration of dairy farms in the province, while the Park area has primarily grain farming (RM of Corman Park, 2013).

The City and the RM are planning together for continued growth and consequent long-range issues, through the Corman Park-Saskatoon Planning District. This district extends one to three miles from the city limits within the RM. There is a District Official Community Plan (first established in 1983, the most recent being 2010) that states general land use policies to guide growth and development in the District (City of Saskatoon, 2013c).

As Saskatoon and nearby urban communities expand, nearby rural land now protected for agriculture may be released for development. Without adequate planning, this risks decreasing the potential for peri-urban agriculture or for developing a green belt. A food system strategy would explicitly bring these issues into consideration as part of planning and stakeholder meetings.

Figure 18: Corman Park-Saskatoon Planning District, 2010



Source: City of Saskatoon, 2013c.



Box 3: The City of Saskatoon as a food strategy asset

The City of Saskatoon

The City of Saskatoon has an important leadership role to play in the food strategy, as well as an operational role in providing tangible support through its various departments.

At a leadership level, the City of Saskatoon has adopted in principle the Saskatoon Food Charter, whose goals are aligned with our food strategy. Indeed food is an important element of our quality of life. In the recent strategic plan, the City commits itself to building a sustainable community, one that “sustains its quality of life and accommodates growth and change by balancing long term economic, environmental and social needs.” The strategic plan also envisions that “we grow more food in the city,” with the number of community and home gardens per capita as one of its success indicators.

The City’s Official Community Plan (OCP) and Local Area Plans (LAP) are important vehicles for implementing a food strategy in the city. Zoning bylaws govern to what use land can be put, and therefore affect the potential for food production in the city. In Saskatoon, honey bees are permitted for residential keeping under the animal control bylaw, so long as specific requirements are met.

Support for food gardens is another element. At present, the City owns and operates one allotment garden, which is in the Westview neighbourhood. There are 83 plots now, but 80 persons on the waiting list. The garden is managed by City staff and gardeners pay a rental fee for a garden plot for their own personal use. The City of Saskatoon tills the allotment garden every spring and helps dispose of compostable garden waste.

The City of Saskatoon also allows vacant land to be used for community gardens if certain conditions are met, and provides access to water on some of these. A community garden is organized and managed by neighbourhood volunteers who grow food on public or private lands including school and church property. The city has a clearly defined process for establishing community gardens readily available on the municipal website. The city lists 30 community gardens on its website and the number is increasing every year. In addition there is a waiting list of over 100 people wanting to participate.

The city is currently in the process of reviewing the possibility of amending bylaws to allow gardens to fulfill space requirements for groups of dwellings and a portion of landscaping requirements for multi-unit residential and institutional land uses.

The City plays an important role in water provision, management, and conservation. This is important because water is essential to growing food and maintaining human and environmental health. Within Saskatoon, the City treats and delivers potable (drinking) water, treats wastewater, and is in the process of developing a storm-water management plan. During summer months when potable water demand is highest, the City’s Be Water Wise campaign offers residents tips and resources for growing gardens that conserve water.

The City of Saskatoon is involved in regional watershed management as a member of the South Saskatchewan River Watershed Stewards Inc. (SSRWSI). The Source Water Protection Plan being implemented by SSRWSI addresses a range of watershed issues including safe drinking water and pressures from urban development and agriculture.

The City is responsible for waste management. Curbside recycling helps divert food and beverage packaging waste from the landfill. The City has depots for yard waste, which is turned into compost and mulch for parks and community gardens. It has a new project to capture the landfill’s methane, created through decomposing organics and City officials are examining the possibility of a city-wide curbside composting program. Both projects will reduce the environmental impact of food.

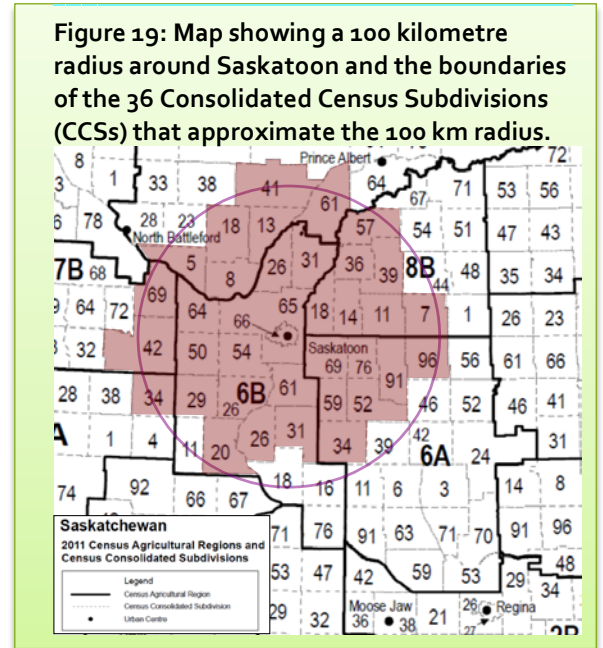


b. Food production in the 100-kilometre radius

We discussed above how for most purposes, we can conceive of the *Saskatoon region* for food production as the province. We nevertheless investigated the existing production within the 100-kilometre radius around Saskatoon, as an illustration of the potential for Saskatoon residents to obtain food from local producers within an hour's drive.

We used what was available from the 2011 Census, using the 36 Consolidated Census Subdivisions (CCSs) that approximate the 100 km radius (Figure 19). For small area data such as this, Statistics Canada does not provide acreage or production data. Therefore, we used the number of operators for each of the products.

Overall, the approximately 5,000 Saskatoon-area farms are 13% of all Saskatchewan farms. Relative to provincial farm data, a larger portion of Saskatoon-area farms produce vegetables and fruit. The percentage of farms producing wheat is the same as the provincial percentage, while those producing beef cattle, about 12%, is only slightly lower than the provincial percentage. On the other hand, the percentage of farms with dairy cattle, hogs, poultry, sheep and honey bees were all higher than the provincial percentages.



More detailed data show that the farms around Saskatoon produce a diverse mix of crops, vegetables and livestock (Table 9). This existing diversity—and the potential for additional diversity it implies—means that the Saskatoon region could supply more of its own food needs.

Crops. Most farmers grow wheat, oats, barley and other common crops. But dozens are also growing mustard, chickpeas, soybeans, and caraway seed. Farms also grow and sell a diverse range of vegetable crops. For some of these crops, the acreage is small. As with vegetable crops, Saskatoon-area farms display a diversity of fruit and berry production.

Livestock. There is also diversity in livestock production. Not only are area farms raising cows and pigs, they are also raising bison and goats and llamas.



Table 9: Number of farms reporting production of various products, Saskatoon 100-km radius, 2011

CROPS		VEGETABLES		FRUITS AND BERRIES		LIVESTOCK	
Canola (oil, margarine)	2,438	All vegetables, excluding greenhouse vegetables	51	All fruits and berries	83	Beef cows	1714
Spring wheat (bread)	2,361	Carrots	31	Saskatoon berries	46	Dairy cows	109
Barley (beer, feed)	1,359	Beets	30	Cherries, sour	30	Sheep & lambs	160
Oats	1,153	Sweet corn	28	Raspberries	23	Pigs	113
Dry field peas	624	Cucumbers	28	Apples	14	Goats	79
Lentils	428	Squash & zucchini	28	Strawberries	13	Llamas & alpacas	120
Flaxseed	285	Onions	23	Plums & prunes	5	Rabbits	39
Durum wheat (pasta)	219	Tomatoes	21	Pears	2	Bison	63
Mustard	79	Peas, green	21	Apricots	2	Elk	20
Rye	74	Beans, green and wax	21	Grapes	1	Deer (excl. wild)	17
Potatoes	45	Cabbage	16			Wild boars	7
Canary seed	42	Lettuce	15			Laying hens	180
Forage seed for seed	38	Radishes	12			Broil/roasting hens	125
Soybeans	17	Broccoli	11			Turkeys	34
Triticale	15	Shallots, green onions	11			Honeybees	70
Chick peas	9	Spinach	11				
Corn for grain	7	Cauliflower	10				
Caraway seed	5	Peppers	9				
Sunflowers	4	Pumpkins	9				
Beans, dry white	3	Asparagus	7				
Buckwheat	1	Celery	4				
		Brussels sprouts	3				
		Rutabagas & turnips	3				
		Chinese cabbage	1				

Source: Statistics Canada Census of Agriculture 2011.

Organic production. Almost 100 farms in the Saskatoon area are growing and marketing certified organic products (Figure 20). Five are producing certified organic fruits and/or vegetables. Six are producing certified organic animal products. These farms provide a good base of organic production. But as above, it is almost certain that there exists a huge untapped potential to expand organic acreage, production, sales, and consumption.

Figure 20: Number of farms with organic products for sale, by product, Saskatoon 100-km radius, 2011

All Organic	104
All Certified organic	96
All Transitional organic	12
Organic hay or field crops	97
Certified organic hay or field crops	91
Transitional hay or field crops	9
Organic fruits, vegetables or greenhouse products	7
Certified organic fruits, vegetables or greenhouse products	5
Transitional fruits, vegetables or greenhouse products	3
Organic animals or animal products	6
Certified organic animals or animal products	6

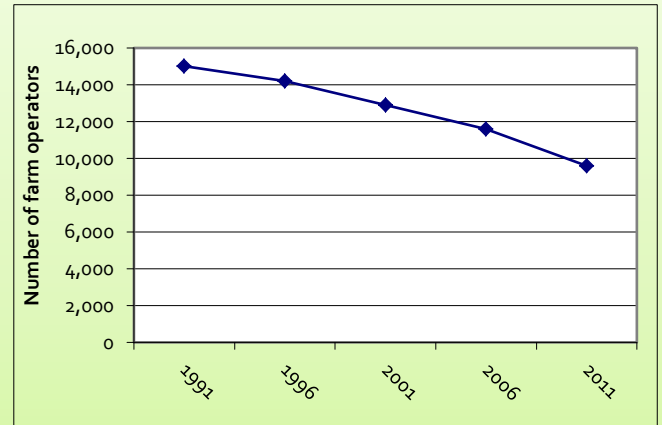
Source: Statistics Canada Census of Agriculture 2011.



However, like elsewhere in Saskatchewan the number of farm operators in the Saskatoon region is decreasing (Figure 21). The 1991 Census of Agriculture recorded approximately 15,000 farmers in the three Census Agricultural Regions (CARs) bordering Saskatoon. Twenty years later, the 2011 Census recorded 9,600, a 36% drop. Moreover, the trend line is getting steeper—we're losing farmers at an accelerating rate. Statistics Canada defines farm operators as "those persons responsible for the day-to-day management decisions made in the operation of a census farm or agricultural operation." Up to three farm operators could be reported per farm.

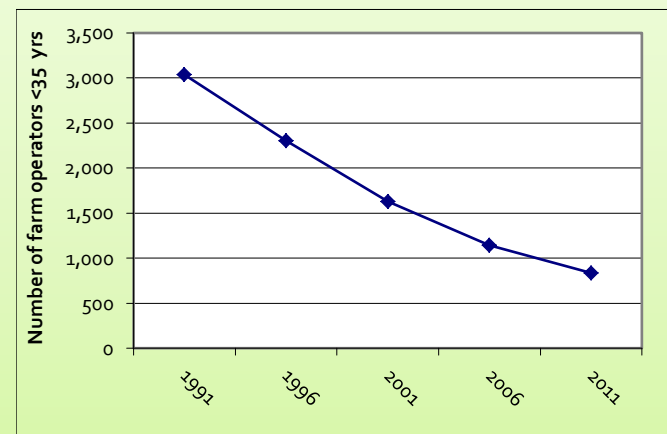
The number of young farmers is down even more (Figure 22). The 1991 Census of Agriculture recorded 3,035 farm operators under the age of 35 in the three CARs bordering Saskatoon. In 2011, the Census recorded just 835—about one-quarter the number recorded 20 years earlier. This reduction in the number of young farmers will almost certainly lead, in the next decade or two, to a precipitous drop in the number of farms. The Saskatoon area may be missing its next generation of family farmers.

Figure 21: Area around Saskatoon (CARs 6A, 6B, and 8B), number of farm operators, 1991-2011



Source: Statistics Canada Census of Agriculture.

Figure 22: Area around Saskatoon (CARs 6A, 6B, and 8B), number of farm operators under 35 years of age, 1991-2011



Source: Statistics Canada Census of Agriculture.



c. Decline in large-scale processing

Over the past few decades, there has been tremendous change in the number of food processing facilities in Saskatoon and the surrounding area. “Consolidation” has meant that, in many sectors, several local plants in the city and around the province have been replaced by one or two very large ones. Some types of processing facilities, such as beef packing plants, no longer exist in this province. On the other hand, Saskatoon and the surrounding 100-km radius now host some very large plants that serve the province or region. In addition to increasing geographic concentration, concentration in ownership is also increasing, with fewer and fewer companies controlling our food processing infrastructure. We can see these changes, and their implications for food security, if we compare the food processing facilities in Saskatoon-and-area today, to the situation two or three decades ago.

Beef. Saskatoon is surrounded by farms that together produce tens-of-thousands of head of cattle annually. A generation ago, most of those cattle would have been fattened and finished locally, trucked into Saskatoon, processed into steaks and hamburger and roasts in local beef packing plants, and served at local tables. Not now. Saskatoon, indeed Saskatchewan, has no large, federally inspected cattle processing plants (AAFC, 2012a). Virtually all the cattle raised in the Saskatoon area end up in two huge slaughter plants in Alberta, at High River or Brooks.

