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Executive Summary

A Healthy Food System is...

 one in which all residents have access to, and can afford to buy, safe, nutritious, and culturallyacceptable food that has been produced in an environmentally sustainable way and that sustains our rural communities

This Snapshot is...

- a quick summary of progress towards a healthy food system in Waterloo Region since the publication of <u>Towards a Healthy Food System for Waterloo Region</u> in 2005,
- organized by the <u>six priorities</u> for improving the health of Waterloo Region's food system as identified by the Waterloo Region Food System Roundtable, and
- a sampling of research, projects and organizations that are actively pursuing the priorities.

This Snapshot is not...

• an exhaustive chronicle of all food research and every food initiative undertaken in Waterloo Region since 2005.

Local Food Infrastructure

This Priority includes:

Rebuilding the processing and distribution interface required to make more local foods available to local residents. Also includes convincing public Institutions to buy more local foods



Since 2005...

- Several new and expanded businesses in Waterloo Region have expanded the options for buying local food, including many new on-farm stores and <u>CSAs</u>, and unique innovations like the <u>Elmira Produce Auction</u> and <u>Bailey's Local Foods</u>.
- There are lessons to learn from the failure of some of these initiatives, like 100 Mile Market.
- The <u>Ontario government has funded several projects</u>, including <u>one at the University of Waterloo</u>, to help public institutions source more Ontario foods. It also introduced the <u>Local Food Act</u> in Fall 2012, aimed at setting targets for public institutions to purchase more Ontario food.
- Some <u>exploratory research</u> by the Canadian Coalition for Green Health Care has identified barriers and opportunities for using more local food in hospitals and long-term care facilities.
- Two recent research studies one by the <u>University of Waterloo</u> and one by Opportunities Waterloo Region – both call for stronger connections and the creation of a shared strategy among economic developers and businesspeople to promote the local food sector in Waterloo Region.

Current Assessment

- Urban consumers who want to consume local food have many more options available to them than they did in 2005, thanks to expanded offerings from many farm stores, food buying clubs, wholesalers, and restaurants.
- New and updated research is needed to identify specific economic development opportunities, such as a feasibility study on a local food processing and distribution hub, and to quantify the current and potential contribution of food and agriculture to the local economy.
- Better co-ordination is needed to identify the specific opportunities and take coordinated action to address barriers and make entrepreneurs aware of the opportunities in the local food sector.

Food Sovereignty

This priority includes:

Working towards giving people greater knowledge about, engagement in, and control over the food in our communities. Also includes food democracy, food skills and food education.



Since 2005...

- By hosting Food Summits and an interactive website, the <u>Waterloo Region Food System</u>
 <u>Roundtable</u> has furthered *food democracy* by providing opportunities for people and
 organizations involved in efforts to improve the health of our food system to network
 with, and learn from, each other.
- New <u>Public Health research</u> has quantified the level of *food skills* among Waterloo
 Region's population, and programs like Public Health's <u>Peer Program</u> and the <u>Working</u>
 <u>Centre</u> continue to improve gardening and food preparation skills for many people.
- Several local organizations continue to provide food education to people, including
 <u>Foodlink Waterloo Region</u>, <u>Little City Farm</u>, <u>rare</u>, and the <u>Waterloo Region Food System</u>
 Roundtable.
- Recent research in Waterloo Region drew a strong correlation between the quality of people's diets and their sense of engagement and control over the food they can access.

Current Assessment

• Food sovereignty has seen some encouraging progress since 2005, as many more people and institutions are beginning to incorporate food systems thinking into the way they do things. This creates a strong base on which to build.

Food Policy

This priority includes:

Advocating for "joined-up" food policies at local, provincial, and federal levels of government and monitoring their implementation



Since 2005...

- The Region of Waterloo adopted a new section on Access to Local and Other Healthy
 Foods in its <u>Official Plan</u>, and area municipalities are now following suit with policies on
 community gardens, temporary farm markets, and retail food stores.
- A <u>comprehensive report</u> on municipal policies that support healthy eating, physical activity, and mental health gives many ideas for strengthening municipal food policies.
- The Ontario government <u>no longer permits</u> the sale of foods that are high in unhealthy
 fats, sugar and sodium in publicly-funded schools. The Waterloo Catholic District School
 Board nutrition standards exceed these provincial directives and apply to all food and
 beverages that are not only sold but also offered in school (e.g. school celebrations).
- A new <u>report by Ontario nutritionists</u> is calling on employers to improve their workplace food environments by offering more local, healthy food options.
- New organizations have appeared on the provincial and national scenes to advocate for joined-up food policies. These include <u>Sustain Ontario</u>, <u>Food Secure Canada</u>, and <u>Centre</u> for Food in Canada.

- Significant progress has been made in food policy in Waterloo region since 2005.
 Municipalities have recently incorporated access to healthy food into their municipal official plans and will now move towards their implementation.
- Many organizations are giving increased attention to convincing the Ontario and Canadian governments to adopt comprehensive food policies, and though the policies have yet to materialize, their realization seems possible in the medium term.

Urban Agriculture

This priority includes:

Encouraging and supporting the expansion of food grown of raised in Urban areas



Since 2005...

- The number of community garden plots in Waterloo Region has increased by 77%, from 679 plots in 2005 to 1,200 in 2012, thanks to the Diggable Communities Collaborative (involving Opportunities Waterloo Region, the Community Garden Council, Public Health and other partners). Community gardens can now be found in schools and workplaces in the region.
- Great strides have been made to build an inclusive community garden movement; gardens have been established to welcome newcomers to Canada, youth, and people with mobility challenges.
- Several research studies on community gardens and urban agriculture in Waterloo
 Region have been published since 2005. The studies cover the benefits of community
 gardens, the potential for accessible and inclusive gardens in Waterloo Region, and
 more.
- Policies permitting and supporting community gardens have been established in municipal official plans; these municipalities have varying positions on the raising of hens.

- The growth in community gardens in Waterloo region is encouraging, and the recently-adopted municipal policies should encourage more growth in the future.
- Barriers still exist for community gardens, including access to water and compost, lack of long term tenure for some community garden sites. Public opinion remains mixed regarding urban hen raising and urban beekeeping.

Farm Viability

This priority includes:

Pursuing policies and other initiatives which return a larger portion of the food dollar to famers, especially for producing healthy foods for local sale.

Also includes paying farmers more and encouraging more sustainable farming.



Since 2005...

- The <u>2011 Agricultural Census</u> showed that Waterloo Region farms have much higher average incomes than ten years earlier, and continue to be among the highest in the province, despite having smaller average farm sizes. More research is needed to explain this phenomenon and to analyse more specific trends such as how many farms are earning a higher percentage of their income from local markets.
- Waterloo Region's farmers continue to get older, though they are six years younger than
 the Ontario average. New programs like <u>FarmStart</u> and <u>CRAFT</u> encourage younger
 people to consider farming with training programs for new farmers.
- Recent changes to the <u>countryside policies in the Region's Official Plan (ROP)</u> could provide more long-term protection for farmland from urban development and give farmers more options for earning income on their farms. The entire plan, however, is under appeal.
- The <u>Perth-Waterloo-Wellington chapter of Canadian Organic Growers</u> has produced numerous studies analyzing the organic farming sector and workshops and resources aimed at supporting farmers interested in using more sustainable farming methods.

- While farmers in Waterloo Region continue to be more prosperous on average than in most of the rest of Ontario, many continue to depend on off-farm income, and barriers to entry continue to be an issue for new farmers.
- Serious consideration needs to be given to expanding programs like the <u>Rural Water</u> <u>Quality Management Program</u> to pay farmers for delivering other environmental services.

Access To Healthy Food

This priority includes:

Advocacy for policies and other initiatives which ensure everyone has access to enough nutritious food. Also includes adequate income, emergency food, walkability, and cultural appropriateness.



Since 2005...

- New research is beginning to call for a different focus on the concept of Access to
 Healthy Food. Based on evidence that the accessibility of non-nutritious foods may
 have more effect on diet quality than the lack of accessibility to healthy foods, more
 voices are calling for measures to limit access to non-nutritious foods.
- The lowest income people in our community still struggle to afford enough nutritious food to feed themselves. While incomes have improved since 2005 for those who rely on minimum wage jobs and for those with children, thanks to the advocacy of several local and provincial organizations, the cost of a nutritious food basket for these people still leaves little to pay for other basic expenses. Single adults on Ontario Works cannot even afford a nutritious food basket after paying rent.
- <u>Food bank usage</u> has increased substantially since 2008. Nonetheless, the Region's food banks and emergency food programs have coordinated with one another to meet this challenge, and initiatives like <u>Waterloo Region Shares</u> have helped to strengthen the emergency food network.
- A successful pilot of <u>neighbourhood markets</u> has demonstrated the potential of small temporary farmers' markets to increase walkable access to food, fruit and vegetable consumption, and farmer incomes. New policies in municipal Official Plans now permit these ventures in most land use designations and set goals for ensuring healthy food is available within walking distance of all residents.
- <u>Recent research</u> summarized the opportunities and challenges for growing more ethnic vegetables locally. The <u>Vineland Research and Innovation Centre</u> is researching the viability of growing ethnic vegetables on a conventional scale in Ontario, and <u>FarmStart</u> is helping new farmers enter this emerging market. Meanwhile new community gardens in Waterloo Region are specifically targeting New Canadians to give them the opportunity to grow foods that are most familiar to them.

- Too many people still rely on emergency food assistance to feed themselves and their families because their incomes are too low to afford enough nutritious food. This affects the quality of their diets and therefore their health.
- Municipalities in Waterloo Region are starting to adopt policies encouraging walkable access to healthy food, but more work is needed to implement the ideas.

Introduction

This report is an update on the status of Waterloo Region's food system. It builds on the work of a food system assessment published by Region of Waterloo Public Health in 2005 – Towards a Healthy Community Food System for Waterloo Region¹ – and summarizes the new information made available since then in published reports and other sources which were brought to the attention of the report authors.

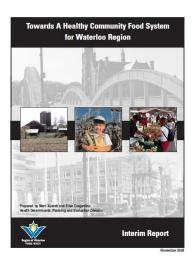
The impetus for this report was funding made available by the JW McConnell Family Foundation to Opportunities Waterloo Region to conduct a regional food system assessment. As the initial stage of the Value Chain Program,² the Foundation's Food System Assessment Fund seeks "quick farm-to-table scans of regional food chains," and asks for food system assessments to address specific questions about the existing and potential demand and supply for sustainable regional food, and to map out plans for getting there.

Waterloo Region already has a food system assessment from 2005,³ as well as a plan to move towards a healthier food system⁴ which was widely-endorsed by the community in 2006 and endorsed by Regional Council in 2007 (see additional details in sidebar). Waterloo Region also has an organization set up to refine the plan and monitor progress on it (the Waterloo Region Food System Roundtable). This report builds on that work, attempting to summarize some of the vast body of food systems work that has affected or taken place in Waterloo Region since.

The report is structured along the lines of the six broad Food System Priorities as identified by the Waterloo Region Food System Roundtable in 2010 (see sidebar). In each section, we start with a brief summary of where we were in 2005 when *Towards a Healthy Community Food System* was written, and then update the state of progress towards realizing that priority by reviewing new research, initiatives, or active organizations which have surfaced since then, and concluding with a brief assessment of where we are today on the priority. This assessment does not constitute an exhaustive review of all the organizations and projects involved in efforts to improve Waterloo Region's food system, but attempts to document actions of which the authors are aware. Input into the content of this report, including suggestions of other organizations and projects for inclusion, are welcome.

Background

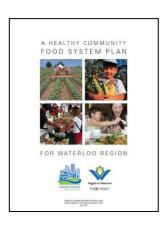
Waterloo Region's first food system assessment, *Towards a Healthy Community Food System for Waterloo Region*, was published in November 2005. The report documented that approximately one in ten Waterloo Region residents either did not have enough to eat or worried about not having enough to eat. At the same time, many farmers struggled to make a living growing or raising food, and many who had enough to eat were experiencing health issues because they did not get enough nutrition from the food they ate. It also pointed out that our food system depended far too much on fossil fuel inputs to be sustainable over the long term.



The report suggested a goal of working towards a healthy food system, defined as one in which all residents have access to, and can afford to buy, safe, nutritious, and culturally-acceptable food that has been produced in an environmentally sustainable way and that sustains our rural communities.⁵

It then suggested a number of strategies for moving towards a healthy food system, which ranged from preserving the region's agricultural lands and strengthening consumer food skills, to increasing urban agriculture programs and reviving the local food processing industry.

Following the release of the 2005 Report, over eighty people from nine sectors of the food system participated in consultations on the report's recommendations. Focus group participants identified specific actions which they felt were important to achieve the goal of a healthy food system. Then, in a follow-up forum in June 2006, participants chose six priority actions from a list of 26 actions identified in the focus groups, and affirmed the need for a new organization to oversee their implementation. This process, and the resulting plan made out of the prioritized actions, is documented in the 2007 report *A Healthy Community Food System Plan for Waterloo Region*.⁶



Work began soon after the June 2006 forum to create the Waterloo Region Food System Roundtable. The people who make up the group represent key sectors and interests in Waterloo Region's food system, and see their role as monitoring the status of the *Food System Plan* and identifying current Food System Priorities. Their tagline, repeated at the top of their webpage, is "connecting our community to the work of building a healthy food system" in Waterloo Region. In April 2007, when Regional Council received a published version of the *Food System Plan*, Council passed a motion authorizing Public Health staff to provide administrative support for the Roundtable.⁸

In 2009, the Roundtable held a Food Summit ⁹ to educate people about the interconnected complexities of the food system and to engage them in actions to address them. Over 170 people attended the Summit, which produced a Declaration identifying actions participants committed to taking. The Roundtable used the Food Summit Declaration to refine its Food System Priorities in January 2010. The following six priorities represent the Roundtable's priority areas for work towards a healthy food system in Waterloo Region:



- Local Food Infrastructure Rebuild the processing and distribution infrastructure required to make more local foods available to local residents.
- **2.** Food Sovereignty Work towards giving people greater knowledge about, engagement in, and control over the food in our communities.





- **3. Food Policy**-Advocate for "joined-up" food policies at local, provincial, and federal levels of government and monitor their implementation.
- **4. Urban Agriculture**-Encourage and support the expansion of food grown or raised in urban areas.





- **5. Farm Viability**-Pursue policies and other initiatives which return a larger portion of the food dollar to farmers
- **6.** Access to Healthy Food-Advocate for policies and other initiatives which ensure everyone has access to enough nutritious food.



Local Food Infrastructure

Rebuild the processing and distribution infrastructure required to make more local foods available to local residents



Assessments of Waterloo Region's food system from 2005 to the present have continuously identified the broad area of economic development as a priority area for action to move towards a healthier food system. The Waterloo Region Food System Roundtable names Local Food Infrastructure as one of its six Food System Priorities, and includes within this priority "rebuilding the processing and distribution network to make local food easily accessible to residents." Public institutions are key for rebuilding the local food processing sector, since if enough institutions with significant food expenditures could be convinced to buy an increasing percentage of their food from local sources, it could create new markets for local producers and processors. 11

Several key pieces of research were summarized in Public Health's 2005 report *Towards* a *Healthy Community Food System* that described the state of local food infrastructure at the time. Below is a quick review of what was known at that time.

The Economic Impact Study of the Agriculture and Food-Related Sectors in Waterloo Region was commissioned by Public Health in 2003 to examine the economic significance of the food system in terms of dollars and jobs. ¹² At the time the report was written, 11.3% of the WR labour force worked in the primary, secondary, and tertiary sectors of the food economy. Gross sales for all three sectors totaled almost \$2.7 billion, including a substantial value-added component.

The 2006 Study of Redundant Trade in Waterloo Region looked at the negative economic and environmental impacts of redundant trade on the region. ¹³ It studied 11 selected fruits and vegetables, and found that Canada imported and exported those foods from other countries during their peak harvest time in Waterloo region. Scans of grocery store and farmers' market shelves found imports of the same foods during peak harvest time, too. The study also found local foods not necessarily easy to find and sometimes more expensive.

The 2005 *Region of Waterloo Food Flow Analysis* looked at a specific basket of foods commonly consumed in Waterloo Region and tried to determine what percentage of these items were from local sources. It found that most of what is supplied in local stores did not come from the Region.¹⁴

The 2005 Optimal Nutrition Environment study (published in an academic journal in 2010) examined whether the Region's own agricultural lands could supply the required amount of fruits, vegetables, legumes, and whole grains needed to help the Region's population fill the gap between its current and ideal nutritional needs. It found that Waterloo Region could help its population meet the Canada's Food Guide dietary standards with food grown on its own land with a 10% (for the year 2026) and an additional 2% (2046) shift in the use of farmland from what is mostly cropland that is currently used as animal feedstock to growing fruits, vegetables, legumes, and whole grains. ¹⁵

Since 2005...

Growing public demand for local food since 2005 has led to the creation or expansion of several new businesses in Waterloo Region aimed at delivering local and other healthy foods to Waterloo Region residents. Foodlink's Buy Local! Buy Fresh! Map featured eight Community Shared Agriculture (CSA) farms in 2012, compared to four in 2005. New businesses like Bailey's Local Foods, which was established in 2008, created a new model for accessing local foods; the business allows customers to order individual food products online from dozens of local farms and food processors – including meats, cheeses, and a variety of processed foods within a 100-mile radius of Waterloo – and to pick them up from a central location weekly. 17

Oakridge Acres, a farm located in North Dumfries, opened up an on-farm Country Meat Store in 2008, and began selling products directly supplied by over 40 local producers or through the Ontario Natural Food Co-op (ONFC). The store won the Premier's Innovation Award for Agri-Food Innovation Excellence in 2008, ¹⁸ and continues to attract customers from far and wide with in-store cooking classes, outdoor farm events, and a wide variety of local foods. Grand River Organics started operating as a CSA pooling foods from several organic farms together in 2009. Now operating year round, it allows individuals to customize orders online. They work directly with farmers from Dufferin County to Port Maitland to pickup and deliver orders to a number of drop-off locations (5 in Cambridge, 8 in Waterloo, and 3 in Kitchener). ¹⁹

Perhaps the most promising update in the development of local food infrastructure in Waterloo Region has been the continued success of the Elmira Produce Auction Co-operative (EPAC). First established in 2004 by a group of Mennonite farmers in Waterloo Region, EPAC EPAC started with 65 producer members coming from a 75 km radius, and had grown to 100 members within a 120 km radius by 2010. It has expanded its original building space, and experienced a 600% increase in sales between 2004 and 2009. There has been a noticeable impact on the local agricultural community as a result of the auction's success. New crops are being grown by farmers for the auction, an increase in the number of greenhouses has been

noted, and small producers are finding great gains from their involvement with EPAC.²¹ Auction founder Nelson Wideman left the co-operative in 2010 to establish another wholesaler of local foods, Jay West²². Jay West is seeking to fill a niche for retailers who do not wish to spend the time bidding on foods at an auction, but who still want wholesale quantities of local produce: it operates year-round.²³

The success of EPAC has helped other organizations link consumers with local farmers. In 2006, the University of Waterloo Food Services established a "farm market" on its campus run by student volunteers (Food Services covers the cost of buying and transporting the food). The UW Farm Market boasts that its produce selection is 100% local, ²⁴ which is primarily due to its use of EPAC. This in indicative of how the auction can make it easier for other food retailers to provide local food. University employees and students have voiced their support for the market and find it to be an excellent way to eat healthy for less while supporting regional farmers by buying local produce that might otherwise prove difficult to find. ²⁵ Like many other farm market ventures, the University of Waterloo project helps farmers receive a fair price for their produce. It also has the added benefit of introducing young adults and newcomers to Waterloo Region to what can be grown here, allowing local producers to gain a foothold in an emerging consumer base.