It wasn’t always this way. Saskatoon used to have a large cattle slaughter plant: Intercontinental Packers. Saskatoon-based “Intercon” was one of Canada’s “Big Five” beef packers (Ring, 2006). The company also had plants in Regina, Red Deer, and Vancouver (Ring, 2006). Intercon employed as many as 1,400 workers in Saskatoon (Maple Leaf Foods, n.d.), and company profits gave the city its Mendel Art Gallery. Intercon’s Saskatoon plant stopped slaughtering cattle in 1995 (MacArthur, 1995). Some years before, Burns, Canada Packers, Moose Jaw Packers, Fuhrmann Meats, and others (Stats. Can., 1984) had closed their beef packing plants in Saskatchewan. In 2010, the last federally-inspected beef plant in the province, in Moose Jaw, closed. Today, to get to a Saskatoon plate, nearly all Saskatoon-area cattle must make a thousand-kilometre round trip to Alberta and back. There do remain, however, several small provincially inspected and health region inspected beef processing facilities that have some capacity to process local beef for Saskatoon tables. Roughly 1% of Saskatchewan cattle production is processed through Saskatchewan facilities (Sask. Ministry of Ag., 2012). Changes to inspection regulations over the past decade have made it harder for small beef processors to continue to operate, and their number is falling.

Pork. The situation for hogs and pork is similar to that for cattle and beef. Saskatoon’s Intercontinental Packers plant—later called Mitchell’s then Schneider’s and most recently Maple Leaf—slaughtered hogs until it closed in 2007. Today, there is no large hog slaughter and processing plant in the Saskatoon area, and just one federally inspected hog plant continues operating in the province: Thunder Creek Pork, in Moose Jaw (AAFC, 2012b). This medium-sized plant processes about 13% of Saskatchewan’s hog production (Sask Pork, 2013). Much of the pork in Saskatoon grocery-store coolers comes from plants in Manitoba, Alberta, and elsewhere.

Poultry. Saskatoon hosts Prairie Pride Natural Foods, one of the provinces two large, federally inspected poultry slaughter and processing plants (CFIA, 2013). The plant opened in 2006. Canada Packers had a poultry



plant in Saskatoon for many decades, but that plant closed in the early 1980s (Stats. Can., 1982a). Currently, the province's other large poultry processor is Lilydale Foods in Wynyard.

Eggs. Locally-owned Star Egg, located in Saskatoon, is the province's single large egg grading and packaging facility. More than three-quarters of the eggs in Saskatoon grocery stores come from Star Egg. In 2008, the company opened its new facility in the city. Saskatchewan farmers produce about 28 million dozen eggs per year (Stats. Can., 2012). Star Egg grades and packages about 23 to 24 million dozen (personal communication). Some of that production is sold outside the province.

Dairy. Saskatoon hosts Saskatchewan's only large federally inspected dairy processing plant, Saputo Dairy Products (CFIA, 2011). It processes milk from across the province and produces fluid milk, milk powders, various cheeses, yoghurt, and sour cream (CFIA, 2011). In contrast to this one dairy plant today, in 1973, Saskatchewan had thirty (Stats. Can., 1975). Several of these were co-ops, now gone. The story of food processing in Saskatchewan is one of sweeping consolidation.

Flour. Saskatchewan in the 1960s and '70s had several large flour mills. The Robin Hood flour brand was created in Moose Jaw in 1909 (Smucker Foods website), but the Robin Hood plant there closed in 1966 (Dominion Bureau of Statistics, 1968). Currently there are three major flour mills in Saskatchewan. Two are in Saskatoon: Robin Hood, owned by Horizon Milling, a joint venture of Cargill and CHS Inc.; and Dover, owned by Parrish and Heimbecker. Saskatchewan's third flour mill, Nutrasun Foods in Regina (Grain & Milling Annual 2013), is smaller, focuses on organic grains, and sells most of its production outside of the province and across North America.

Oilseed crushing. Saskatchewan has a large and fast-growing canola processing sector. There are four large canola crushing facilities in this province: one in Nipawin, two in Yorkton, and one, in Clavet, 30 kms east of Saskatoon (Saskatchewan Chamber of Commerce, 2011). The Clavet facility is owned by Cargill and is the largest canola crushing plant in Canada (Cargill, 2012).

Beer and barley malting. Canada once had interprovincial beer trade laws that worked to locate beer production in the province where the beer would be consumed. This helped minimize the need to transport beer—mostly water—from province to province, and it spread jobs across the country. These rules led to Canada and Saskatchewan being largely self-sufficient in beer production, with this province hosting five major breweries in the early 1980s: Molson and Carling O'Keefe in Regina, Molson in Prince Albert, and Labatt and Carling O'Keefe in Saskatoon (Statistics Canada, 1980 and 1982b). These breweries employed hundreds of workers across the province.

The landscape changed dramatically in the 1980s and 1990s, driven by several factors including foreign corporate takeovers of Canadian brewing companies and, especially, the 1989 Canada-US Free Trade Agreement. The Carling O'Keefe and Molson plants in Regina closed in 1980 and 2002, respectively. Prince Albert's Molson plant closed in 1986. The Labatt and Carling O'Keefe plants in Saskatoon closed in 1993 and 1989, respectively (Ingledew, 2006). The latter soon re-opened as the Great Western Brewing Company and is now the province's only large brewery.

Before these changes in the 1980s and '90s, the big-three Canadian breweries captured more than 90% of the national market (Dobni, 1993, p. 155). It is likely that Saskatchewan was, similarly, roughly 90% self-sufficient. Today, the ratio is reversed; with probably 90% of our beer *imported* from other provinces, or countries (Sneath,



2001, p. 270, and conversation with Regina brewpub owner). With few exceptions, Saskatchewan's beer is largely the product of foreign transnationals. Though low-volume, high-quality local brewers such as Saskatoon's Paddock Wood and brew pubs such as Regina's Bushwakker are welcome additions to Saskatchewan's beer landscape.

Beer is made from malted barley. One of Canada's largest malting facilities is located 95 kms east of Saskatoon, at Biggar. The Prairie Malt facility is owned by Cargill and Viterra (Crawford et al., 2012).

Overview. Saskatoon has retained some processing facilities: eggs, poultry, flour, etc. In this, it has fared better than all other Saskatchewan cities. But there have also been losses for Saskatoon: our beef and pork plant, breweries, etc. Saskatoon no longer has as full a range of food processing plants. Figure 23, from a report by Agriculture and Agri-Food Canada (AAFC, 2013, p. 106), shows that Saskatchewan is relatively disadvantaged when it comes to the location of processing facilities.

Moreover, the ownership of the processing plants has changed. Ownership has, in many cases, gone from local to national to international. Gone is the farmer-owned dairy processor, Dairy Producers Co-operative. In its place is the Montreal-based transnational Saputo. Gone is Saskatoon-based Intercontinental Packers. Instead, Saskatoon-area cattle are processed in Alberta by US-based Cargill or Brazil-based JBS. Co-op owned canola crusher and grain miller CSP foods is gone. Canadian brewers Labatt, Molson, and Carling O'Keefe are gone, swallowed into global mega-brewers such as Belgium-based AB InBev and Molson Coors.

There is some good news. Great Western Brewing Company, Star Egg, and a handful of other processors are locally owned companies with significant food processing plants in the Saskatoon area. And many small local and regional processors continue to serve local customers.

Overall, however, recent decades have seen the mix of processors in the Saskatoon area become less diverse and comprehensive, they have seen ownership shift from local companies to national and international transnationals, and they have seen the destruction of farmer-owned co-operative processors.

Figure 23: Canadian food processing capacity



Source: AAFC 2013.



d. Small and medium scale processing

Notwithstanding the changes documented above in the food processing industry, Saskatoon has smaller-scale food processing, which is often more artisanal. The market is increasing due to increasing demand and promotion. There are almost 300 food processors in the province, according to the Saskatchewan Food Processors Association. The various organizations we spoke to, including the Agriculture Council of Saskatchewan, SaskMade and the Saskatoon Farmers Market, are optimistic and committed to expanding their markets. Saskatoon has an additional valuable resource in the Food Centre, which actively provides support to provincial food processors to increase their production and market share. There are 50 to 55 new products per year. One quarter of Food Centre clients have a direct link with food production, but three quarters are processing and manufacturing only.



Box 4: The Food Centre as a food strategy asset

The Food Centre

The Food Centre assists with start-ups in food processing. It works with processors to develop food products to be ready for the marketplace.

Food Centre staff provide advice on developing and packaging products to meet safety standards, achieve high quality and increase sales. Its federal processing facility is equipped for processing a variety of food products, with certifications such as organic, HACCP approved, FDA and CFIA inspected for interim processing of meat, dairy and processed foods. The Food Centre also provides food safety training and education, assisting processors with food safety programs such as HACCP or GMP.

The Saskatchewan Food Industry Development Centre Inc. is a non-profit agency established in 1997 as a partnership among the Government of Saskatchewan, the University of Saskatchewan and the Saskatchewan Food Processors Association.

Pineview Farms, located north of Saskatoon, is an example of a medium-scale food processing enterprise, that has formed a food hub with neighbouring livestock producers. In addition to producing and processing its own chickens, the enterprise processes beef, lamb and other meats for sale. The on-site store sells Pineview-processed products, as well as other Saskatchewan-made products. Pineview products are also available in Saskatoon outlets.





e. Urban-rural connections

Over the last several years, there are an increasing number of ways to obtain locally produced food in Saskatoon: farmers' markets, Community Supported Agriculture (CSA), individual farmers, specialty stores like SaskMade, or more recently in some larger retail stores, at times (Table 10). Saskatoon organizations in the food sector, such as CHEP, the Saskatoon Farmers' Market, and SaskMade actively provide support to local producers in marketing their products in the city.



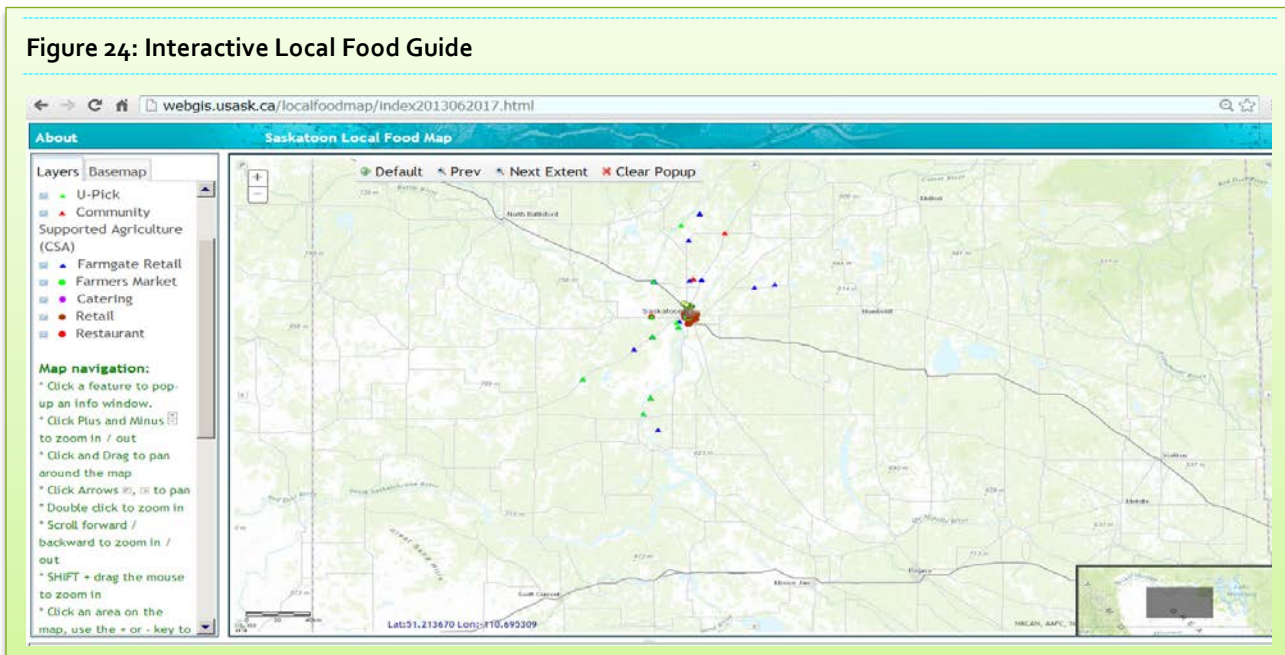
Table 10: Examples of how to obtain local food

- Specialized
 - Saskatoon Farmers' Market
 - SaskMade store
 - Other farmers' markets
 - Community-supported agriculture (CSAs)
 - CHEP Good Food Box
 - Farm gates
 - Market gardens
 - Upic operations
- Consistent offering of selected products
 - Certain stores, e.g. Steep Hill, Dad's, Saskatoon Coops
- Occasional
 - Other stores and supermarkets at times

Local Food Interactive Guide

We heard that there is growing demand among consumers for more information about how to access local food, either directly or indirectly. We responded to this need by collecting sources of local food and making the information available on an interactive electronic map (Figure 24). However, the map needs a home for continual updating and promotion.

Figure 24: Interactive Local Food Guide

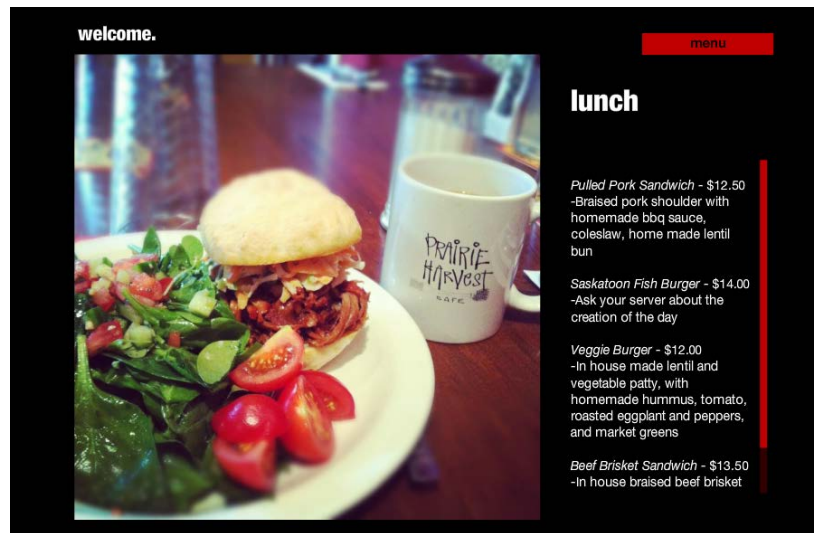




f. Restaurants

Although Saskatoon is in the centre of a food producing region, there is relatively little reference to that in the menus and promotions of the majority of restaurants. We discuss below how respondents to our online surveys had slightly lower expectations for Saskatoon restaurants than for retail stores in regard to increasing local food offerings. Although franchise restaurants may be the most common type in all Canadian cities, many other cities also include a significant proportion of establishments offering, indeed some specializing in local produce. Examples are Halifax and lobster, Montreal and cheeses, or Vancouver and salmon. By contrast, food tourism does not appear to be a priority in Saskatoon.