Success has not been easy to achieve for all entrepreneurs in Waterloo Region's local food sector, however. Three entrepreneurs created 100-Mile Market in 2007 as a wholesale distributor of foods from over 160 Ontario producers aimed at restaurants, hotels, caterers, and public institutions like schools and hospitals.²⁶ The business attracted a large investment from the Waterloo-Wellington Community Futures Corporation and won the Premier's Agrifood Innovation Award in 2009,²⁷ but went bankrupt in 2011. The reasons for the failure of this business need to be examined closely in the analysis of the feasibility of future local food distribution enterprises in the region.

The Ontario government has moved strongly to support the development of local food infrastructure by setting up a funding program designed to help public institutions such as schools, universities, hospitals, long-term care facilities, and municipalities purchase more Ontario foods. The Broader Public Sector Investment Fund (BPS) was created in 2009 by the Ministry of Agriculture, Food, and Rural Affairs and is managed by the Greenbelt Fund.²⁸ The fund has disbursed millions of dollars into projects aimed at reducing the barriers to purchasing local foods for institutions, including two projects based in Waterloo Region.

The University of Waterloo was able to hire a Local Food Co-ordinator with BPS funds to conduct a baseline evaluation of the foods it offers through its food services department and

make a plan to increase that amount. The university found that it had to change several internal protocols just to track the food sources at its numerous food service locations, but was able to establish that it purchased 20% of its \$6.2 million budget from Ontario sources in 2010. The university believes it can reach a target of 31% by 2015.²⁹

My Sustainable Canada (MSC), a new non-profit organization based in Kitchener which was founded in 2007, has conducted numerous research studies with various partners and funders (including the BPS) on the barriers and opportunities to purchasing more local food in the broader public sector, particularly the health care sector. Through the Canadian Coalition for Green Healthcare (CCGH), MSC conducted a survey of hospitals and health care facilities across Ontario, asking them to describe their food service practices and their local food purchasing in particular.³⁰ One of the hospitals surveyed, St Mary's Hospital in Kitchener, led a "constellation" of healthcare facilities in conducting further research into the opportunities. The resulting research report described the food procurement and preparation practices of Ontario health care facilities in detail; it found that while senior administrators placed a high value on local food, budget restraints and other policies deter them from being able to purchase much local food. The report made several recommendations for how to address the barriers, including making local food a strategic priority in healthcare institutions as well as the Ministries of Health and Long-Term Care and Agriculture, Food, and Rural Affairs.³¹

Also through the CCGH, MSC conducted case studies with St Joseph's Health Care Centre in Guelph³² and the St Joseph's Group Purchasing Organization,³³ which purchases food for several hospitals in Ontario. In their case studies, CCGH helped the healthcare organizations conduct food origin audits and then set targets to increase their local food purchasing. Both organizations were able to increase their local food procurement during the case study, providing hope for other healthcare facilities to follow their lead. The final report in the series jointly authored by MSC and CCGH made a number of specific recommendations for all stakeholders in the provision of food in health care facilities in Ontario. It recommended that the Ontario government give flexibility to health care facilities in their efforts to increase Ontario foods, and that it increase programs to support facilities' "ease of access" to Ontario food suppliers. It recommended that food producers and distributors and health care facilities take full advantage of government ease of access programs to increase their connections with each other, and that health care facilities develop their own policies and procurement contract language that give preference to local food.³⁴

Another promising development for public institutions committing to buy more local food was the introduction of Local Food Act by the Ontario government in September 2012. The Act would, if implemented, empower the Minister of Agriculture, Food, and Rural Affairs to

set targets for the purchase of Ontario food in the broader public sector, including colleges, universities, schools, and hospitals.³⁵ As of this writing, the Act is still being debated in the Ontario legislature. Its introduction is a sign that the government is prepared to move in the direction of setting targets for public institutions to purchase more Ontario foods.

A number of studies published since 2005 merit mention for their analysis of the potential to rebuild local food infrastructure in Waterloo Region. A 2010 report by two University of Waterloo students titled *Analyzing the Potential for Local Food in Convenience Stores in Waterloo, Ontario* found that convenience stores have the necessary infrastructure to display and sell local food. However, it also found that the cost of local food would be higher than that available at farmers' markets or in larger grocery store chains. Also, space within convenience stores is limited, and the addition of extra shelving and refrigeration units for local products is not always possible. To make such investments worthwhile, the report argued that a shift in consumers' perception of the role of convenience stores would have to occur, because people do not typically look to convenience stores for their weekly grocery purchases.

Another study by University of Waterloo researchers suggested that the perception that local food is more expensive is inaccurate and acts as a barrier to the growth of the local food sector. The report, *Is Local More Expensive?*, looked at the prices of local and non-local foods in grocery stores, farmers' markets, natural food stores, and web-based enterprises in 2010 in Waterloo Region. It found no evidence that local is consistently more expensive than non-local.³⁷ There was even less statistical difference in price if the definition of local expanded from 100 miles to all of Ontario.³⁸

Research conducted in early 2012 by Opportunities Waterloo Region (OWR) identified a need for further research to quantify the current and potential contribution of the local food sector to the local economy. In interviews with key players in Waterloo Region's local food sector, OWR found mixed opinions about the true current demand for local food: some felt it was high, and others felt the demand was limited to a small niche.³⁹ On the supply side, most respondents agreed there was a need for more local processing and distribution, and offered varying ideas for how to achieve this.⁴⁰ Overall, respondents agreed on the need for better coordination among all levels of the food value chain to set clear goals and work together to achieve them: it recommended a dedicated paid convenor to oversee projects related to the economic development of the food system.⁴¹ The report recommended an update of the 2003 *Economic Impact Study*⁴² and a formal research study to capture real demand for local food, and recommended business feasibility studies for the creation of food processing and distribution hubs.⁴³

Another study published in 2012 analyzed the networks among economic developers and businesspeople in the local food sector in Waterloo Region. The study found much poorer connections among local food entrepreneurs and municipal economic development officials than in the clean energy and creative sectors, and found that economic development officials paid much less attention to these sectors than manufacturing or technology, despite their economic potential. The paper argued that a strong regional identity was crucial for the success of the local food sector, and that the current fragmented approach to growing the sector results in missed opportunities. It recommended strengthening the regional identity for local food and developing a regional hub for information sharing and co-ordination of food processing and distribution facilities.

A third important study published in 2012 looked at the potential for creating a sustainable food system in Southwestern Ontario. ⁴⁷ Citing a number of economic, environmental, and social problems with our current food system, the study claims that redirecting exports of Ontario foods for domestic consumption and replacing imports with local production could create over 140,000 jobs, and suggests specific areas of education and training required for those jobs. ⁴⁸ It documented a long list of existing initiatives that are contributing towards sustainable food production in Ontario, and proposed the formation of "Sustainable Food Clusters" that would be co-operatively-controlled enterprises bringing together producers, processors, distributers, and retailers of local, sustainably-produced food in a region. A "Sustainable Food Cluster Network" would manage trade amongst the clusters of foods that can only be produced in certain areas. As of this writing, the study authors are contacting municipalities in the study area to offer consulting services to aid in the creation of business structures and financing mechanisms, soil and climate maps for determining ideal locations for various crops, brand creation for local foods, and more.

Current Assessment:

Urban consumers who want to consume local food have many more options available to them than they did in 2005, thanks to the many farm stores, food buying clubs, wholesalers, and restaurants expanding their offerings of local food. The failure of one large wholesaler of local food (100-Mile Market), however, should give some pause to the optimism for growth of the local food sector. More research is needed to identify the specific opportunities, such as whether a business case can be made to establish a local food processing and distribution hub, and to quantify the current and potential contribution to the local economy that the food and agriculture makes.

Many people continue to feel there is unrealized potential in the local food economy, and point to the lack of a co-ordinated economic development strategy for local food as the

culprit. Better co-ordination is needed to identify the specific opportunities and take co-ordinated action to address barriers and make entrepreneurs aware of the opportunities.