In Saskatoon, interest has been promoted by Local Bounty, a provincial organization formed to increase the connection between producers and chefs in Saskatchewan. Local Bounty promoted local food in restaurants and explored ways to expand the local food market. For example, Local Bounty's relationship with the Saskatchewan Institute of Applied Science and Technology (SIASST) Professional Cooking program in Saskatoon, provided "an opportunity to teach the next generation of cooks and chefs in Saskatchewan about the importance of a local food system" (Prairiesaver, 2009). However, Local Bounty ceased to operate in 2012.



There remain many challenges. The main two are the same ones we heard from the retail industry – a higher price for local food, but also more difficulty in sourcing it. We address these challenges in our next chapter on scaling up.

The restaurant industry is a major component of a tourism strategy. In 2012, Tourism Saskatoon and Tourism Saskatchewan contracted with Creative Fire to develop a basic culinary tourism strategy for Saskatoon and area, based on local input (Creative Fire, 2012). The proposed strategy was composed of several recommendations for promoting and building the restaurant industry in Saskatoon. One of them was to:

Establish a local-first recognition program for restaurants and producers and a thematic approach for marketing and promoting the region's culinary offerings.



g. Scaling up

Export markets are critical to the farm economy and therefore important to all residents. However, a thriving local market for farm and processed food products is an important component of a food strategy. The ability to produce our food is critical to our long term self-sufficiency and our community.

Many people believe that Saskatchewan could increase the proportion of locally grown vegetables and fruits, as well as other selected products. For example, of the 94 respondents to the shopping survey, most (92%) believed it is possible to increase the retail market for local foods, and only slightly fewer (87%) believed it for restaurants. Only about a third (35%) believed we should focus on only selected foods to try to increase this market. Similarly, over 90% of our 15 producer respondents (mostly from the Farmers' Market) felt it was feasible to increase the proportion of local food sold in Saskatoon for both retail stores and restaurants. The most common response to *how much?* was 50% for retail stores and 25% for restaurants. About one-third (30%) thought we should focus on only selected foods.



Our assessment inquired about what the barriers were to increasing the market, and how it would be possible to increase it. We asked this question of key informants, in focus groups and in our online surveys.

Responses to the question of how *to increase the market*, depended on whether the respondent saw the problem as being lack of demand or lack of supply, but there were responses on both sides of this conundrum. People perceive that there is increasing interest in local products from consumers, but the supply is still small and inconsistent. On the other hand, until consumer interest develops into a stronger and more wide-spread demand, supply will remain small-scale. What is needed, therefore, is action at both the demand and supply sides to create a virtuous circle (Table 11).

Increasing the demand

Education of consumers about the value and benefits of Saskatchewan food products. Those who support local products do so because they feel that the products are better and that they have more value. The most effective way to increase the demand for local products is to educate people about their value -- for health, for taste, for the economy, and for the culture.

Promotion of Saskatchewan products and the idea of buying local. Related to the importance of educating people about local food, this proposal goes a step beyond education to promotion. The kind of promotion being envisioned is related to branding, or mass marketing, with a theme related to valuing community. Many other provinces have such campaigns to support their local products.

More venues where local food is sold. The more places local food is sold, the easier it will be to access and more purchases will follow. This means, for example, more Farmers' Markets venues, more Good Food Boxes, plus local food being sold in more retail stores. Make local food as convenient as possible. In addition, promote the perception that healthy foods are convenient and be inviting to the community population.



More wholesalers/retailers exercising flexibility with local suppliers. Wholesalers and retailers have stringent expectations about ease, consistency and reliability of supply, and this is their reason for not buying more local product, in addition to the relatively higher cost. However, the Value Chain experience was that indeed some flexibility is required to meet the variable conditions that producers face, but it may be possible to find an accommodation that will suit both producer and buyer.

Establishing buying agencies, such as Peak of the Market in Manitoba. As we described earlier in the report, for in-season vegetables, Manitoba is 57% self-sufficient. One of the factors is that all vegetables grown in Manitoba must be marketed through Peak of the Market. This ensures a consistent buyer for the vegetables, pools the risk for vegetable growers, and promotes the Manitoba brand. On a smaller scale, we have CHEP's supplier group for its programs, a form of bulk-buying, which also helps to keep costs low. In an interesting development, discussions are occurring among Aboriginal organizations, First Nation communities, Friendship Centres and urban groups on collaborative purchasing.

More local procurement by public agencies. As part of the assessment, we interviewed several institutions in the city which (1) are publicly funded and have a social mandate and (2) purchase large quantities of food for serving their employees and clients. These included the Saskatoon Health Region, SIAST, the University of Saskatchewan, and the City of Saskatoon. Both the City of Saskatoon and SHR have food charters that in principle value the benefits of local food. However, results from these interviews were not very promising. The Saskatoon Health Region has the largest budget, and spends \$10m per year on food, which goes mainly to patients, as well as for sale to staff and visitors. Even a 1% commitment of this budget to locally-produced food would mean an additional \$100,000 annual infusion into the local food economy. However, almost the whole budget is spent through Sysco, a national and international food and meal distributor to restaurants and institutions. The SHR does some local procurement but on a very minimal basis, providing specialty items at times, like mustard or blueberries, and were unable to tell us how much of their budget this entailed.

Table 11: Proposals for increasing the market for local products

Increasing the market requires increasing both demand and supply

Demand:

- Promotion of Saskatchewan products and the idea of buying local.
- Education of consumers about the value and benefits of Saskatchewan food products.
- More venues where local food is sold, to make access easier.
- Keeping the cost of local product more comparable to equivalent non-local.
- More local procurement by public agencies.
- More wholesalers/retailers exercising flexibility with local suppliers.
- Establishing buying agencies, such as Peak of the Market in Manitoba.

Supply:

- Collaborations among producers to create economies of scale, pool investment funds and share risks, improving consistency and reliability of supply. (e.g. contracts, Value Chains, non-competing agreements).
- Improvement of business skills among producers in sales, marketing, managing and responding to the market.
- Immigration policies to increase the labour supply, while maintaining ethical standards.
- Provincial policy support to small-scale production and processing:
 - Infrastructure for shared use (venues for selling, storage, transportation).
 - Training in small-scale production and processing methods, as well as marketing.
 - Reformulation of food safety regulations and guidelines, to provide the same level of safety, but with process appropriate to small-scale.
 - Land size and purchase policies to ensure that some parcels of land continue to be affordable for those interested in supplying the local market.
 - Market studies to assist small-scale producers and processors to position themselves in specific markets (e.g. niche, health).



Their main objection to increasing local purchasing is the higher cost, but also the logistical difficulties in obtaining the food – too many suppliers to deal with and unreliability of the source. The cost challenge will only get worse because SHR continues to face cost pressures, and in addition the provincial government has newly mandated all the health regions to centralize their procurement through a single provincial agency. SIAST purchases food for its staff cafeterias and for training purposes, again mostly through Sysco. However, the instructor for the chef-training course individually arranges local product for teaching about cooking local food. The University of Saskatchewan has several cafeterias on-site. One of these, at STM College, has a partnership with the U. of S. Horticulture Club, which supplies produce from their gardens as available. However, neither partner felt it was feasible to increase their volumes. The City of Saskatoon has cafeterias/concessions in all the leisure centres; however, these are leased and there are no requirements that local food be served.

Keeping the cost of local product more comparable to equivalent non-local. This recurring suggestion was not directed at any specific action, but was expressed as a caution. It reflects the knowledge that although consumers will purchase local food even if it costs slightly more because they recognize its better value, the price should be kept comparable. The caution was also related to the desire that consumers with lower incomes find local food affordable. The proposals below will help to achieve this, as they are directed at expanding the supply and creating economies of scale.

Increasing the supply

Collaborations among producers. One alternative to growing larger in a competitive economy is to collaborate with others, where required to obtain the benefits of a larger size. There are different types of collaborations, some broader, some tighter. A recent example includes the Agriculture Council of Saskatchewan, food wholesaler The Grocery People and the provincial government, who have initiated a value chain initiative with vegetable producers in the province, to provide infrastructural support while increasing

Box 5: Saskatchewan Grocery Retail and Foodservice Value Chain Initiative

Expanding trade between provincial buyers and producers: The example of the Saskatchewan Grocery Retail and Foodservice Value Chain Initiative.

A promising new initiative is putting locally grown carrots, garlic, radishes, and many other kinds of vegetables on supermarket shelves. At the same time, this initiative is creating a \$1 million local market share for Saskatchewan farms. The initial agreement between farmers and Federated Co-op began with a single product, potatoes, but has quickly grown to include 33 vegetable categories.

The Agriculture Council of Saskatchewan (ACS) recently spearheaded the Saskatchewan Grocery Retail and Foodservice Value Chain Initiative, to increase collaboration between local producers on the one hand and foodservice operators and grocery retailers, on the other. The initiative educates both parties about each other's needs and capabilities, to facilitate increased uptake of local production in urban markets.

Through the initiative, a value chain has been established between grocery wholesaler The Grocery People (TGP) and a group of producers from throughout the province. TGP, a subsidiary of Federated Cooperative Ltd, supplies fresh produce to retail co-operatives in Saskatchewan and elsewhere. The agreement began with a single product (potatoes) but has now extended to 33. TGP has made commitments to growers to purchase a certain amount of their product. The initiative is working with growers to meet safety standards and addressing packaging so that growers will benefit from economies of scale. Cold storage is being built throughout the province, and centralized distribution points established through the creation of pick zones.

This initiative has addressed several of the barriers to expanding trade in local products that were reported to us by producers and others: supply consistency and reliability; demand consistency; safety standards; and storage. The barriers were addressed by (1) creating economies of scale through collaborations among individual producers and (2) established contracts between producers and a wholesaler. The cost spread between local and other products was reduced, although not eliminated.



sales of local produce in the city (Box 5). At present, 16 vegetable producers in the province are in the process of creating the Prairie Fresh Corporation. Other examples of collaboration are producer cooperatives and non-competing agreements. Collaborations or partnerships work to create economies of scale, pool investment funds and share risks, ultimately improving consistency and reliability of supply.

Improvement of business skills. Scaling up requires producers and processors to have skills not only in production, but also in selling and positioning their product in the marketplace. The Agriculture Council of Saskatchewan initiative we describe here, as well as other training and networking activities, are examples of this kind of business skills building, as is the Food Centre assistance to processors in obtaining funding.

Immigration policies. One of the barriers to scaling up is the unavailability of labour. Several respondents reported the difficulty of finding people to do farm labour at the relatively low wage rates required by the need to compete on a price basis with imported products. These respondents spoke to the value of an immigration policy that welcomes foreign workers to work on farms. However, in order to meet ethical standards, foreign workers should have proper pay and working conditions and be allowed to apply for citizenship.

Provincial policy support to small-scale production and processing: There is benefit in having Saskatchewan agriculture and food processing sectors that include a good distribution of farm sizes and that produce a diversity of products. To maintain this distribution will require policy support at the provincial level. We know that export-oriented agriculture has received and continues to receive a great deal of government logistical and financial support. Some support to locally-oriented, small scale agriculture and food processing would help this sector stabilize, and become a viable and valuable sector of the industry. Specific measures include:

- Upfront funding for infrastructure for shared use. Small-scale producers and processors do not have enough capital individually to finance farmers' market buildings, large storage sheds, or large-scale transportation.
- Training in small-scale production and processing methods, as well as marketing, as noted above. The Food Centre is an example of an agency that does the former.
- Support to Aboriginal entrepreneurship in food production microenterprises.
- Market studies to assist small-scale producers and processors to position themselves in specific markets. This type of information will be helpful for preparing producers and processors to place themselves in niche markets, or the health market, for example.
- Reformulation of food safety regulations and guidelines, to provide the same level of safety, but with processes appropriate to small or medium-scale. Many standards at present are written not as an end outcome but as a process to be followed. However, the process may be based on larger producers, and too cumbersome for smaller processors. In the meat industry for example, compliance with food safety requirements often requires adopting more costly capital-intensive measures, which makes it difficult for smaller abattoirs to operate. This could be alleviated by some reformulation.
- Farm size and land purchase policies to ensure that some parcels of land continue to be affordable for those interested in supplying the local market. As we have seen above, farm size in the province has grown and so has the price of land. As a result, new and younger farmers are not able to enter farming. Such measures might also help women to enter farming, as has happened in Ontario.

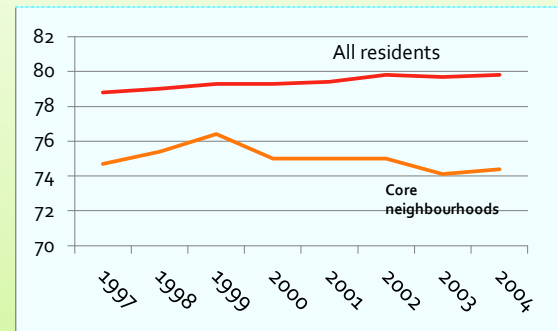


4. Access to nutritious food

a. Food and health

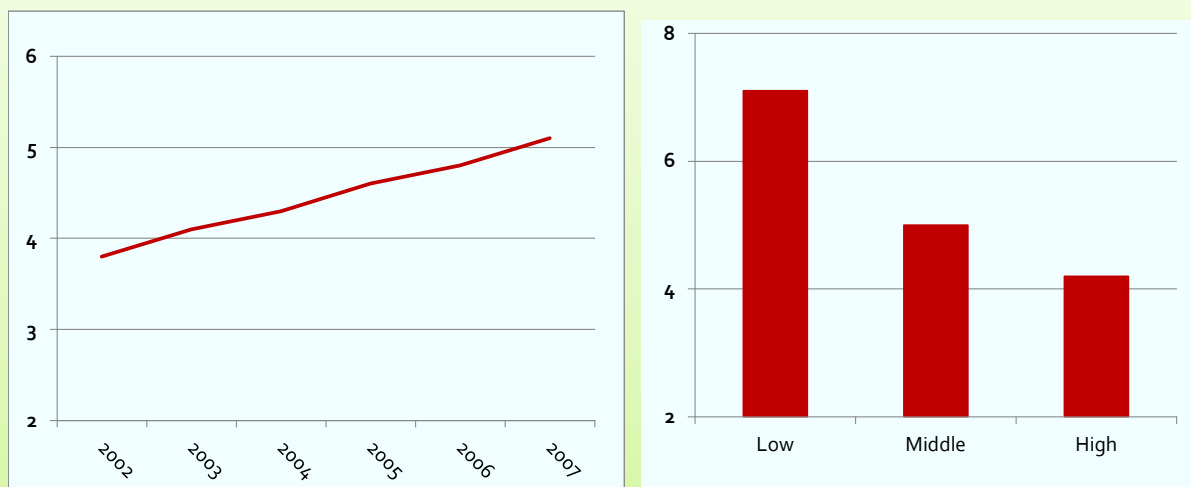
Nutritious food is the foundation of good health. And as we documented above, Saskatoon's boom means more of us can afford nutritious food. But the boom also increases prices for housing and other goods, so people on lower incomes have less money to spend on food. We discussed above how health disparities have increased in our city, so that those living in low-income neighbourhoods can expect to die at least 5 years before other Saskatoon residents (Figure 26). Of particular relevance to our food strategy is that food-related health problems such as diabetes and obesity are increasing and are more prevalent in low-income neighbourhoods (Figure 25).

Figure 26: Life expectancy in years, Saskatoon Health Region, 1997-2004



Source: Saskatoon Health Region, 2009.

Figure 25: Diabetes rates by year, 2002-2007 and by neighbourhood income level, 2007, Saskatoon Health Region



Source: Saskatoon Health Region, 2011. Rates are age-standardized prevalence rates in %.

These problems are due primarily to the unaffordability of good food for people on lower incomes, but also to related causes such as distance to stores and poor transportation, inadequate skills in choosing and preparing nutritious food, and social barriers.

There is a great deal of work going on at present to prevent diabetes and to help alleviate this chronic disease. Food and exercise are key. Although not the majority of those with diabetes in Saskatoon, First Nation residents are over-represented. Changing food patterns is seen as critical. As one First Nations respondent told us, "Food can be used as a tool to prevent diabetes."



Education and skills



Education about healthy food and skills in preparing it were identified by most respondents as key to a food strategy. CHEP, the Saskatoon Health Region, the Saskatoon Friendship Inn, the Saskatoon Food Bank and Learning Centre, Central Urban Métis Federation Inc. (CUMFI), and the school boards, to name only those we talked to, all provide food education programs, often in partnership with each other. Some are targeted to diabetes patients, but most are not and are aimed at educating people about how to have healthier diets.

Food safety

Food safety issues are also a pre-occupation. Although Canada has a good long-term record in preventing illness due to pathogens spreading through food, recent problems, such as the listeria outbreak in 2008, or the more recent problem with one large Alberta beef plant, have made consumers cautious. Further, there is concern that longer term health effects of processed foods may not be adequately studied or understood. The need for continuing and increased vigilance and oversight about the long-term safety and health effects of food was a concern that came up several times in our discussions, and indeed this corresponds to national trends.

Food allergies can be a serious problem for some people, including children. The cost of non-allergenic food can be a serious burden for those on lower incomes.



Breastfeeding

For infants, there is national and international agreement that breastfeeding is the best way to feed them. It provides them with the best nutrition, as well as immunological, emotional and cognitive benefits. Breastfeeding also provides economic benefits, to families in terms of the cost savings from avoiding purchase of infant formula, and to society in terms of reduced health care spending. Nevertheless, fewer than half of Saskatoon babies are exclusively breastfed for 6 months (47% in 2010) as recommended by Health Canada and the World Health Organization (SHR, 2012a). Lack of skilled support, conflicting advice, inaccurate information from healthcare providers, and social attitudes that discourage breastfeeding in public spaces have a detrimental effect on mothers who choose to breastfeed. Breastfeeding rates are lower in certain minority groups and among low-income, less-educated, and younger women, directly implicating health equity issues in both cause and effect. The Saskatoon Health Region promotes breastfeeding through programs such as West Winds Primary Health Centre's Baby Friendly Initiative™ (BFI), which aims to develop a region-wide breastfeeding policy, deliver breastfeeding classes for parents, and educate and train frontline staff.



SHR's Building Health Equities (BHE) program, which is focused on and located in Saskatoon's core neighborhoods, has two programs involving mothers and children that also provide coupons for healthy food as an incentive/reward. Mothers who participate in Breastfeeding Matters receive a coupon with a visit. Those who bring their children for immunization receive a coupon per child, and those who both breastfeed and bring children in for immunization get two coupons per child. The program lets mothers increase their skills in healthy parenting and also increase their ability to feed their family.

Box 6: The Saskatoon Health Region as a food strategy asset

The Saskatoon Health Region

The Saskatoon Health Region is the largest health region in the province, serving more than 318,000 area residents. It is responsible not only for health care services, but also for preventing disease and promoting health. Good nutrition and healthy eating are one of the priorities. Diabetes is a particular problem at this time.

The Saskatoon Health Region is concerned about health disparities that have emerged in the city, due to poverty, poor housing, and other factors in the social environment. It is part of the Saskatoon Poverty Reduction Partnership. It is committed to food security and has undertaken studies on food availability in the city and on food costs in the province.

The SHR Health Promotion Department has integrated the regional food strategy into its strategic work plans and is a partner in food security initiatives: Nutrition Positive, a universal nutrition program offered in all schools in SHR, with CHEP and the school divisions and the Health Promoting Schools Program, a community development approach to create the schools as environments for healthy eating, physical activity and mental health promotion, also with the school divisions; the Collective Kitchen Partnership, with CHEP and the Saskatoon Community Clinic; the Food Basket Challenge with the Saskatoon Food Bank and Learning Centre, also developing social marketing tools, including a video, for raising awareness and generating action on food security; the Saskatoon Mothers' Centre Coalition; and Breastfeeding Matters Coalition. It also supports the Breastfeeding Friendly Initiative.

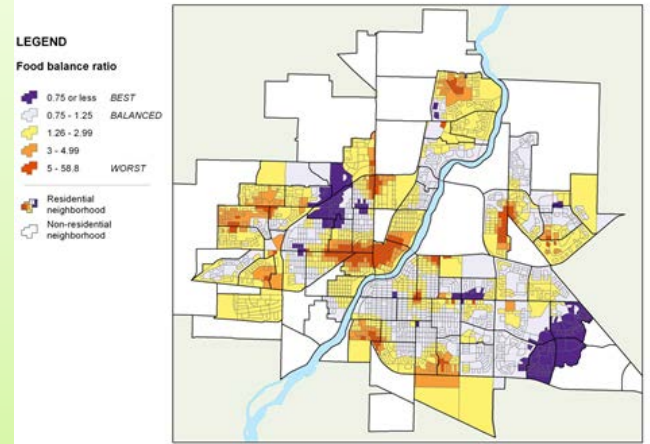
The SHR has its own food charter that commits it to community food security as a "basic right that exists for all people within our community, especially the most vulnerable. Food is obtained in a dignified, safe, accessible and culturally acceptable manner which maximizes healthy food choices. Food is produced, processed and distributed in a way that supports the environment, community self-reliance and local and regional economic development" (SHR, 2006).



b. Location of food stores

Access to healthy food is a continuing concern. A 2010 SHR study examined the distance between place of residence and supermarkets in the city (SHR, 2010). The report states that supermarkets are related to health because those living near a supermarket eat more vegetables and fruit, have healthier diets and lower levels of obesity. The SHR study points out that “low-income consumers, in particular, benefit from shopping in supermarkets compared to convenience stores, specialty stores or farmers markets.” The study defined supermarkets as retail grocery outlets associated with one of the six major chain grocery-based retailers located within the city of Saskatoon. These include Extra Foods, Safeway, Sobeys, Co-Op, The Real Canadian Superstore, and The Real Canadian Wholesale Club.” The SHR study found that overall, 45% of the city of Saskatoon’s population lives within walking distance (1km) of a supermarket. On the other hand, residents across the city of Saskatoon live approximately twice as far from a supermarket as they do from a fast food outlet. Access to food was most imbalanced in the Central Business District and along 22nd Street West in Caswell Hill, Riversdale, Westmount and Pleasant Hill, where residents live 59 times closer to a fast food outlet than to a supermarket. The Good Food Junction store was developed as a response to the lack of a food store in its neighbourhood, and it has alleviated this problem somewhat, although the downtown remains without a major food store.

Figure 27: Food Balance Ratio in Saskatoon (Blue is best, red is worst)



Source: Saskatoon Health Region 2010.



Community-accessible venues

First Nations interviewees suggested that for the core neighbourhoods, the many smaller stores were more frequented because of their accessibility, but also the comfort level people had in using them -- the ethnic markets especially. They explained that for many in their community, the shopping experience was negative, and there was a lack of confidence in grocery stores and a fear of social judgment. They also noted that the Saskatoon Farmers’ Market was perceived as “distant”, in spite of its physical proximity to the core.

CHEP has been developing a suite of activities designed to take food to the people, including seniors’ markets and neighbourhood markets. This year, a new pilot called More Store to Your Door, provides residents the opportunity to pre-order a wide range of groceries. Neighbourhood markets are held in conjunction with other partners and sometimes other activities, such as immunization clinics. Examples are St. Thomas Wesley United Church, St. Paul’s Market and the Aboriginal Student Centre at the U. of S.



c. Bulk-buying

One way to keep prices lower is through bulk buying. CHEP, for example, purchases products at a preferred rate from The Grocery People and Saskatoon Co-op. CHEP also has a network of local producers from which it buys products at negotiated rates. In addition to school and other food programs, CHEP distributes the Good Food Box, on a subscription basis, which is open to all residents.

In this way, CHEP is taking on the role of a food hub. A food hub can take many forms, but it is a central location where food goods and produce are collected, processed and shared with consumers.



The food hub concept, which is gaining traction throughout North America, holds the solution to a problem that continues to bedevil the local food movement, and that is lack of infrastructure. How can local growers, farmers and artisans aggregate, process, market and share their goods? How can they get what they grow and produce from their fields and home kitchens to the consumer's dining table and local institutions? Food hubs are the missing link in the local food chain.

(Roberts and Stahlbrand, 2013)

Box 7: CHEP as a food strategy asset

CHEP Good Food Inc.

CHEP Good Food Inc. is a Saskatoon-based charitable organization that works to improve access to good food and to promote long-term food security, while developing skills and building capacity in individuals and communities, and working on both the access and production aspects of food. CHEP programs mitigate economic and geographic challenges for low income people to access healthy foods. In particular one set of programs helps to feed hungry children in Saskatoon. In partnership with city school boards, CHEP delivers school lunches from CHEP's kitchen, delivers fresh fruit, vegetables and milk to schools, supports fruit and vegetable snacks to students and families of pre-k students and supports infant and toddler nutrition in high school child-care centres. Food education is a key component in schools and communities: Kids' Kitchens; Collective Kitchens, nutrition sessions, including for diabetes prevention, and newsletters. Over the last 5 years, CHEP and First Nations and Métis organizations have increasingly collaborated on good food initiatives.

CHEP acts as a good food broker to help families eat well. The Good Food Box program provides selected foods at close to wholesale prices. To support the local food economy, CHEP includes local produce where possible. It also brings food markets to groups with less access, such as seniors.

Also on the production side, CHEP is a champion of urban agriculture, and has helped the gardening network grow to 22 community gardens. CHEP partners with the City of Saskatoon, and with others, such as schools and churches, to support existing gardens and establish new ones. A recent program is a backyard-sharing program, where CHEP helps people connect with a garden near them.

CHEP engages in policy, research and education work to support food security. It has been a leader in the development of Station 20 West and the Good Food Junction food store. This social enterprise direction also led it to launch a Boxcar Café.



Another promising opportunity in this direction is the Good Food Initiative developed by the Aboriginal Friendship Centres of Saskatchewan. A province-wide initiative still at the feasibility-assessment stage, it would engage the 11 Friendship Centres in a collaboration with others to provide more locally produced and healthier food with a culturally relevant dimension.

The Friendship Centres deal with a stunning array of problems at the individual and community level. If a program, such as a Co-operative were initialized, owned, and operated by the Friendship Centre's [in collaboration] with established food coops, retailers, nutritionists, health service practitioners, we can begin to address the issues of food security, obesity, malnutrition, and curbing health problems before they start at the dinner table. It is the goal of this feasibility study to assess the viability of a food cooperative and the associated programming elements which the Good Food Initiative will utilize.

...

The goal of the Friendship Centre Good Food Initiative is to improve food security by targeting the following areas:

1. Enable each friendship centre access to a selection of locally grown produce at a subsidized cost.
2. Encourage each friendship centre to gather and grow locally.
3. Create a network of alliances with similar goals of improving access to local food.
4. Implement Collective Kitchens and Good Food workshops through graduated phases at each Friendship Centre.
5. Implement community gardens.
6. Subsidize costs of deep freezers to be made available for cheaper cost to low-income families and friendship centres to make the storage of food more available.

(Aboriginal Friendship Centres of Saskatchewan, 2013)

d. Food in schools

Programs to provide meals and snacks to children in community schools have increased over the years, and have become school board policy. Saskatoon Public Schools is the largest school division in the province, and Greater Saskatoon Catholic Schools is Saskatchewan's largest Catholic school division. A total of 80 elementary schools are operated by both divisions. Both school divisions partner with CHEP to provide the school meals and snacks. Meal programs are supplemented with nutrition education for children and families, and in some cases with school-based gardens.

CHEP describes the evolution of this program:

CHEP was founded out of a concern for hungry school children. At the time, only 2 Saskatoon schools had official nutrition programs; others relied on the generosity of teachers and staff who would bring extra food for children who needed it. Over the past two decades, we have seen this partnership between community, health and schools evolve into an established program where community schools are funded to engage coordinators to prepare healthy lunches (and sometimes snacks and breakfasts). CHEP supports them with opportunities for ongoing learning at bi-annual in-services and weekly delivery of fresh fruits, vegetables and milk.