Food Sovereignty

Work towards giving people greater knowledge about engagement in, and control over the food in our communities



The term Food Sovereignty has come into wide use since the adoption of the Declaration of Nyéléni at a world conference of over 500 delegates from 80 countries on Food Sovereignty in Mali in 2007. The Declaration states that food sovereignty is about the right of people – particularly those who produce, distribute, and eat food – to control their own food systems. The Waterloo Region Food System Roundtable adopted the concept of Food Sovereignty when it re-articulated its Food System Priorities in 2010. It broke the concept down into three themes: food democracy, food skills, and food education.

Food Democracy refers to the control that communities should have over all aspects of their food: in a truly democratic food system, people know where their food comes from and how it is produced and distributed, and have influence over those factors. **Food Skills** recognizes that people need the skills to grow, cook, and preserve food if they are to have control over their food. Lastly, **Food Education** is necessary so that people are aware of how the current food system works, its environmental, social, and economic impacts, and how we can work together to change it.⁵⁰

Though the term Food Sovereignty was not used in Public Health's 2005 food system assessment, the report did describe some aspects of the state of food sovereignty at the time. It described a food system which was concentrated in the hands of fewer and fewer players. While not as dramatic in the rest of Ontario, Waterloo Region was experiencing the trend towards fewer, bigger farms, with 9.2% fewer farms in operation in the Region in 2001 than 1996, and average farm size 6.1% bigger. Five corporations employed 55% of all people in the food processing and distribution sector in Waterloo Region. In the food retail sector, four food chains operated 71% of the 35 supermarkets in the Region. The conclusion drawn in the 2005 assessment was that the concentration of ownership in the food sector left the Region vulnerable to corporate relocation decisions and made it difficult for small- and medium-scale producers to get their products into supermarkets. In the language of food sovereignty, the

concentration of ownership in the food sector takes control of the food system from small- and medium-sized farmers and consumers.

The assessment identified initiatives that were already in place in the Region to improve people's food skills, such as the Community Nutrition Worker Program, Foodlink Waterloo Region's Local Harvest newsletters, and programs of the Rare Charitable research reserve, and suggested efforts to strengthen food knowledge and skills among consumers as one of seven proposed objectives for moving towards a healthy food system.⁵⁵

Since 2005...

Food Democracy

Food democracy requires a high degree of cooperation and engagement among individuals and groups from all sectors of the food system. The formation of the Waterloo Region Food System Roundtable in 2007 was an attempt at improving cooperation, and the more than 40 members who have served in the organization since then have represented key sectors and interests in the food system, from producers, restaurant owners, food distributors, and community members, to food security advocates, researchers, and nutritionists. The Roundtable's stated mission is "to connect our community to the work of building a healthy food system," and in addition to bringing together this group of representatives of the food sector five times a year, the Roundtable built a website aimed at enabling all people involved in food system projects in Waterloo Region to connect with others with similar interests. The website was generating over 40 daily visits on average in 2012, and over 450 people receive biweekly updates on various ongoing food projects in the region. ⁵⁶

The Roundtable has co-ordinated some direct efforts to solicit democratic input on the changes needed to improve the health of Waterloo Region's food system, most notably by hosting the Waterloo Region Food Summit in November 2009. Over 170 people attended the Summit in Kitchener, over one-third of whom had experienced food insecurity at some point in their lives. The Summit was billed as a way to learn about the problems facing the food system and to identify key strategies for fixing it. The Food Summit Declaration, which was signed by the participants as they left the event, committed the participants to working towards 13 different priorities. The Roundtable later incorporated the Declaration into its six Food System Priorities, and then hosted a follow-up Summit in April 2011 which updated the community on the status of each.⁵⁷

No one has published updated research on the concentration of ownership in Waterloo Region's food processing and retailing sectors since the 2003 *Growing Food & Economy* study.

We do know, however, that the number of farms continues to decrease, and the average farm size continues to increase, though at slower rates that the rest of the province. There were 1,398 farms headquartered in Waterloo Region in 2011, 3.2% fewer than 2001. Average farm size was 159 acres in 2011, 2.6% larger than 2001. ⁵⁸

A recent Wilfrid Laurier University study shed light on the strong correlation between the quality of people's diets and their sense of engagement and control over the food they can access. Through in-depth interviews with forty-four City of Waterloo residents coupled with objective dietary measurements of the same people, researcher Ellen Desjardins was able to conclude that the people who were most involved in neighbourhood food buying clubs, advocating to store managers to stock better foods, educating themselves about the food system, and preserving their own foods were more likely to eat more nutritious foods according to the Healthy Eating Index. ⁵⁹ This finding was corroborated by the NEWPATH study (details below in the Access to Healthy Food section), where researchers found that people who shopped more at CSAs were more likely to have lower BMI and higher diet quality. ⁶⁰

Food Skills

Region of Waterloo Public Health produced a report on the food skills of Waterloo Region Adults in 2010. The report found that while the majority (93.5%) of adults in the Region felt confident using a knife safely, fewer (78.8%) were confident in their ability to cook from scratch, and even fewer believed they had the ability to freeze (58.5%) or can (33.4%) seasonal foods. Women tended to rate their food skills higher than men, and people with lower incomes tended to rate their food skills higher than higher-income people. Evidently, there is room for improvement in the skills required to achieve true food sovereignty, and we now have a useful baseline of food skills in Waterloo Region against which to measure future interventions.

The Waterloo Region Peer Program has been improving the food skills of the community since 1988 through an ongoing partnership with local neighbourhood and community organizations. Peer Community Nutrition Workers (CNWs) focus on increasing the knowledge and skills of families and individuals within their community with respect to food, healthy eating and nutrition. In 2012 local organisations hired 15 Community Nutrition workers who ran 131 programs in priority neighbourhoods across Waterloo Region. They reached 2,635 community members. CNWs are community residents that share similar life experiences with members of their communities. CNW's are trained and certified by Region of Waterloo Public Health in the skills needed to plan and facilitate neighbourhood-based programs to build knowledge on nutrition education. 63

The Kitchener-based Working Centre has also recognized the importance of improving food skills in order to strengthen communities. Its most recent food-related initiative, the Hacienda Sarria Market Garden, exposes volunteers to sustainable local food production techniques and gives them valuable business skills. Individuals can simultaneously learn how local conditions influence food production and how to sell the final products to local businesses.⁶⁴ The Working Centre gives community members an opportunity to cooperate with one another and access a variety of programs and tools to develop skills in a number of areas. It improves Food Skills primarily through its St John's Kitchen, Community Shared Agriculture (CSA), and urban agriculture projects. At St John's Kitchen, staff and approximately 100 volunteers work together to prepare over 300 meals a day and run a marketplace and small greenhouse. 65 Participants gain valuable knowledge of how to prepare healthy dishes with food that may otherwise be wasted and learn about selling agricultural products. The Commons Market CSA run by the Working Centre gives participants a chance to gain skills in food distribution, as local products are received and packed on-site for CSA member pickup.⁶⁶ Similarly, community garden projects carried out by the Working Centre allow individuals to learn how to produce their own food in their own neighbourhood using sustainable land use practices, and expose them to the various health, nutritional, and financial benefits of urban agriculture.⁶⁷

Food Education

Food education gives people the opportunity to learn how current and alternative food systems work in order to better understand why change is important. Foodlink Waterloo Region has made significant contributions to Food Education since being incorporated in 2002. It published its eleventh edition of the Buy Local! Buy Fresh! Map in 2012, which identifies the foods that can be grown in Waterloo Region and where they can be purchased. In 2012, it released a smartphone app which enables users to search for the same Buy Local! Buy Fresh! Map information on their phone. Since 2004, Foodlink's "Local Harvest" newsletter has been providing information on what local products are in season, where to find them, and what dishes you can make with them. ⁶⁸ Foodlink added the "Local Dish" blog to its Food Education repertoire in 2010, adding an average of three new posts each month about farming experiences, restaurant reviews, and ways to cook with local foods. ⁶⁹

Other food education initiatives spring out of sharing the experience of growing one's own food. Little City Farm is an urban homestead that practices sustainable agriculture, prepares and preserves produce, strives to reduce its environmental impact, and encourages public engagement. It hosts over twenty workshops and tours annually on topics ranging from

canning and preserving to cheesemaking, seed saving, and rainwater collection.⁷⁰ Similarly, rare Charitable Research Reserve engages the community in a number of educational programs. Located where the Speed and Grand Rivers meet, rare's food education programs explore sustainable farming activities, local food operations, and how, when, and what to plant based on the time of year.⁷¹ The valuable exposure to Food Education and Food Skills programs people receive at rare allows them to better understand sustainable solutions and the factors that influence the current food system.

The Waterloo Region Food System Roundtable's Food Education efforts have focused more on alerting people to issues in the food system that may be addressed through policy changes. Through its website and monthly public events at the Kitchener Public Library, the Roundtable has addressed issues ranging from food labeling, genetically-modified foods, and food safety regulations, to gravel pits, migrant agricultural workers, and global food prices. Their KPL events have attracted an average of twenty people per month since starting in the Fall of 2009.

Current Assessment

Food sovereignty has seen some encouraging progress since 2005, as many more people and institutions are beginning to incorporate food systems thinking into the way they do things. The emergence of the Food System Roundtable in Waterloo Region has increased the level of discussion of food issues and many other organizations like Foodlink, rare, the Working Centre, and Little City Farm are training people in the skills to produce their own food. We now have a measurable baseline against which to measure future assessments of the food skills of Waterloo Region's population: there is certainly room for improvement. A 2003 study found very few supermarkets and food processors and distributors dominating the industry: further research is needed to determine if the concentration of ownership in the food industry has changed since then.