Schools that have not been designated as community schools have fewer supports for their nutrition needs. Here, CHEP funds a far greater proportion of the nutrition program. Two CHEP staff prepare meals at North Park Wilson School and deliver them to 19 other sites. We also support very small sites in other ways (such as providing Co-op gift cards), as circumstances warrant. The flexibility of this model makes it easy for us to adapt to changing demographics by supporting schools that are experiencing a new need for nutrition support. In the past year, we have added 3 new schools (St. Luke, Lawson Heights and Buena Vista) and one school (St. Frances) has obtained a nutrition coordinator and therefore no longer requires delivery.

About ten years ago, CHEP also assumed funding for pre-K nutrition for schools in the public division. We continue to support snacks (funding for a half piece of fruit and a cup of milk for each student) in 14 schools (several of which have more than one pre-K class). This number includes pre-K programs in 4 schools that are not designated as community schools, but have similar needs (Fairhaven, Lester B Pearson, Howard Coad and Sutherland).

This spring we have offered Snack Pack Attack to pre-K classes with a high percentage of Aboriginal students (as funding is tied to the Urban First Nations Inuit Métis Diabetes Project). Six schools have taken us up on the offer so far and have received (or will receive) a nutrition session with Danielle (either for children and teachers only or on a family day) and a free Good Food Box Snack Pack for each child.

We have also been involved with pre-K families through the Alphabet Soup program offered by READ Saskatoon. Feedback on our nutritionist was so positive that READ has offered to cover the costs of having us provide the nutrition support for all sessions.

(CHEP, 2013)

All involved are clear that there continues to be unmet need and there are many hungry children living in our city who do not have enough to eat.

We held a focus group with the nutrition coordinators of the Saskatoon public schools. They told us that, considering the problem with increasing health disparities in the city, there is a need to increase teamwork and partnerships, with organizations working together. They also talked about going beyond feeding hungry children to resolving the poverty problems of their families and communities (Table 12).

e. Poverty

Achieving food security requires action at three levels: short-term relief; capacity building strategies, and system change strategies (Figure 28).

Saskatoon organizations and programs, including CHEP, the Saskatoon Food Bank and Learning Centre, and the Indian and Métis Friendship Centre provide short term relief. The Saskatoon Friendship Inn, for example, serves on average 500 meals a day (approximately 15,000 in a month); 37 - 40% of those served are children (approximately 6,000 a month) (Saskatoon Friendship Inn, 2013). In the last year, 152,000 people used the Saskatoon Food Bank for emergency food; 62,000 baskets were provided. Of these people, 43% were children (Saskatoon Food Bank and Learning Centre, 2013). The school meals programs we describe above also provide short-term relief.

Table 12: Improving school food programs
Focus group with nutrition coordinators, Saskatoon public schools: Suggestions for improving programs

- Teamwork and partnerships: organizations working together.
- Increased role for nutrition coordinators in relationship to children and their families.
- More food available to families in the community: fresh food coupons or incentives. (In the kids' families, there is a lack of resources: a lack of fresh food; not enough money for buying healthy food; homelessness; lack of literacy; mental health problems; the effects of poverty overall.)
- Education about child hunger: to raise awareness in the larger community; also more information among schools about nutrition.



Figure 28: Strategies to cope with food insecurity



Source: Hanson, 2011.

The organizations working toward food security recognize that short-term relief of hunger is necessary, but that it is not enough. As we discussed above, our interviewees had incorporated capacity-building, to a greater or lesser extent depending on their mission.

However, Saskatoon needs more system-level solutions to reducing poverty and inequality. Notwithstanding the supports being developed, people need enough income to buy healthy food. The Saskatoon Poverty Reduction Initiative (SPRP), formed in the last few years, unites various sectors in the city to tackle poverty. In addition to developing a plan to reduce poverty in Saskatoon, in the next year, the SPRP will monitor and report on the following policy options, as provided on its website:

- Income
 - Remove Working/Earning Clawbacks
 - Index Social Assistance rates to Inflation
 - Increase Public Understanding of Social Determinants of Health
 - Education
 - Increase Support for Community Schools
 - Universal Child Care for Low Income Parents
 - Reserve Education Placements for Low Income Students
 - Housing
 - Expand Affordable Housing Projects
 - Support for Home Ownership
 - Develop a Long-term, Consolidated, Comprehensive, Interagency Social Housing System for Hard to House Individuals
 - Increase Monthly Shelter Allowances
 - Renewed Federal Responsibility for Social Housing
 - Employment
 - More Work for Aboriginal People
 - Comprehensive Return to Work Programs
 - Health
 - More Health Resources in Low Income Neighbourhoods
- (SPRP, 2013)



5. Food and the environment

From production to disposal, food has a large impact on the environment. Reducing food's ecological footprint is one of the goals of our food strategy.

Local food production is perceived partly as a means to achieve self-sufficiency and sustainability. For many people, the importance of developing local food resources is based on projections that food imports in the future will either be more restricted or more expensive due to energy shortages and costs. This theme emerged both in focus groups and in online surveys.

a. Reducing food waste

Disposal of food-related waste is the direct responsibility of the city. Saskatoon's curbside recycling program will assist in reducing the negative impact of food packaging. However, many cities across Canada also have curbside compost pick-up programs. Saskatoon is only in the early stages of considering such a program. Recently released data from Statistics Canada's National Household Survey (Statistics Canada, 2013) showed that composting is widely practiced in Canada – 61% of households reported composting either kitchen and/or yard waste in 2011. However, Saskatchewan was one of three provinces, along with Quebec and Newfoundland-Labrador where fewer than half reported composting. The study showed a marked increase in household composting activities between 2007 and 2011, attributed to the introduction of weekly curbside kitchen waste composting programs in several cities. Data were provided for most Census Metropolitan Areas (CMAs) in Canada; however, Saskatoon data were not of high enough quality to report.

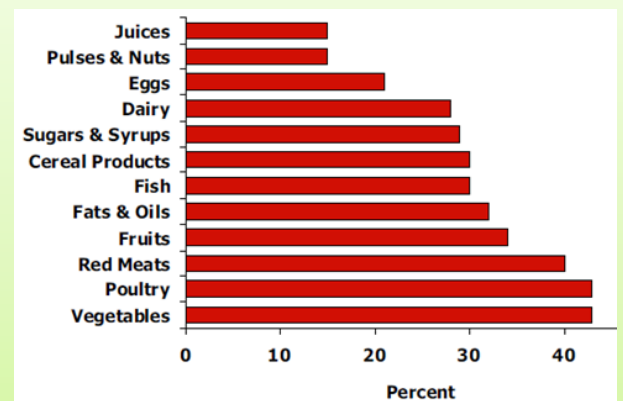
In Canada, we waste approximately 40% of our food—\$27 billion worth annually (Gooch et al., 2010, p. 2). To put \$27 billion into perspective, that amount exceeds the combined Gross Domestic Product of the 28 countries at the bottom end of the GDP scale (The World Bank, 2013). In Canada, \$27 billion works out to about \$2,000 per Canadian household per year.

Canadian annual per-person food waste includes:

- 122 kgs of fresh and processed fruits and vegetables;
- 6 kgs of dairy products;
- 10 kgs of poultry (boneless basis);
- 16 kgs of red meats (boneless basis);
- 18 kgs of oils, fats, sugar, and syrup; and
- 85 litres of various liquids

Source: George Morris Centre & Value Chain Management Centre, 2012, p. 4; and Felfel et al., 2011.

Figure 29: Canadian food waste by category, 2009.



Source: AAFC, 2012, based on Statistics Canada 2007.

In all, the total is more than 200 kilograms of food per year per Canadian. Canada ranks number one among industrialized nations in terms of per-capita garbage production (Conference Board of Canada, n.d.).



Not all that food is wasted in homes or in restaurants, but most of the waste occurs in those places. Food waste in the home—disposing of cooked food that isn't eaten, or disposing of ingredients and foods that are never prepared—accounts for about 51% of all waste. Add to this the 8% of all food waste that occurs in food service establishments—restaurants, schools, hospitals, etc.—and the “end use” portion of food waste sums to 59%. The balance is wasted at retail stores (11%), in processing and packaging facilities (18%), in transport (3%), and in the field (9%) (Gooch et al., 2010, p. 5). But even if we take only the food waste that occurs in our homes, and in the restaurants and institutions where we eat, the numbers are still huge: \$16 billion per year in Canada.

Because Saskatchewan residents make up about 3% of the national population, we can calculate the probable value of food wasted in this province in our homes and in the restaurants and institutions where Saskatchewanians eat: just under \$500 million (3% of \$16 billion). These losses do not include food that isn't, strictly speaking, thrown away, but is instead consumed in too-large quantities, leading to obesity and obesity-exacerbated health effects such as diabetes and heart disease. This “counter-productive” food could be seen as a form of waste.

When we waste food, we waste the fuels, water, and other inputs that went into making the food. The food that is thrown away in our homes and restaurants had to be grown or raised, often requiring fuels and energy-intensive fertilizers; it has to be transported, handled, processed, packaged, warehoused, refrigerated, frozen, retailed, refrigerated again, cooked, and hauled to the land-fill. When we waste mega-tonnes of food each year we waste fossil fuels and other resources.

b. Reducing energy use

In our interviews, people raised concerns about “food miles” and about energy use on farms. Indeed, farm energy use appears to be increasing (Canning, 2010, p. 20; Environment Canada, 2012, p. 13), partly as a result of increased use of fertilizers. Many chemical fertilizers are fossil fuel products. Key to understanding our food system and its successes in feeding billions more people is to understand that, increasingly, we are using our fields to transform fossil fuel energy into food energy—oil and natural gas from beneath the ground into crops in the field into meals on our plates.

Nitrogen is the most heavily applied chemical fertilizer. Up to 90% of the cost of making nitrogen fertilizer is the cost of natural gas (Agrium, 2005; US GAO, 2003, p. 1). One can think of a modern nitrogen fertilizer factory as having a large natural gas pipeline feeding into one end and a large nitrogen gas (ammonia) pipe coming out the other. Some of that nitrogen gas is made into granular fertilizers. To grow a wheat crop, for example, it would be common for a Saskatoon-area farmer to apply nitrogen at a rate of 50 pounds per acre. The energy contained in that amount of nitrogen fertilizer is equivalent to 36 litres of diesel fuel, or a similar amount of gasoline. In addition to the energy embodied in the nitrogen fertilizer come the energy content of other fertilizers (phosphorous and potassium, i.e., potash) and the energy content of the actual fuels used: gasoline, diesel fuel, natural gas, and propane.

A pilot Saskatchewan Farm Energy Evaluation Program was conducted by the Government of Saskatchewan and Sun Ridge Group in 2009 (Sun Ridge Group, 2009). That program gathered data for the years 2005, '06, and '07. The results showed that, for example, the farmers in the study used the energy equivalent of 68 litres of diesel fuel (the median amount) per acre to produce spring wheat. This does not include the energy



embodied in farm machinery, buildings, or other on-farm equipment. Not only do our farms use significant amounts of fossil fuels, as a result they emit significant amounts of greenhouse gases. In Canada, farms are responsible for 10% of all greenhouse gas emissions (Environment Canada, 2012, p. 13). "Emissions from on-farm fuel use and crop production," are increasing, according to Environment Canada (Environment Canada, 2012, p. 15).

Very limited data from that same Farm Energy Evaluation Program indicates that organic farmers, who don't use energy-expensive chemical fertilizers, may be producing food at significantly lower energy costs, on both a per acre and per tonne basis. If this is true, per acre and per tonne greenhouse gas emissions would probably also be lower for organic production systems. The government's pilot study does not provide enough information or detail to compare various production systems: organic, reduced tillage, direct seeding, etc. Nevertheless, preliminary results raise the possibility that promising methods exist to cut on-farm energy use and greenhouse gas emissions. More research, communication, and education are needed in this critical area.

Our farms affect our environment in many other ways. Fertilizer use can have impacts on water and directly on the atmosphere. Globally, half to two-thirds (Smil, 2002, p. 129; Smil, 1997, p. 127) of the nitrogen fertilizer farmers apply misses our food crops entirely and is lost from the land into the atmosphere or into rivers, lakes, and oceans. Run-off of nitrogen and phosphorous fertilizers contribute to algae blooms in lakes and to the creation of hundreds of coastal "dead zones," such as the one in the Gulf of Mexico. There is a direct link between increased fertilizer use and the multiplication of ocean dead zones worldwide, which have approximately doubled each decade since the 1960s (Diaz and Rosenberg, 2008, p. 926). Closer to home, Lake Winnipeg, in Manitoba, is downstream from Saskatoon. Algae blooms there, partly as a result of nitrogen and phosphorous run-off from crop and livestock production, have damaged the Lake's ecosystems. The Winnipeg Free Press says that algae blooms "blanket the water's surface with a thick coat of slimy green goo" and the paper concludes: "Lake Winnipeg is sick—and getting sicker with each passing year." (Winnipeg Free Press, 2010, August 12).

After they are applied to the land, nitrogen fertilizers can emit the greenhouse gas nitrous oxide, a gas hundreds of times more effective than carbon dioxide at trapping heat (Ramaswamy et al., 2001, p. 388). Atmospheric nitrous oxide concentrations today are at their highest level in human existence (Gruber and Galloway, 2007, p. 295), mostly as a result of nitrogen fertilizer application (Forster et al., 2007, p. 37).

Much of the energy-expensive grain we produce goes into livestock feeding and meat production. When we feed wheat, barley, corn, peas or other "feedgrains" to livestock, we convert several calories of grain into one calorie of meat; we turn several units of plant protein into one unit of meat protein (Tilman et al., 2002, p. 674; Pimentel and Pimentel, 2008, pp. 68-70; Cook, 1976, pp. 154 & 319-326). Seen this way, livestock raised on grain have very high fossil fuel requirements. The vast majority of Saskatoon-and-area residents want meat and animal products in their diets, but to safeguard our environment we need to ask: how do we produce an optimum amount of meat, using a reduced amount of grain, using less energy, and producing fewer environmental impacts? The good news is that there appear to be many promising solutions, such as increased reliance on grass-feeding, better use of marginal lands, swath grazing, and other lower energy, lower grain input livestock feeding alternatives.

Our farms are just one link in our larger food system chain. Indeed, energy use on our farms is just a fraction of total energy use in the food system—a system that includes several other links: processing; packaging;



transportation; wholesale and retail; food services; and household food preservation, preparation, and disposal. Indeed, data from the United States show that energy use in the processing link and in the household link both exceed energy use on farms (Canning et al., 2010, pp. 19-23). Or, seen another way, for every unit of energy used on our farms, several more are used to process and package and transport and retail and prepare that food.

Considered from farm to table, the North American food system requires a huge amount of energy: about 8.5 barrels of oil equivalent per person per year (BP, 2013; Canning et al., 2010, p. i). To put that into context, if all 7 billion people on the planet tried to produce their food supplies in this way, if they copied the Saskatchewan system of growing and processing and transporting and preparing food, global energy use would increase by roughly 50%,³ and global greenhouse gas emissions would increase apace. It is evidence of our food system's out-sized environmental footprint that replicating our system worldwide is impossible.

c. Conserving water

There is a growing awareness of water as a precious resource and about the appropriate use and conservation of water. Water sources are at risk through overuse and agricultural and other waste.

Much of the impact is at the provincial level. Our food system is one of the largest water users and has significant impacts on our lakes and rivers. Analysts distinguish between two kinds of water use: non-consumptive and consumptive. Non-consumptive uses mean that the water remains in the river or lake, or that it is soon returned. Examples of non-consumptive uses include cooling coal-fired power plants or urban water use, where much of the water is returned to the river through the sewage treatment plant. On the other hand, consumptive water uses are those wherein water is *not* returned to the lake or river. One example is crop irrigation. By far the largest consumptive water use in the South Saskatchewan River basin is food production—irrigation accounts for 86% of the consumption use of the South Saskatchewan River (Howard, 2012). The River is dammed in several locations, partly to retain water for irrigation. Climate change may have a two-fold effect on the river: lowering flows and increasing the need for irrigation water. This combination of decreased supply and increased demand could result in damaging impacts on our river.

Over-consumption of water and protection of the river are both concerns at the urban level. The City of Saskatoon is part of the South Saskatchewan River Watershed and participates in the development of its protection plan. Conserving water is also on the City Council agenda, which recently adopted a *Be Water Wise* campaign.

d. Conserving land

As we discussed early in this assessment, for many people a focus on local food systems arises from a concern that the global effects of climate change will force us to rely more and more on our own capacity to produce food. A related concern is our ability to produce food over the long term. Water is part of this, as we just noted above. The concerns about land are even more complex. One set of concerns is how to reduce pollution and

³ Globally, average per capita energy use is about 12 barrels of oil equivalent per year. Proliferating a food system that requires 8.5 barrels of oil equivalent per person per year would dramatically increase global energy use.



retain the food-production potential of agricultural land. A second set is how to retain more land for food production. We discussed above how these concerns need to be addressed in Saskatoon's expansion plans. We also discussed the need for land policies that provide possibilities for small and medium-scale food producers for food production diversification, as well as to facilitate entry of new and younger farmers. Several respondents spoke to us of concerns about the growing pattern of large land holders buying Saskatchewan land, a pattern that will decrease diversification and self-sufficiency in food production.

Seeds are another concern. By a variety of means, such as gene patenting, growers are being deprived of their ability to save, re-use, buy, and sell seeds. If seed use is restricted in this way, our food system will be in jeopardy.

6. Knowledge about food systems

In carrying out this assessment, we have raised more questions than we have answered. Although there is a great deal of data about agriculture, exports, transportation, and certain food sectors, these data do not provide information from a food systems perspective. They do not help us to plan for our food needs as a community, in particular for a region such as Saskatoon. From the health perspective, there is a great deal of information on nutrition and health, but less on how to ensure adequate nutrition levels in the city. Although the topic of food is pervasive in the media, we need studies of what food policies and systems will best achieve the goals we seek for a better nourished community.

Saskatoon organizations and individuals working in the food sector do have explicit and implicit knowledge about the food system in the city. Individual enterprises such as Pineview Farms, for example, have analyzed the market in the area from the perspective of what it takes to produce and sell healthy products. CHEP has a policy arm, and led the development of the Saskatoon Food Charter. This food system assessment has been the beginning of a dialogue among different organizations with the goal of building new knowledge in this area.

This dialogue has included the University of Saskatchewan, which is an important resource to our community. Its professors, staff and students, and its many research and education programs and other associated activities can be an asset to our food strategy. Two departments in particular have been active so far in their efforts to meet goals that are part of our food strategy. The research interests of the Department of Community Health and Epidemiology, part of the College of Medicine, include the social determinants of health. Studies and discussions about how food access, income, and social development influence the health of the Saskatoon population are important for both developing a good food strategy and in tracking its progress. On the production side, the College of Agriculture, Plant Sciences Department, has focused on the vegetable and fruit potential of the province and the city. Studies on the possibilities provided by different plants and growing conditions, including innovative methods like rooftop gardens are combined with community education.

However, we need a method and mechanism to bring together and build on the different forms of knowledge together toward the goal of improving the food system of our Saskatoon and area community.



C. RECOMMENDATIONS AND NEXT STEPS

1. Levers for change

Our assessment has identified a Saskatoon population that is increasingly educated, knowledgeable and concerned about where their food comes from and how it is prepared. Saskatoon's changing population and socio-economic conditions can be levers for moving forward on the goals of our food strategy (Box 8). We identified the following elements:

- Residents are more educated about nutritious food and demanding more healthy food, and more local food.
- There is a recognized need to decrease diabetes and obesity rates and to reduce health disparities in Saskatoon.
- School meal programs are expanding and diversifying as a way to help more children learn.
- Many Saskatoon residents have more spending power.
- Local food producers and processors are actively pursuing local markets, improved infrastructure and support.
- Urban residents are actively pursuing food production in the city and organizations are supporting them.
- Health concerns are emerging from large-scale food processing.
- There is growing concern about impacts on the environment and that climate change will mean food shortages everywhere, making food self-sufficiency imperative.
- Local and provincial organizations are working to improve the Saskatoon food system.

Box 8: Food strategy goals

Enrich Saskatoon's food culture

Enriching our food culture is a goal for the food strategy, and one that can serve as its overarching theme. Having a vibrant food culture makes sense socially and economically. It is positive and energizing. Although other, also important, goals related to the economy and health are more pragmatic, the attraction of working toward a vibrant food culture came out quite strongly in the focus groups. As one key informant stated:

Food is culture is community.

Be sure everyone has nutritious food

Nutritious food is the foundation of good health. All residents should eat well. Saskatoon's boom means more of us can afford nutritious food. But the boom also increases prices for housing and other goods, so people on lower incomes have less money to spend on food. Health disparities have increased in our city but our food strategy can help to reduce them.

Boost the hybrid food economy

Food exports are vital to Saskatchewan's economy and food imports provide us with a rich and varied diet. However, locally-produced food is critical to our long term self-sufficiency and our community. We support the concept of a hybrid economy, which includes import-export, but seeks a larger role for local.

Minimize food's ecological footprint

The environmental impacts of food production, processing, storage, transport and preparation are large, as are the financial costs of food waste. Our food strategy seeks to minimize food's ecological footprint, from production to disposal of waste.



2. Recommendations

Our assessment has documented many of the factors, organizations, and enterprises already supporting change in the Saskatoon food system. In formulating recommendations and suggestions, our focus is to build on the existing strengths.

1. Our first overarching recommendation is to create a mechanism for ongoing food system action: A Saskatoon Community Food Council.

The Council would have members from different parts of the community and of the food sector, all committed to the basic goals and vision. Its purpose would be to foster and oversee the implementation of the food strategy. It would promote collaborations in the community, among and between producers and residents, and their organizations, building on existing strengths.

From the findings, the need emerges for increased collaboration among those involved. Given the nature of the movement's strength, any collaborations that are formed should retain flexibility, openness and responsiveness, but alliances can lead to more effective use of resources with better economies of scale, and improve the potential to leverage additional investment from outside sources. Alliances also enable the delivery of a coherent message for promotion. Based on our discussions in the assessment, we suggest that an explicit commitment to healthy food produced in a sustainable environment, accessible to community members in diverse ways, would be a message consistent with residents' values.

Figure 30: Saskatoon Community Food Council: Foster the food strategy and promote collaboration





In implementing the food strategy, the Council would act on the recommendations we have made in the following areas. Taken as a whole, the recommendations form the basis for a food strategy and corresponding action plan for Saskatoon.

2. Promote Saskatchewan foods and food production as a healthy community-minded choice.
3. Garden everywhere: expand capacity in urban agriculture.
4. Increase collaboration among producers and the development of needed supports.
5. Increase ways to obtain local food products.
6. Feed the children: substantially increase school meals and snacks.
7. Educate residents about healthy food and teach good food skills.
8. Increase availability and affordability of good food.
9. Increase people's ability to buy good food: reduce inequality.
10. Reduce food waste in the home and reduce energy input in food production.
11. Preserve water and land for the future.
12. Build knowledge of regional food systems.

Detail

2. Promote Saskatchewan foods and food production as a healthy, enjoyable, community-minded choice.

- It is opportune to make good food a key theme for Saskatoon, with the City of Saskatoon and Tourism Saskatoon becoming leaders in the regional food strategy, along with the food sector and organizations. We need to bring together partners from across the food system to explore challenges, and identify opportunity for growth. We need to build on the strengths that we have, by increasing collaborations among organizations active on food strategy goals.
- The overarching message is that Saskatchewan foods and food production are a healthy, enjoyable, community-minded choice.
- The City of Saskatoon should integrate the food strategy goals into the Official Community Plan and promote the food strategy as part of Saskatoon's image and values.
- Food tourism can be a strong contributor to the economy. Tourism Saskatoon should make the availability of interesting local food one of its attractions for Saskatoon. Tourism Saskatoon should market and promote the region's culinary offerings. It should work with local chefs to promote a city/region-oriented label for restaurants. Restaurants in tourist destinations, for example the Western Development Museum or Wanuskewin, could integrate local thematic food. Food festivals such as Taste of Saskatchewan or Folkfest could highlight local food components. The Star-Phoenix Taste of Saskatoon could include a local food component.
- The development of a media strategy for Saskatoon, including newspapers, food writers, social media and other forms, would be an important component of promoting local food and the food strategy in an ongoing way.



3. Garden everywhere: expand capacity in urban agriculture.

We need to grow more food in Saskatoon. We should strengthen the existing collaboration among CHEP, the City of Saskatoon and the University of Saskatchewan to increase support and leadership in urban agriculture, including the following key areas:

- Support existing community gardens and increase the number available. Having people garden on civic land decreases opportunities for crime and vandalism and builds community.
- Create a problem-solving mechanism to assist community gardens to function. Often there are specific logistical problems that good communication could easily resolve. This same mechanism could act to ensure that lower income communities not only have good access to gardens but are not impeded from using them through lack of specific resources, such as tools.
- Plan for community gardens in new neighbourhoods. This would be a better process than retroactively finding a suitable place for a community garden in existing neighbourhoods.
- Work with schools and other institutions interested in establishing gardens.
- Collaborate with interested First Nations and Métis organizations and communities to create and support programs and microenterprise for food production and processing.
- Develop a program to foster rooftop, balcony and boulevard gardens. Let people know that front-yard gardens are allowed.
- Develop CHEP's newly initiated shared-garden initiative, matching those with gardens to share, with others wanting to garden.
- Plant berry bushes and fruit trees where possible on city-owned land.
- Collaborate with Out of Your Tree to promote harvesting from fruit trees.
- Pilot promising practices in urban agriculture, promoting them and teaching about them.
- Create a training program in urban agriculture, which would include Seedy Saturday, and practice opportunities in CHEP and other projects, including recent initiatives in microenterprise projects.
- Inventory available land and resources
 - Develop an inventory of public and private land that can be leased by food growers. The inventory would include factors such as water access, slope and soil conditions.
 - Develop an interactive map that shows where all the edible fruit is on city park land, the U of S, and other accessible land, to encourage residents to harvest this fruit.
 - Develop an inventory of community accessible kitchens that the public can access.
- The City of Saskatoon should adopt several of the best practices in this area for its own jurisdiction, many already adopted by other cities, such as the following:
 - Allotment gardens
 - Add at least one allotment garden in the short term, and in the longer term, offer allotment gardens in the west, east, south and north parts of the city.
 - Consider reducing or eliminating the fee to make them more accessible.
 - Bylaws and practices supportive of urban agriculture
 - Actively inform residents about what practices are currently allowed in urban agriculture and what practices would be welcomed. For example, the City can support and educate its population about growing food in front yards, boulevards, vacant lots, right of ways, traffic circles etc. It could perhaps encourage the use of rain water/rain barrels connected to schools and businesses to serve as a water source for these gardens.



- In the longer term, review the City's OCP and zoning bylaws to remove impediments to or ambiguities about urban agriculture; and to create policies and allowable practices for commercial uses of urban agriculture.
- In the longer term, consider assigning civic staff to focus on supporting urban agriculture.

4. Increase ways to obtain local food products.

- There is a need for a "Saskatoon Food Hub" or centre, to act as a network hub, providing an important conduit for local food. CHEP could play this role, or perhaps a partnership could be formed. The Hub would:
 - Become the central registry for local food sources and urban-rural links, and hosting the on-line map of local food.
 - Increase bulk-buying, such as the Good Food Box, to increase the flow between producers and consumers at volume discounts.
 - Work with stores like Steep Hill, Herbs and Health, Dad's, and SaskMade to have a consistent and expanding repertoire of local products, perhaps over time increasing distribution to other small stores.
 - Work with the Saskatoon Farmers' Market to expand its producers, diversify its local produce and improve relationships with the core neighbourhoods.
 - Identify ways to support an increase in mini-Farmers Markets within the city, of various forms, while not jeopardizing the Saskatoon Farmers' Market.
 - Develop a stronger presence on the East Side of Saskatoon, to create a city-wide capacity and increase volumes.
- The Saskatoon Health Region should increase its purchase of local food by an increasing amount each year, to reach 5% of the total budget. In moving to centralize purchasing by all health regions, the province should include criteria to support local food purchasing.
- The U. of S. should participate in the national Farm to Cafeteria program, as a way to increase local food offerings in its cafeteria, and as a way to engage students and faculty in a local food system experience, while participating in a cross-Canada dialogue about it.