Food Policy

Advocate for "joined-up" food policies at local, provincial, and federal levels of government and monitor their implementation



The Waterloo Region Food System Roundtable selected food policy as one of its priorities with the context that there is "no comprehensive food strategy or policy... at any level of government [in Canada] which aims to ensure that healthy, environmentally-sustainable food is available to everyone." Government policy at all levels - locally, provincially, nationally, and internationally — shape how the food system functions. However, a lack of coordination among governments and ministries regarding how best to address food issues can produce unintended consequences. The absence or incompleteness of such a food policy in effect acts as a policy in itself. In its most practical form, a comprehensive national food policy would provide the foundation and guiding principles on which provinces and municipalities could build.

Waterloo Region's 2005 food system assessment did not discuss Food Policy directly, as very few people in governments or academia were thinking about developing comprehensive food policy at the time. The Region of Waterloo had developed a Regional Growth Management Strategy as early as 2003, however, which called for the development of a food system plan and for a growth model that aimed to prevent further encroachment of urban development onto farmlands. The Regional Growth Management Strategy's proposal to adopt a permanent countryside line illustrated the Region's recognition that growth must be controlled to protect our existing agricultural resources and production capacity. Over time, the countryside line strategy has been strengthened and serves as an example of how supportive policies can protect and even encourage growth in the local food system.

Since 2005...

The Region of Waterloo introduced the goal of developing an environmentally and economically sustainable regional food system in its new Regional Official Plan (ROP), which received Council approval in June 2009 and was then formally approved by the Province in December 2011.⁷⁶ The ROP is a comprehensive document containing all of the planning policies that guide how the Region will grow over the next twenty years. The inclusion of food system policies⁷⁷ into the ROP alongside growth and transportation strategies illustrates the Region's recognition of the significant role its food system will have in shaping its future. The ROP implemented the concept of the Countryside Line which had been first articulated in the 2003

Regional Growth Management Strategy. The intent of the Countryside Line is to protect the farmlands around the three cities from urban development for at least twenty years, and in some cases permanently. It should be noted, however, that some members of the development community have appealed the ROP, and the Ontario Municipal Board (OMB) will decide whether the Region can impose these kinds of limits. An OMB ruling in January 2013 accepted the developers' arguments and concluded that the Region underestimated the amount of new land needed to accommodate the Region's growth to the year 2031. This ruling would force the Region to open up approximately 1,053 hectares of new land for development. However, the Region is appealing this decision to the Ontario Divisional Court.

The food policies contained in the ROP are the result of collaboration between the Planning and Public Health departments of the Region of Waterloo, but are also in no small part the result of advocacy work done by the Waterloo Region Food System Roundtable. 80 The Roundtable was formed in 2006 to coordinate and engage key stakeholders in shaping policy and programs that improve the health of the food system and the public. It regards the influence it exerted on the food policies in the ROP as one of its greatest achievements. 81

Since the ROP's approval, the Region's seven area municipalities have made varying levels of progress in updating their own Official Plans, which now must come into compliance with ROP policies. All three cities in the Region – Kitchener, Waterloo, and Cambridge – circulated drafts of their new Official Plans to the public in late 2011, and all three contained policies on community gardens, temporary farmers' markets, or food access for the first time. The Roundtable compiled the relevant food policies from each municipality and provided comments to each on them. Be advocacy met with some success, as the City of Waterloo and City of Cambridge both chose to permit temporary farmers' markets and community gardens in all land use designations in their final Council-approved Plans. As of this writing, Kitchener and the region's four rural townships have yet to finalize their new Official Plans, but the Roundtable plans to provide input into the public consultations for each one.

While the Regional Official Plan and the area's Municipal Official Plans now contain promising policies on a number of food issues, a 2012 report cautioned that advocacy will be needed to ensure the policies achieve their intended aims. In early 2012, the Waterloo Region Healthy Communities Partnership hired a consultant to analyse the Official Plans of all seven of the Region's area municipalities for their support for healthy eating, physical activity, and mental health. The resulting report, *Supporting Advocacy on Municipal Plans*, suggested many areas where the Plans could go even further in their support for the development of a healthy food system. ⁸⁴ For example, it is unclear how the City of Waterloo's laudable objective of a

small or medium-sized food store within a 2km walk of each resident will be achieved in practice, or how policies stating all lands "may be zoned to permit" temporary farm markets will actually lead to more farm markets. The report's detailed analysis recommends citizen follow-up in many areas, including getting involved in processes determining zoning by-laws, informing the public of the new policies so that more food businesses can take advantage of the opportunities, and working with municipal staff to show them the potential of using the policies to build a healthier food system.⁸⁵

The Ontario Government has taken several steps in recent years to recognize the important connections between health and the food system. In its 2010 guidance document for public health units regarding how best to promote healthy eating, the Ministry of Health Promotion (since subsumed within the Ministry of Health and Long-Term Care) cites unhealthy diets as a cause of increasing incidence of chronic diseases, and suggests that public health units seek to influence policies and environmental supports rather than delivering messages to individuals or small groups. ⁸⁶ In particular, it suggests collaborating with municipalities and retailers to improve access to local food through things like community gardens and community shared agriculture programs. ⁸⁷

The Ontario Ministry of Education introduced the School Food and Beverage Policy/Program Memorandum 150 (PPM 150) in January 2010 to all publicly funded schools. Food and beverages offered for sale on school premises, for school purposes, must comply with the requirements set out in the policy. The requirements specify nutrition criteria that food and beverages must meet in order to be offered for sale in schools. Food and beverage products that contain few or no essential nutrients and/or contain high amounts of fat, sugar and/or sodium (e.g. candy, chocolate bars, and high fat, low fibre snack foods) are no longer permitted for sale. Though not without issues in its implementation, the Ministry of Education's plan can be interpreted as a significant policy achievement towards improving the food environment for students province-wide.

At the local level, the Waterloo Region Catholic District School Board (WCDSB) is a provincial leader in terms of school nutrition policy work and school based nutrition programs. The WCDSB, in partnership with Region of Waterloo Public Health, developed and adopted a Food and Nutrition Policy for Secondary Schools in 2007⁸⁹ and for Elementary Schools in 2009⁹⁰. In 2011, the WCDSB nutrition standards were revised to meet and exceed the PPM 150 nutrition standards. Both of the WCDSB nutrition policies go further and apply to all food and beverages that are not only sold but also offered in school (e.g. school celebrations, school rewards, school meetings, healthy classroom snacks, and classroom and staff nutrition education). Workshops led by Public Health in all WCDSB schools have engaged the entire

school community in conversations about how to implement the policies and promote healthy eating. Region of Waterloo Public Health expects to release an evaluation of the implementation of these policies in the WCDSB sometime in 2013.

As part of its health promotion efforts with workplaces, Region of Waterloo Public Health produced a guide to encouraging healthy eating in workplaces in 2011. 1 The Ontario Society of Nutrition Professionals in Public Health built on this work in 2012 when it released a report calling for action to take a comprehensive approach to promoting healthy eating in workplaces. It calls for a reduction in the typical less nutritious foods and beverages provided in workplaces in cafeterias, during meetings, events and celebrations, or left in common work areas. Many of these foods are described by *Canada's Food Guide* as "Foods to Limit" because they contain too much fat, sugar, or salt to contribute to good health. These foods tend to be highly accessible and prominently displayed which promotes consumption. It calls for workplace policies to limit access to these foods and beverages in addition to strategies to increase individual knowledge and food skills. 192

A new civil society organization emerged in 2008 to network among the increasing number of organizations across the province interested in food issues and advocate for policies at the provincial level. Sustain Ontario is working to transform food and agriculture at a system-wide level to promote healthy food and local sustainable farming. They have advocated for provincial endorsement of their Good Food Policies, which call for a provincial government policy that unites the various provincial ministries to pursue a coordinated food strategy. If adopted, the Good Food Policies would encourage the development and sustainability of local food systems throughout Ontario. Over the summer of 2012, Sustain gave significant input into the Ontario government's proposed Local Food Act, which the government introduced later that Fall (see more on the Local Food Act in the Local Food Infrastructure section).

Food Secure Canada is a non-profit organization established in 2005 that seeks to develop a comprehensive food strategy for Canada as a whole. Based on the principles of eliminating hunger, providing healthy and safe food, and developing a sustainable food system, Food Secure Canada published a proposed national food policy called *Resetting the Table* in 2011 and engaged in an advocacy campaign to convince the federal government to adopt it. ⁹⁶ The proposed policy builds on concerns raised by hundreds of people who participated in their national consultations to present a complete policy framework that can guide the nation towards food sovereignty. It tackles the socioeconomic and environmental problems of the contemporary food system and provides solutions in the form of policies where action plans are absent or incomplete. These proposed policies range from guaranteeing public participation in

and the viability of regional food systems to financing healthy school food and strong poverty elimination programs.⁹⁷

Food Secure Canada is not the only agent for change at the national level. The Canadian Federation of Agriculture (CFA) conducted its own consultations among its members and in 2011 published *Towards a National Food Strategy: A Framework for Securing the Future of Food,* which addresses "everything from promoting the Canadian brand and healthy lifestyles to sustaining economic growth and ecosystems." ⁹⁸ The Canadian Agri-Food Policy Institute published a paper in 2011 called *Canada's Agri-Food Destination,* which calls for Canada to develop a national food strategy. ⁹⁹ The Conference Board of Canada took up that challenge by creating the Centre for Food in Canada, hosting a Canadian Food Summit in February 2012, and drafting its own national food strategy with wide public input. ¹⁰⁰ The consultation has been criticized by some for emphasizing the interests of the largest players in the food industry over issues of local sustainability, health, and poverty, however. ¹⁰¹

Canada's need for a comprehensive national food policy has recently received international recognition. Olivier De Schutter, the UN Special Rapporteur on Food, visited Canada in May 2012 and expressed concern that the lack of a national food strategy was illustrative of a "growing gap between Canada's international commitments and their implementation domestically." ¹⁰² De Schutter noted that "Canada has no national food policy or strategy," and recommended that Canada follow the lead of many of the community-based initiatives noted above to develop a comprehensive policy as soon as possible. ¹⁰³

Current Assessment

Significant progress has been made in the area of Food Policy in Waterloo Region since 2005. At the municipal level, the Regional government has written food policies into its Official Plan for the first time ever, and its seven area municipalities have begun to do the same, with varying levels of depth and scope. The Waterloo Region Food System Roundtable, which emerged in 2007, can take credit for advocating successfully for many of these municipal policies, and seems aware of the need to follow up with all the municipalities to ensure that the policies have their desired effect. People in Waterloo Region are connected with efforts to develop comprehensive food policies at both the provincial and national level, too. Both Sustain Ontario and Food Secure Canada have emerged since 2005 to advocate at their respective levels of government, and have gained support from organizations across the province and country for their proposals. Actual government policies reflecting their proposals have yet to materialize at either level, but seem poised to develop in the short- to mediumterm future.

Urban Agriculture

Encourage and support the expansion of food grown or raised in urban areas



Urban agriculture in its broadest definition is the growing of food in cities. It includes backyard and rooftop gardens, community gardens, edible landscaping (e.g. fruit trees and edible flowers), and the raising of animals, chickens, and bees. The Waterloo Region Food System Roundtable identifies Urban Agriculture as a priority, arguing that new programs and policies could help realize the potential to grow much more food in our cities. It also advocates for better education and supports for the harvesting of "wild" foods, i.e. foods that grow naturally in local areas without the tending that agriculture requires. ¹⁰⁴

Waterloo Region's 2005 food system assessment was able to draw on the work of a 2005 report by Public Health on the state of Urban Agriculture at the time. It documented the existence of 31 community gardens in the Region for a total of 679 plots, and 6 green roofs or rooftop gardens. It also reported on a population survey which found that 70% of urban residents felt it was important to be able to grow their own vegetables, and that 38% of residents did so, predominantly in their backyards. Public Health's Urban Agriculture Report had documented the social, environmental, and economic benefits of urban agriculture, and advocated for its promotion as a way to deal with some of the consequences of population growth such as increased urban heat islands, loss of contact with nature, natural habitat loss, and loss of productive farmland. ¹⁰⁶

Since 2005...

Since 2005, the number of community gardens in Waterloo Region has increased 70%, to 53, and the number of plots has increased 77%, to almost 1,200. Garden organizers attest to waiting lists for most community gardens in the Region, which was a source of frustration for many prospective gardeners in 2012. There are several explanations for this increased interest in community gardening. Supportive policies and funds from the City of Kitchener helped increase the number of gardens in Kitchener. Also, the TD Friends of the Environment Foundation provided the resources for many new gardens to get established. Also of significance was the establishment of the Community Garden Council of Waterloo Region, which was established in 2005 when the Community Garden Network, decided that community gardens in the region needed more infrastructural support and advocacy.

In 2008, the Council formed a partnership with Region of Waterloo Public Health and Opportunities Waterloo Region called the Diggable Communities Collaborative (DCC). With funding from the KW Community Foundation, the DCC created promotional materials for gardens and a guide for promoting community gardens called *Sowing Seeds of Interest*. With funds from the Ontario Trillium Foundation, the DCC was able to hire a garden mobilizer to conduct a needs assessment of the volunteer garden co-ordinators, promote and support the start up of new gardens, and advocate for municipal policies supportive of community gardens. ¹⁰⁹

The DCC has also made efforts to attract ethnic communities to participate in community gardens. With funding support from the Council of Agencies Serving South Asians (CASSA), it hired a co-ordinator in 2011 to work with these populations to address the barriers that may prevent their participation. This work led to a guide for creating gardens that are inclusive of all cultural communities (yet to be published), promotion of gardens to multicultural agencies, and workshops on the benefits of community gardens to specific cultural communities. As of the time of the writing of this report, this work resulted in three new multicultural gardens in the region.

After being challenged by a gardener who was not able to garden because of mobility barriers, DCC started a project to create accessible community gardens. Several university students worked with Public Health staff to write a guide to creating barrier-free community gardens. A University of Waterloo professor hosted a design charette with urban planning students for four specific gardens, resulting in detailed designs for the construction of new physically accessible gardens. Further funding from the Trillium Foundation and other local businesses enabled two of these accessible gardens to be built in 2012.

One of the successful outcomes of DCC's advocacy efforts has been the inclusion of new policies in municipal official plans. Thanks to advocacy from the Community Garden Council, the Food System Roundtable, and others, Regional Council approved new policies in the Regional Official Plan (ROP) in 2009 that commit the Region to support community gardens wherever feasible by granting access to Regional lands, and by providing rain barrels, composting bins, compost, wood mulch or other forms of in-kind support. The ROP also requires the Region's seven area municipalities to establish policies in their own Official Plans to encourage community and rooftop gardens. Both the City of Waterloo and the City of Cambridge approved final versions of their new Official Plans in 2012: Waterloo's encourages gardens in all land use areas and commits the City to making City lands available for gardens where appropriate, and Cambridge's also explicitly permits community gardens in all land

use designations.¹¹⁴ As of the writing of this report, the City of Kitchener had not yet finalized its Official Plan, but its draft Plan would permit community gardens in all residential areas.¹¹⁵

Another new area of development for community gardens since 2005 has been the increase in gardens at workplaces and schools in the region. Both Toyota and Conestoga Rovers now have workplace gardens where employees are encouraged to tend to gardens on their breaks. Two high schools – Eastwood Collegiate and KCI – as well as École Harmonie, a French-language elementary school, have school gardens which become live classrooms for students. All three post-secondary schools in the region – the University of Waterloo, Wilfrid Laurier University, and Conestoga College – have also put aside school lands for community garden plots open to their students.

Barriers still exist for community gardeners in Waterloo Region, however. Many gardens have to struggle to get access to water, compost, and woodchips. It is also difficult for gardens to establish long-term land tenure in some locations, and some gardens have had to close in Waterloo Region because the landowners decided to use the lands for other purposes. A report on policies in local Official Plans recommended that local municipalities consider Montreal's example of providing for a permanent agricultural zone in the city, as well as explicitly permitting and supporting community gardens in city-owned parks and greenspaces. ¹¹⁶

A significant amount of academic research has been conducted on community gardens in Waterloo Region since 2005. Cheryl Dow's 2006 Master's thesis interviewed gardeners, garden co-ordinators, and municipal staff to identify the benefits and barriers to operating a community garden, and made several recommendations for how community gardens should be supported by neighbourhood-level co-ordinators and policy-makers. Her thesis greatly aided in the formation of the DCC. An undergraduate term paper by University of Waterloo students in 2011 documented the history of the Diggable Communities Collaborative and described its successful approach to partnership as a model for other communities to follow. Muhammed Shabbir's 2010 Master's thesis conducted case studies of six community gardens in the Region which were selected for their interest in developing physically accessible or culturally inclusive gardens: it made detailed recommendations for the types of physical alterations required to establish accessible gardens, and how to make gardens inclusive for ethnic communities. Megan Herod's 2012 Master's thesis looked at two Waterloo Region gardens to demonstrate the crime prevention benefits of community gardens.

Region of Waterloo Public Health conducted an evaluation of community gardens by interviewing over eighty Waterloo Region gardeners in 2012. ¹²¹ The gardeners they

interviewed were young and old, new Canadians and Canadian-born, and with a variety of skills and physical or mental challenges. The study found that the community gardening experience had three main benefits: *inclusion* of people with diverse backgrounds into the public sphere; opportunities for *learning* about food-producing plants and where food comes from; and *health benefits* such as stress reduction, better diets, and physical exercise. The study concluded that there is a tremendous appetite for community gardens in the region, requiring support and resources that are small compared to the potential benefits they bring to any urban environment.