5. Increase collaboration among producers and the development of needed supports.

- There is a need for producers to collaborate in many different ways, to create economies of scale and increase their capacity and strength in the market, and invest in common infrastructure. Our assessment has documented some examples. There is also an opportunity for local retailers to provide leadership and flexibility in increasing their relationships with local producers.
- A project to "showcase" local producers as teaching examples would be beneficial to increasing both capacity and the potential for collaboration.
- There would be benefit in the partners in the Value Chain Initiative – the Saskatoon Co-ops and the Agriculture Council of Saskatchewan -- to expand the number of producers over time, expanding the capacity of producers in providing organizational infrastructure; creating economies of scale by collaborating in production, and providing market stability through contracts.
- There may be potential for collaboration with interested First Nations communities in and near Saskatoon to build on the economic opportunity presented through their reserve land to produce food for local sale.



- The Saskatoon Food Hub, the Value Chain Initiative and the Food Centre should build knowledge about policies and programs that would support small and medium-sized farmers, including specific implementation guidelines for food safety in smaller enterprises, such knowledge to be used by provincial and federal agencies.

6. Feed the children: substantially increase school meals and snacks.

- City school boards, in partnership with CHEP and with financial support from the provincial government, should expand their meal programs within the community schools to provide meals to all children who attend those schools. This will improve the nutrition of all the children there, while removing the stigma of using the program. Education and engagement about good food should continue to be part of the programs. In addition, there is a need to develop understanding by the general public about the benefits of these programs.
- The provincial government should support childcare centres in providing healthy and affordable meals to children, perhaps through partnering with CHEP in Saskatoon. Over the longer term, the availability of healthy food should be expanded to all public places where children congregate, e.g., all schools, childcare centres, and leisure centres. There should be collaboration with national groups to develop a national child nutrition program for children in Canada.

7. Educate residents about healthy food and teach good food skills.

- Schools are an important site for education of children and families. Saskatoon School Boards, CHEP and the Saskatoon Health Region should continue to develop healthy eating programs in all schools, using standards such as health promoting schools, incorporating gardens, and integrating the families of children so that they learn and support their children's healthy choices.
- The Saskatoon Health Region should champion food security for residents as a determinant of health, and continue to partner with community organizations in increasing access to healthy food and providing education around it. It should be a leader in implementing the food strategy.
- First Nations and Métis organizations, CHEP and the Saskatoon Health Region should continue to collaborate in engaging these communities to participate in food education activities and to improve nutrition.
- CHEP and its partners, including the Saskatoon Health Region, should build on its collective kitchens and other programs that provide education and promotion about healthy food, by encouraging other organizations in the city to do the same with their clientele.
- Newcomer communities could be engaged in identifying how local ingredients can be used or adapted for creating their traditional recipes.
- Breast feeding is an important element of good nutrition. CHEP, the Saskatoon Health Region and others supporting the Saskatoon Breast-Friendly Initiative should continue their initiatives. They should also increase the public's understanding about why breast feeding is part of a good food strategy.

8. Increase availability and affordability of good food.

- CHEP and the new Saskatoon Food Hub should continue to develop ways to make good food available at reasonable prices, including bulk buying and the Good Food Box, as above, but also by providing senior-friendly, community and mobile markets. The Good Food Junction should ensure it continues to provide a healthy food choice for the core neighbourhoods.



- CHEP and the City of Saskatoon should continue to promote and develop community gardens in such a way as to keep them affordable and accessible to people with fewer resources, so that the gardens can be a way to supplement the food intake for lower income people.
- First Nations and Métis communities should continue to provide meals to those in need, while providing education and promotion about healthy food, integrating cultural traditions that enrich the lives of the community, and partnering with CHEP and other groups.
- The Saskatoon Food Bank and Learning Centre should continue to enhance the nutritious elements of food hampers to those in need, while providing education and promotion about healthy food, and integrating projects such as the Potato Patch, which foster urban agriculture and participation by the larger community.

9. Increase people's ability to buy good food: reduce inequality.

- The Saskatoon Health Region should continue to focus on reducing health disparities in the city through health promotion in schools and action on including nutrition in schools and other social determinants of health, in partnership with community organizations.
- The Saskatoon Poverty Reduction Partnership should support the recommendations of the food strategy as a means to reduce food insecurity for Saskatoon residents facing poverty, while continuing to advocate for policies that increase income and other supports.

10. Reduce food waste in the home and energy input in food production.

- Residents should seek food products with minimal packaging, reduce food waste in preparing food and compost food waste.
- The City of Saskatoon should implement the city-wide curbside composting program for food waste, now being studied.
- Federal and provincial government agricultural policies should include goals to reduce the carbon footprint of food production and processing. We need studies of on-farm energy use and energy use by other links in the food chain: transportation, processing and packaging. Farmers need support in moving toward livestock production strategies to reduce energy use and greenhouse gas emissions.

11. Preserve water and land for the future.

Water

- Residents should conserve water and minimize the use of cosmetic pesticides in yards.
- The City of Saskatoon should increase protection of our water sources. We offer the following recommendations
 - Continue to support the protection plan for the South Saskatchewan River Watershed.
 - Incorporate green policies for its own buildings, for example, green roofs.
 - Adopt park design that reuses and saves treated water. (For example, instead of using treated water for spray pads only once before it is washed into the storm sewers, the water could flow to nearby trees, etc.).
- The provincial government should increase protection of our water sources from agricultural waste. Given limited water supplies, the government should prioritize irrigation projects that diversify food production and that target production to the local Saskatoon and area market.



Land

- Federal and provincial governments should implement agricultural policies to preserve and promote the next generations' ability to grow a diverse range of healthy food for our population. For example:
 - In cooperation with other provinces, Saskatchewan should enact a set of land ownership restrictions wherein farmland can only be owned by individuals who are provincial residents, or by incorporated farming operations owned by provincial residents. Residents of other provinces or nations and Saskatchewan non-farm corporations should not be allowed to own more than a small amount of Saskatchewan farmland.
 - Where the land is owned by Saskatchewan residents who are not active or retired farmers, e.g. by Saskatchewan residents who hold farmland as an investment, property tax rates should be higher.

12. Build knowledge of regional food systems.

In the assessment, we noted the need for a way to bring together and build on the different forms of knowledge toward the goal of improving the food system of our Saskatoon and area community. We suggest the following:

- The University of Saskatchewan should establish a regional food systems unit, comprised of university-based and community-based participants, to focus on studies of the local food economy. It would involve different departments and disciplines, including community health, plant sciences, and others but also community partners, such as CHEP and the SHR. The unit could encourage research at many different levels. Examples based on key informant interviews include studies that provide students with research opportunities such as regular food costing (as SHR is doing) nutrition tracking within the city, tracking vacant land uses in the city, and identifying conditions for rooftop gardens. Also arising from this assessment are proposals for studies of best-practices in small to medium-scale agriculture and food processing, and sector-specific analyses for increasing local markets for food products. Finally we need policy research on possibilities for different levels of government to increase support to the local food system. The unit should be housed in a department or college which has multi-disciplinary experience and community partnerships, such as within Plant Sciences in the College of Agriculture or Community Health and Epidemiology in the College of Medicine. Other options include the School of Environment and Sustainability or in the Division of Nutrition. Perhaps funding for a research chair in regional food systems could be obtained.
- In the short term, funds should be applied for to carry out further analyses of the food system in the Saskatoon area. Examples include:
 - Studies could be designed using data from Statistics Canada in conjunction with surveys of local producers to provide sector or product-specific analyses of potential.
 - Partners in First Nations and Métis organizations should be encouraged to collaborate in applying for funds to carry out a study of best practices for meeting the needs of First Nations and Métis communities through a food systems approach.
 - Saskatoon organizations such as the Saskatoon Environmental Society and the Waste Reduction Council could be encouraged to collaborate with others to create a research and education program about the environmental impacts and costs of food as it is consumed in Saskatoon, and how to reduce them.



3. Next steps

Saskatoon Community Food Council

Over the next few months, the Team will initiate the Saskatoon Community Food Council, inviting participation from other individuals and organizations, to foster the vision and strategy in this report. As we discussed above, a food council is a group that seeks to improve the community's food system by promoting and coordinating programs and activities, making and overseeing policy recommendations, conducting or sponsoring research, networking, and building interest and participation in the community. Working from a food systems perspective, the food council would integrate issues of food, agriculture, health, economy, culture and community. A food council should have members from different segments of the community and of the food sector, all committed to the basic goals and vision of the food strategy. It will require financial and logistical resources to support its activities.

Many Canadian cities have established food councils, including Vancouver, Toronto, Ottawa, Halifax, Kamloops, and most recently Edmonton. Edmonton's Food Council is a committee of the city's administration, to advise on food and urban agriculture matters and to actively support the food strategy implementation. Other responsibilities include research and evaluation, coordination, engagement and education. It is composed of 15 members from different sectors of the food system and the community. Toronto's Food Policy Council was the first one established in Canada (1991). It has played a strong role in shaping municipal food policy, and since 2012, has been working with the city of Toronto to promote urban agriculture opportunities as identified in the Toronto Grow to Action plan. The city of Vancouver established a food policy council in 2004. The membership consists of 21 individuals with 14 members representing seven areas of the food system in addition to 7 members at-large. The council has directly contributed to several initiatives, including an "Agricultural Inventory" of city-owned property directing appropriate departments to identify city-owned land which may be available for community gardens or other agricultural uses; a procurement rule change for city facilities to purchase locally grown food; commitment to the creation of a new composting program; and implementation of "Farm to School" and "Farm to Cafeteria" programs.

Continuing promotion of the food strategy

In moving forward, the team will continue to promote the food strategy with the public and organizations and agencies involved in the food sector, including but not limited to, those mentioned in the recommendations. Until the formal establishment of the food policy council, the team will act on those recommendations in the report that fall within our capacities. In particular we will apply for funding to support additional research following up on the assessment. We will also continue to support a social media presence to enable continuing feedback with the public.

The most successful cities anticipate and prepare for the changes that lie ahead. They envision their future city and what will make it great. They plan ahead and then act on their plans.

(City of Saskatoon, Saskatoon Speaks, 2011)



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Appendix 1: Team Members

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*These members withdrew from the process because of the time required.



Appendix 2: Methods

The project was initiated in November 2012 and a final report produced in September 2013. The consulting firm Kouri Research was contracted to carry out the plan developed by the Team, under its guidance and support. A combination of community interaction, group and individual interviews, and research was undertaken.

Focus Groups and Group Interviews

- Saskatoon Greater Public School Division Nutrition Coordinators, Jan. 25, 12 participants
- CHEP producers, Feb. 4, 2013; 7 participants
- City residents attending a CHEP Grub and Gab event at Station 20 W, Feb. 7, 2013; 25 participants
- City residents, by invitation of City of Saskatoon Neighbourhood Planning through neighbourhood associations, Feb. 11, 2013 at Lakewood Civic Centre ; 8 participants
- City residents, by invitation of City of Saskatoon Neighbourhood Planning through neighbourhood associations, Feb. 13, 2013 at Station 20 W; 9 participants
- MyWay Immigrant Women, Feb. 21; 13 participants
- Saskatoon Food Coalition, May 7, 2013; 12 participants
- City of Saskatoon Staff Group, June 26 and July 23, 2013; 10 participants

Surveys and Consultations

- Food shopping survey, posted online on saskatoonfood.ca: 94 respondents
- Producer survey, posted online on saskatoonfood.ca, with requests to producers by email sent by Agriculture Council of Saskatchewan; print versions distributed to Farmers' Market producers: 15 respondents.
- Poll about people's perspective on what a "region" should be, online, as well as in informal presentations (about 200)
- Public feedback sessions on preliminary findings and recommendations at two sessions, one held in June at the Saskatoon Farmers Market (89 respondents) and another at the Centre Mall in August (7 respondents). The informational materials were also posted on the website along with an online questionnaire (51 responses). However, the self-selection bias was too high for the results to be used in the assessment, as all proposed recommendations had at least 75% approval ratings.

Statistical Analysis, Document Review and Supplementary Research

- Literature on food systems and food systems assessments was reviewed.
- Reports on what other cities have done were reviewed.
- Saskatoon's zoning bylaw and other relevant administrative material were reviewed.
- City of Saskatoon data on vacant land was compiled.
- Data on activities from Saskatoon organizations were collected and compiled.
- Demographic, economic and food trends were analyzed using Statistics Canada and other data and reports.
- Historical research, with follow up queries, was undertaken for some aspects of the food system in Saskatoon and Saskatchewan.



Key Informant Interviews

Key informant interviews were held with personnel of relevant organizations, including Team members. Organizations and enterprises included City of Saskatoon Neighbourhood Planning, Saskatoon Health Region Population and Public Health, CHEP Good Food Inc., Pineview Farms, University of Saskatchewan Department of Community Health & Epidemiology, The Grocery People, the Agriculture Council of Saskatchewan, the Food Centre, the Saskatoon Food Bank and Learning Centre, Wanuskewin, the Greater Saskatoon Catholic School Board, Tourism Saskatchewan, Tourism Saskatoon, and the Aboriginal Friendship Centres of Saskatchewan.

Several individual key informants were also interviewed, including a city councilor, a food reporter, First Nations and Métis community animators, personnel for food procurement at the Saskatoon Health Region, SIAST and the University of Saskatchewan, and individual professors at the University of Saskatchewan (Economics and Horticulture Departments).