The state of green roofs and rooftop gardens has not changed much in Waterloo Region since 2005. Both Toronto¹²² and Chicago¹²³ are examples of cities that are investing in green roof and food-producing roof projects in their cores. There is also growing interest in exploring the potential for partial or full community greenhouses on Toronto rooftops.¹²⁴ Although not used for food production, Grand River Hospital's four rooftop gardens serve as local examples of how natural landscapes can be incorporated into the urban realm, but its green roof was already in place in 2005.¹²⁵ There are special design challenges that must be overcome when retrofitting older buildings or building new ones with green roofs and rooftop gardens. Designers must consider the additional weight from water, soil, etc., and whether the roof is accessible to those with physical challenges.¹²⁶

One area of urban agriculture that has seen some new developments since 2005 is the area of urban chicken raising. Many advocates of sustainable food systems see the raising of urban hens (and in some cases even rabbits or goats) as a desirable practice which could help increase the food supply and connect urban residents more closely to the food system. In 2008, a group of residents in the City of Waterloo made media headlines by approaching City Council to consider explicitly permitting raising hens in the City. The issue was debated publicly for several months, with advocates citing the above benefits and opponents voicing fears of noise, smell, and disease outbreaks. In April 2009, a City staff report recommended that Council permit urban hen raising with certain regulations including limits on the number per property, a prohibition of roosters, maintaining a clean coop, and so on. Council turned down the recommendation, but they did agree to grandfather all existing hen-owners and revisit the issue in two years. Council revisited the question in 2011, but did not change its position.¹²⁷ So the situation today is that it is illegal to raise hens in both Kitchener and Waterloo, with some exceptions. The City of Cambridge does not explicitly permit hen-raising, but indirectly does by permitting agricultural uses in all land use designations.¹²⁸

An undergraduate paper produced by University of Waterloo students in 2011 analyzed the potential of three types of urban livestock raising for the city of Waterloo: hens, bees, and

goats. It described the benefits and potential that the raising of each animal can have, as well as the challenges they pose such as sharing animal husbandry skills and addressing concerns about noise, smell, and food safety. Using examples of policies in other cities like Toronto, Vancouver, and Seattle, it provided specific recommendations of ways that local municipal policies could be adapted to encourage urban livestock in Waterloo. ¹²⁹

Another student paper in 2010 explored the idea of encouraging urban foraging (or Wild Foods, as the Roundtable describes it in its Food System Priorities)¹³⁰ on a formal level at the University of Waterloo and the surrounding community. It talked about the potential that the harvesting of wild foods has for addressing food security, and created a GIS map of 36 identified wild edibles on the university campus, including apples, catnip, buckthorn, lab's quarters, and wild garlic. While the paper cautioned about the need for education about which plants are safe to eat and how to harvest them sustainably, it demonstrated a potential for harvesting much more food from urban areas with the right kinds of supports and education. ¹³¹

Current Assessment

The growth in community gardens in Waterloo region in the last seven years is encouraging, and the recently-adopted municipal policies should encourage more growth in the future. Several barriers still exist for community gardens, however, including access to water and compost, lack of long term tenure for some community garden sites. These highlight the need for work to ensure that the existing policies are implemented and that adequate resources be made available for that purpose.

However, other urban agriculture initiatives have not had the same experience and have either come across legal and political barriers or have yet to gain the popularity and support that community gardens enjoy. Public opinion remains mixed regarding urban hen raising and urban beekeeping, and to date the raising of urban livestock is prohibited in all urban municipalities except Cambridge. Some initial research has been done in the area of encouraging consumption of wild foods, but much more work is needed to make this a common practice in Waterloo Region.

Farm Viability

Pursue policies and other initiatives which return a larger portion of the food dollar to farmers



The Waterloo Food System Roundtable defines improved farm viability as policies or initiatives which return a larger portion of every dollar spent on food to producers so that they can sustain their business and enjoy an adequate income. ¹³² Included in the Roundtable's explanation of this priority is the concept of encouraging farmers to produce food in an environmentally sustainable fashion, and paying farmers for the role they play in providing environmental goods and services for the benefit of all society like carbon-sequestering soils, forests, and wetlands. ¹³³

Waterloo Region's 2005 food system assessment described a prosperous farm sector compared to the rest of the province, with the region's farms ranked second in net revenue per farm, second only to Niagara region. ¹³⁴ Waterloo region's farms, at an average of 156 acres, were smaller than the Ontario average of 226 acres, largely due to the predominance of livestock farms in the region compared to field crop farms. ¹³⁵ The farm sector was supporting four jobs in the regional economy for every job in farming, and the entire agri-food economy was employing 11.3% of the region's workforce. ¹³⁶ Despite all these positive overall measures, however, a study of the health of Waterloo Region rural residents in 2003 found evidence of great stress among farmers resulting from small farms' deteriorating ability to compete with larger ones and commodities from other countries; many farmers were finding it necessary to depend on off-farm income to make ends meet. ¹³⁷

Already in 2005, however, the local food economy was gaining wider support and recognition. A growing number of farmers had begun to grow more foods for local markets and sell directly to consumers, thus earning higher prices for the products: some were earning up to 50% of their income this way. Farmers' markets were a strong part of the urban and rural culture in the region, with approximately 75% of the population shopping at farmers' markets between June and October, and a consumer survey found very strong support for buying local food, with supporters citing preserving local farmland and supporting local farmers as two of their top reasons for doing so. 140

Since 2005...

No comprehensive study on the state of Waterloo region's agri-food economy has been conducted since the 2003 *Growing Food & Economy* report. As discussed in the Local Food Infrastructure section of this report, a recent economic development study of the region's local food system recommended an updated review, the 2011 agricultural census gives us some indication of broad trends. Average gross receipts for Waterloo region farmers was \$340,461 per farm in 2011, up 30% from 2001, and average net farm income was \$59,683, up 52% from 2001. As mentioned in the Food Sovereignty section above, the number of farms in Waterloo Region continues to decrease, and the average farm size continues to increase, though at slower rates that the rest of the province: there were 3.2% fewer farms in 2011 than ten years earlier, and farm sizes were 2.6% larger. The average farm operator in Waterloo Region was 48.4 years old in 2011, compared to 46.1 in 2001; this was younger than Ontario's average, which was 54.5 and 50.7, respectively, but evidently Waterloo Region's farm operators are getting older, though not quite as quickly as the rest of the province. Further study is required to explore the reasons behind these farming trends in Waterloo region, and to document sub-trends like changes in the number of farms selling to local markets.

A significant barrier for new farmers is the high price of farmland. The prices of Waterloo region farmlands have increased, though the increases are not quite as high as in other neighbouring Ontario regions. In the first six months of 2012, farmland prices in Ontario jumped 16.3%, the highest six-month increase since 1996, and almost twice the Canadian average increase, which was 8.6% for the same six-month period. A separate farm real estate study found that farm prices in Waterloo Region went from a range of \$9,000 to \$9,500 per acre in 2010 to \$11,000 to \$15,000 in 2012: in South Huron and mid-Perth counties, land went from \$7,000-\$11,000 per acre to \$16,000 to \$18,000 in the same time period. Real estate analysts say that the higher prices are due to a combination of a shrinking supply of land (as more farmland is put into urban development) and increased demand from farmers who wish to expand their operations to take advantage of rising commodity prices. High farmland prices can benefit existing farmers, because they can borrow more money against a higher-value property and make more money if they sell the land. However, higher farmland prices push up property taxes and make it much more difficult for new farmers to get established.

The phenomenon of high farmland prices is just one barrier for new farmers, though it is a significant one: others include the high cost of entering supply-managed sectors, the perception that farmers earn low incomes, and low interest in farming as a career for young people. These factors all play a role in the rising average age of farmers. Programs encouraging

new farmers will become increasingly important in the near future. Two new programs in Ontario have emerged since 2005 which seek to train prospective farmers in the skills and knowledge required to enter the sector: CRAFT and FarmStart. The Collaborative Regional Alliance for Farmer Training (CRAFT) is a network of farms in Ontario that offers internships for individuals who wish to learn how to start their own sustainable agriculture enterprise. Participants get a chance to meet established farmers and learn about farming methods and the business side of farming. FarmStart started in Guelph in 2005, and offers programs to provide practical tools, financial and physical resources, skills-building, and assistance in building networks of peers and customers. Farmstart primarily works with New Canadians, young people from non-farm backgrounds, and second-career farmers. ¹⁵¹

A significant step forward for the viability of Waterloo region farms has been the adoption of new policies into the Regional Official Plan (ROP) in 2009. The ROP enhances the farmland protection by creating new land designations called Protected Countryside for lands which have large concentrations of prime agricultural land and environmental features such as woodlands and wetlands and permanently protects them from urban development. But the ROP also recognizes that "simply protecting farmland will not guarantee that it will be actively and viably farmed," and "contains policies that support on-farm diversification strategies as a means of supplementing farm income." These policies include requiring area municipalities to permit secondary uses on farm properties such as roadside produce stands, bed and breakfasts, agri-tourism activities, and uses that provide value-added agricultural products from the farm operation of the property. It should be noted that the entire plan is under appeal by numerous parties, and as of this writing is awaiting a decision by the Ontario Municipal Board.

One initiative that has benefitted from the new policies in the ROP is the Elmira Produce Auction Co-operative (EPAC), which was described above in the Local Food Infrastructure section and highlights efforts to improve farm viability in Waterloo Region. When EPAC was first proposed in 2005, a strict interpretation of Woolwich Township's agriculture by-law would not have permitted its operation at its proposed location. However, Township planners worked with the EPAC founders to pass a temporary by-law change, and now produce auctions are specifically named as an example of Agriculture-Related Uses permitted on farmlands in the ROP. EPAC's success in growing the market for local fruits and vegetables has improved farm incomes for hundreds of Mennonite farm families. Its co-operative model gives farmers control over the business, while putting a high percentage of the sales directly into farmers' pockets. 156

Registered farm businesses must join one of three accredited farm organizations in Ontario: the Ontario Federation of Agriculture, the National Farmers' Union (NFU), or the

Christian Farmers' Federation of Ontario (CFO). All three organizations are active voices in the public policy debates on farm issues in Ontario, though the Waterloo Federation of Agriculture (WFA) represents 95% of registered farms in Waterloo Region. Farmers in Waterloo Region who are interested in selling to local markets have also benefitted from the voice of Foodlink Waterloo Region, which has advocated for local farmers on issues ranging from zoning regulations for on-farm food processing to by-laws regulating farm signs on rural roads. All of these farm organizations have been involved in advocacy on issues related to Farm Viability since 2005, including discussions of farm input costs like minimum wages, the role of foreign agricultural workers, the loss of small abattoirs, and aggregate extraction on farmland.