Additional Community Interactions

Efforts were made to be present at relevant events to raise awareness of the process, and to have informal discussions and obtain feedback, including food mapping:

- Saskatchewan Council for International Cooperation Conference, November 2012
- Saskatchewan Green Trades Conference, November 2012
- Consultation session hosted by the Conference Board of Canada for its national food strategy, February, 2013
- Seedy Saturday, March 2013
- Curiosity Conference, March 2013



Appendix 3: Examples of Food Strategy Initiatives from Other Cities

Compiled by Scott Mantyka, for the Saskatoon Regional Food Assessment and Action Plan, May, 2013

Integration into the Official Community Plan (OCP)

Several cities have integrated the notion of food into their OCPs:

Victoria (Section 17.0) - Presents a balanced approach, exploring all facets of the municipal food system, from production to waste management. The concept of urban food production is also integrated into other locations throughout the OCP; this displays the connection between food and the various other aspects under observation.

Richmond (Section 7.0) – Agriculture is a large component of this OCP, largely the result of the quantity of land protected by the ALR surrounding the city. As a result, there is a lot of consideration directed towards maintaining the integrity of the agricultural land, while also promoting its commercial viability. There are also smaller elements directed towards strengthening urban agriculture structures, and improving connection with the community.

Langford (Section 11.0) – Emphasis is placed on development of urban agriculture, especially the integration of urban agriculture opportunities into new development (through design guidelines and density bonusing) or promoting new growing opportunities in existing neighborhoods. An equal emphasis is placed on generating viable economic opportunity for urban farmers and producers. A small section details the ALR and emphasizes that future development can't impair future long-term viability in the region.

Food policy council

Food policy councils (FPC) represent a strong driving factor in inducing positive change within a food system. A FPC is typically tasked to work and influence all stages of the food cycle. These councils may be integrated with municipal policy makers to varying degrees.

Vancouver- The city of Vancouver established a food policy council in 2004. The membership consists of 21 individuals with 14 members representing seven areas of the food system (food production, processing, access, distribution, consumption, waste management, and system-wide); in addition to 7 members at-large. The Vancouver FPC provides a list of policy changes that have been catalyzed through the direct efforts of the FPC:

- Urban agricultural resolution to conduct an "Agricultural Inventory" of city-owned property directing appropriate departments to identify city-owned land which may be available for community gardens or other agricultural uses;
- Procurement rule change encouraging city facilitates to purchase locally grown food;
- Commitment to the creation of a new composting program;
- Implementation of "Farm to School" and "Farm to Cafeteria" programs.

Toronto- A global leader, the Toronto FPC was established in 1991, and was the first of its kind in Canada. They have been active for the past two decades and have played a strong role in shaping municipal food policy. Since 2012 the organization has been working with the city of Toronto to promote urban agriculture opportunities as identified in the Toronto Grow to Action plan.

Edmonton – The creation of a FPC is outlined as an objective in Edmonton's environmental strategic plan (*The way we green* - section 7.0), building on policies outlined in the municipal development plan (*The way we grow* – section 10.1.1). A time frame for establishing an FPC was clearly communicated in an October 2012 publication (*Fresh – Edmonton's Food & Urban Agriculture Strategy*); with the food policy council to be established June 1, 2013 and presenting proposed priorities and a work plan to city council by December 31, 2013.



Regulatory support for keeping of backyard chickens

Vancouver - Possession of chickens is regulated by animal control bylaw (9150)

- As per section 7.2 hens are classified as a prohibited animal within the city of Vancouver. This provision is subject to section 7.15 and 7.16 – permits the keeping of hens within the defined regulations.
- Section 7.5 restricts the number of hens that may be maintained at any time.
- Section 7.15 deals with the required registry of chickens with the city of Vancouver.
- Section 7.16 clearly communicates the guidelines and responsibilities for keeping chickens on city property.

Victoria- Animal control bylaw 92-189 prohibits the keeping of farm animals in the city; chickens are not directly referenced as farm animals and are permissible. Roosters are excluded –permitted for breeding periods. Eggs and meat produced through chicken coops are not permitted for sale. Reference PDF file that indicates the level of acceptance and regulation employed by the various municipalities of Vancouver Island.

Niagara Falls- The city animal control bylaw covers the keeping of chickens as part of “schedule c”. Similar to other Canadian cities that allow chickens, the keeping of rooster’s remains prohibited. This bylaw also provides detail regarding the standards and conditions that must be maintained, from coop dimensions and location, to sanitary standards.

Regulatory support for the keeping of bees

Victoria - Regulation of bees is controlled through civic animal control bylaws (Section 21 - Requirements for keeping bees).

(1) A person who keeps bees must:

- a) Provide adequate water for the bees on the person’s property,
- b) Maintain the bees in a condition that will reasonably prevent swarming, and
- c) Keep hives at least 7.6 m away from each property line, unless there is a solid fence or hedge at least 1.8 m tall parallel to the property line.

(2) The Fence Bylaw applies to a fence erected in accordance with paragraph (1)(c).

Vancouver- Covered to great detail in the “hobby bee keeping bylaw” – 7985.

This bylaw is more explicit, restricting bee keeping to selected zoned regions, and clearly communicating the conditions that must be met to satisfy the requirements.

Toronto- Regulated by the Ontario bee act.

This is a very stringent regulation and is the primary dissuading factor to people rearing urban bees. Bees must be kept 30m from property lines and 10m from highways.

Boulevard gardening

Vancouver-The city of Vancouver has clearly established and defined boulevard gardening guidelines. Residents are encouraged to transform their boulevards. Guidelines account for a wide array of elements, from required soil depth to ensure underground utilities are not impacted, setback and access requirements, to allowable plant height and required maintenance. Information regarding recommended plants is also provided. Vancouver’s gardening guidelines also clearly indicate the production of food is an acceptable practice.

Victoria- The city of Victoria currently charges residents a boulevard maintenance fee (\$2.50/sq. meter) to maintain their boulevards. Property owners have the option to opt of the service and maintain their own boulevards, a growing trend that increases the resource allocation by the city → causing it to assess if the boulevard taxation program is sustainable. Part of this assessment involves exploring alternatives to grass as a boulevard staple. One alternative brought up by the city is the growing of gardens in these boulevard spaces, as long as they don’t impair access, hinder pedestrians or safety, and utilities are maintain. City of Vancouver guidelines are cited as an example.



Winnipeg- Residents are encouraged to beautify their boulevards, but all modification must be in accordance with the neighborhood liveability bylaw (1/2008). One aspect that is explicitly stated is the clear exclusion of fruit and vegetable plants as acceptable plant material for boulevard gardening.

Community gardens

Victoria – The municipal government encourages the development of community gardens on private land that follow the criteria outlined by the city. Additional commentary pertains to rezoning land/qualification for funding opportunities. A big aspect to this commentary is that the city requires a group **must** be responsible for the site if the venture is unsuccessful. The city doesn't want to assume any responsibility, financially or otherwise, for the garden.

Victoria- The urban agriculture resolution, adopted May 15, 2007, officially recognized the importance of community gardens; developing a community gardens policy, and acknowledging community gardens and edible landscaping as legitimate activities in parks.

Edmonton- The impetus for creation of a community garden falls on a private group of citizens. This group must establish and drive the formation of the garden through the defined steps and requirements outlined by the city.

Edmonton- Clear process for obtaining access to community lands is provided online. Process is driven by the individual, with the formation of a group and obtaining community support for the initiative. Any request for city land is assessed by the community recreation coordinator.

Winnipeg- Community gardens are designated as a permissible park and park-related land use in the majority of zoned districts within the city of Winnipeg (according to the zoning bylaws). Gardening is not permissible in commercial corridors, commercial regional areas, and all manufacturing zones.

Regina- Zoning bylaw 9250 indicates community gardens are classified as a permissible land-use in all residential zones (page 5.8), all commercial land classifications (page 5.13), and all industrial classifications (page 5.19). Specific requirements pertaining to gardens are not provided in the specific land classification chapters (chapters 6-8). Community gardens are further communicated to be an accepted land use in the chapter detailing special zone restrictions (chapter 9).

Ottawa – The city of Ottawa has clearly designed and established a Community Garden Action Plan, which was last revisited in 2009. There are policy indicators that help promote the establishment and maintenance of gardens throughout the process, from identification of new land for development, development of capacity, operational support, and clear communication of monitoring mechanisms. Two commonly lauded elements may be found in the operational support section. The city will allow access and use of water where city infrastructure exists and ensures maintenance of system; it also allows the developed community garden to be covered by the community association's group insurance, removing the required need to obtain additional liability insurance.

Calgary- Step-by-step process is available on the city website. All requests for city owned land are directed through the parks department. Website indicates that each application is unique, with consideration being directed towards how compatible the process is with existing land use and future development.

Protection of urban agriculture through rezoning

The complication facing many established urban agriculture initiatives is there is the potential the land they occupy may be converted to another land use at any given moment. Part of securing the long-term viability of urban agriculture is to ensure established initiatives are not lost in the face of encroaching urban development.

Saanich- As part of the council policy pertaining to community gardens (03/cw) there is a section dedicated towards communicating elements and approaches to retain existing sites. One of these recommendations is to rezone established sites as P-4 zones (recreation and open space).

Development of supportive policy and bylaws

Seattle- (All zones, except low-rise and single family) Greenhouses are allowed a 15ft exemption to height limits. They must comply with specific zoning features, such as rooftop features and setback requirements.



Edible landscaping

Vancouver- There is a strong history of promoting edible landscape on private land, with a growing attention being directed towards the promotion of integrating the process into public land. A policy report developed December 15, 2008 examined urban agriculture design guidelines for private land. It provided recommendations and base details, and was a tool to promote urban agriculture in new development. In the publication of an “edible landscaping white paper” served to identify progress of the process in Vancouver; while also identifying means to expand moving forward. The recent “what feeds us” publication built on these publications and provided three recommendations for increasing edible landscapes in the city moving forward:

(1.17 – short-term) Encourage implementation of green streets and blooming boulevards program guidelines to allow for growing vegetables and other food plants in residential boulevards, traffic circles, and bulges.

(1.18 – mid-term) Promote edible landscaping as an alternative to ornamental or flowering plants in residential, commercial, institutional and parks landscaping plans.

(1.19 mid-term) Increase the planting of food-bearing trees when planting new trees in parks and other civic lands, and encourage community stewardship of those trees.

Victoria- Consideration for edible landscapes is included in the municipal OCP as a section detailing urban food production:

(17.4) Review and develop city policy to increase the number of allotment gardens, commons gardens, edible landscapes, food-bearing trees and other types of food production activities that considers other uses and identities.

(17.8) Work with community groups to develop pilot projects for the planting, maintenance, and harvesting of food-bearing trees on suitable city-held lands.

(17.9) Consider new and innovative approaches to urban food production that increase food security, in partnership with citizens, community groups, and other stakeholders.

In accordance with the OCP, the city parks master plan proposes an investigation into the planting of fruit and nuts in public spaces. It is currently experimenting with various pilot projects. Current complications largely surround the ownership and maintenance responsibility of plants.

Ottawa- Food For All, a CIHR funded project looking to develop a food action plan for Ottawa, identified edible landscapes as a means to help create a sustainable city. The expressed vision was that the city look to utilize public urban green space for food production, integrating food production into the public landscape.

Kamloops – The published “best practices in urban agriculture” acknowledges that current landscapes tend to be entirely ornamental and aesthetic in nature, and that the city should look to integrate food production into the process. The city of Vancouver guidelines are presented as the gold standard for moving forward, with localization of plant selection for the region.

(Recommendation 4.3.4) It is recommended that the city amend zoning bylaw landscape standards for multi-family zones, or the development permit area guidelines for multi-family projects to require new projects integrate food producing areas into the overall development as part of the required landscape area.

Business license for urban farming

Chicago- The city of Chicago requires that all urban farms obtain a business licence to operate. They have created a limited business license category for those farmers that would otherwise not qualify for a different classification.

Vancouver- In Vancouver it is illegal to sell any product or offer any service without a business license (as indicated in bylaw 4450). The implications for urban farmers are that they are technically not allowed to sell their products in the city; commercial activity in agriculturally zoned lands is permissible. The Vancouver food strategy “what feeds us” looks to address this issue, proposing the creation of an urban farming business license category (action 1.13). This recommendation has been taken up by the city, which has since made it a priority action in efforts to move towards a green economy with food at its center.

Policies promoting economic viability of urban market gardens & urban agriculture



Kamloops- The best practices in urban agriculture document recommendation 4.2.2 states that the city should explore avenues for ensuring urban agriculture is taxed as agricultural land.

Victoria- In 2008, the Home Occupation Bylaw was amended to accommodate urban agriculture practices, by allowing "up to two people to engage in urban agriculture as a home occupation" and ensure that the taxation rate would be equal that of residential.

Seattle- Urban farms are a permitted accessory use in residential zones. Specific guidelines are provided by municipal code SMC 23.42.051 (Urban farms). In commercial and industrial zones these urban farms are permitted for either primary or accessory use. In manufacturing and industrial sectors they are restricted to rooftops and the sides of buildings.

Density bonusing for future development

Density bonusing is a planning mechanism that allows developers to surpass available floor space in exchange for integrating the amenities that provide public benefit into their construction. It is a planning tool referenced in the Victoria food assessment as having potential moving forward, particularly in the creation of garden space.

New York- Municipal bylaw regarding the construction of greenhouses on rooftops of non-dwelling buildings – greenhouses will not count towards height restrictions or floor area. Theoretically opens up approximately 1200 acres of urban growing space.

Protecting agricultural land

BC – ALR (agricultural land reserve)

Up to the 1970's the province of BC was losing up to 6000ha of prime agricultural land per year. In response to this was the creation of the Land Commission Act in 1973. This commission created a special land use designation in efforts to conserve prime agricultural land. This initial ALR was 5% of the province, 4.7million ha, a value that is largely the same today. This zone encapsulates both public and private land. In ALR zones farming and agricultural practices are recognized as the primary land use, non-farming related activities are closely controlled.

Montreal – PAZ (permanent agricultural zones)

Action 11.4 of the Montreal Master Plan is an effort to promote the retention and development of farms and farming activities. The city aims to promote organic agricultural while controlling non-agricultural activities, in accordance with government of Quebec guidelines.

Edmonton – contemplating the creation of an ALR

"Fresh", the Edmonton food and agriculture strategy includes the creation of an ALR as one approach to protect agricultural land.