In the area of encouraging more sustainable practices among farmers, the Perth-Waterloo-Wellington chapter of Canadian Organic Growers (COG-PWW) has produced numerous studies analyzing the organic farming sector and workshops and resources aimed at supporting farmers interested in using more sustainable farming methods. A COG-PWW analysis of the 2006 Census of Agriculture found the northwest area of Waterloo Region to have one of the highest densities areas of organic farms in the province, with between 4.2% and 9.5% of all farms being certified or transitional organic. 159 Another of their research reports, written by Theresa Schumilas in 2010, analyzed "producer-controlled distribution systems" as a way for local and organic farmers to attain financial viability. It looked at three models in which farmers can capture more of the food dollar from consumers - CSAs, online farmers' markets, and multi-stakeholder co-ops - and found that bigger operations did not necessarily mean better returns for farmers using these distribution methods. ¹⁶⁰ Another COG-PWW report from 2011 interviewed small numbers of organic producers, distributors, retailers, and consumers, and found opportunities for improving communications among them: retailers were often unaware of the availability of local organic produce, while some farmers were struggling to find people willing to pay fair prices for their products. The study recommended strengthening the relationships among growers and eaters as a way to improve farmer revenues, and finding ways to educate consumers about the difference between local and organic.¹⁶¹ Subsequent COG-PWW publications have emphasized the importance of seeking out local AND organic foods. 162

The provincial government's Environmental Farm Plan (EFP) program encourages farmers to identify environmental risks associated with their operations and develop action plans that will mitigate the risks. The program recognizes that farmers are well-positioned to implement environmentally sustainable practices, but often cannot do so without financial assistance. Between 2005 and 2008, 429 EFPs were completed in Waterloo Region. 164

Similarly, the Region of Waterloo funds the Rural Water Quality Program (RWQP) to provide financial incentives for farmers to change farming methods that threaten water quality. Over \$9.2 million has been released since the program's establishment in 1998 to farmers and landowners to carry out over 2800 projects that range from tree planting and reintroducing buffer vegetation along rivers, to the upgrade of old wells and manure storage facilities to prevent runoff. Since its inception, the program has expanded into the nearby counties of Wellington and Brant, and now receives funding support from various municipalities, organizations, and the provincial and federal governments. The success of both the EFP and RWQP demonstrates the potential for improving the environmental sustainability of farming practices through financial incentives.

A 2010 University of Waterloo study compared the RWQP to another program that pays farmers for environmental services – the Alternative Land Use Services (ALUS) program, based in Norfolk County. ALUS provides incentives to farmers to not farm on more marginally productive lands so that the lands can help with pollination, pollution mitigation, air and water purification, among other things. The study compared ALUS and RWQP in terms of their funding sources, types of projects supported, screening processes for applicants, and more; it found that they both encourage environmentally sustainable practices in different ways. It recommended better evaluation of the environmental benefits that farmers provide, and recommended the expansion of both programs to other locations and the enactment of policies to pay farmers for other environmental services. However, it noted that the programs do not adequately address low farmer incomes, and that to do so would require a wholesale revisioning of how farmers are compensated in our society. Issue to another program that to do so would require a wholesale revisioning of how farmers are compensated in our society.

Current Assessment

Waterloo Region's conventional farm sector is relatively prosperous compared to the rest of Ontario: its farm incomes are near the top of both gross and net average farm income for the province. Like the rest of the province, Waterloo Region is experiencing the trend towards fewer, bigger farms, as well as the trend toward higher farmland prices, though to a lesser degree than the rest of the province in both cases. Further research is needed to explain the reasons for Waterloo Region's higher incomes, and to analyze more specific trends in Waterloo region's farm operations, such as how many earn a higher percentage of their incomes from local markets, which farm sectors are doing better than others, etc. Recent changes to the Region's Official Plan (ROP) could provide more long-term protection for farmland from urban development and give farmers more options for earning income on their farms.

Barriers to entry into farming continue to be an issue, but two small programs, FarmStart and CRAFT, have begun to train prospective farmers in the skills needed to enter the sector. Some programs exist to give incentives to farmers to use more sustainable production methods, including the province's Environmental Farm Plan program and the Region's Rural Water Quality Management program: these could be good models on which to expand to encourage more farmers to adopt more sustainable methods.

Access To Healthy Food

Advocate for policies and other initiatives which ensure everyone has access to enough nutritious foods



The ability to access healthy food is influenced by many factors. The Waterloo Region Food System Roundtable breaks down this priority into four areas: adequate incomes, emergency food, walkable food, and culturally appropriate foods. In its description of adequate incomes for food, the Roundtable calls for policies need to be in place to ensure that everyone has a basic sufficient income to buy nutritious food without threatening the ability of farmers to make a viable income. These policies could include increases in benefit rates for income support programs like Ontario Works (OW) and Ontario Disability Support Program (ODSP), or policies that subsidize housing or other basic necessities to make nutritious diets universally affordable. While the Roundtable looks forward to the day when emergency food assistance is no longer necessary, it also advocates for continued work on improving the delivery of emergency food assistance.

The Roundtable also advocates for the concept of **walkable food**: it argues that having convenient access to food within walking distance of people's homes, schools, or workplaces will make it more likely for them to eat better diets. Similarly, if the food that people can afford or walk to does not meet their religious, traditional, or special health needs, their food access is diminished: for this reason, the Roundtable emphasizes the aspect of **culturally appropriate food** as part of this priority.

Waterloo Region's 2005 food assessment described the state of food access in all the above aspects except cultural appropriateness. It cited food insecurity statistics from 2001, which revealed that 42.4% of low-income households in Waterloo Region experienced some degree of food insecurity (defined as not having enough to eat, worrying about having enough to eat or not eating the desired quantity of food due to lack of money).¹⁷⁰ It also reported that

the Food Bank of Waterloo Region had distributed food hampers or meals to over 25,000 people through its member agencies in 2004, which was an 11% increase over 2002.¹⁷¹ With regard to walkability, the 2005 food assessment cited a Region of Waterloo Public Health report that found that 47% of the Region's urban population did not live within reasonable (450m) walking distance of a grocery store or convenience store.¹⁷²

The 2005 food system assessment suggested that "increasing the availability of healthy food so that healthy choices are easier to make" be one of the objectives pursued by people wishing to work towards a healthy food system in Waterloo Region. It suggested looking at programs such as mobile farmers' markets and zoning and financial incentives to attract food retailers to targeted locations as ways to ensure healthy food is available in every neighbourhood. It also suggested increasing urban agriculture programs and restricting unhealthy foods in identified neighbourhoods as ways of achieving its healthy food access objective.¹⁷³

Since 2005...

Recent research is beginning to add an important new dimension to the concept of Access to Healthy Food. The rationale behind the Roundtable's focus on adequate incomes and walkable food is that poor quality diets are associated with a lack of walkable access to, or inability to afford, healthy foods. Certainly, low availability of healthy foods is likely to result in lower diet quality. Similarly, if individuals do not have the means to purchase healthy food, it is unlikely that they will consume healthy diets. However, recent work has shown that relative accessibility of non-nutritious foods (termed 'food swamps') also negatively affects diet quality. In addition, it is not enough to have access to affordable healthy food: healthy food needs to be cheaper than non-nutritious foods in order to improve diet quality. So we may need to go beyond making healthy food accessible and affordable: it may be just as important to limit access to non-nutritious foods and to and make them more expensive than nutritious foods to promote improved diet quality.

Adequate Incomes

The Ontario government has made some significant changes affecting people on low incomes since 2005. The minimum wage increased from \$7.75 to \$10.25/hour between 2006 and 2010,¹⁷⁶ and, since 2009, low income families with children can receive up to \$1,100 per year per child with the Ontario Child Benefit, whether or not they are employed.¹⁷⁷ However, people who rely on Ontario Works or the Ontario Disability Support Program earn less today, in real terms, than people who depended on those programs in 2005, even when accounting for the effect of the Ontario Child Benefit for families with children.¹⁷⁸

Many people living on low incomes cannot afford to eat a healthy diet in Waterloo Region. According to the 2012 Nutritious Food Basket (NFB) survey for Waterloo Region, it costs \$177 per week to feed a family of four, and \$59/week to feed a single 35-year-old male. Extrapolating from the NFB data, a single person on Ontario Works does not earn enough to cover the cost of rent and nutritious food, let alone any other expenses. A family of four on Ontario Works would have only \$237 per month left over for all expenses after paying for rent and the cost of nutritious food, while the same family depending on one minimum wage earner would have \$844 left over. 180

Another measure of affordability of food is the Canadian Community Health Survey's food insecurity survey. According to this source, 8.6% of Waterloo Region residents experienced moderate or severe food insecurity in 2009-2010, meaning either they had to compromise the quantity or quality of food consumed for income-related reasons (moderate), or they had to reduce food intake and disrupt eating patterns (severe). ¹⁸¹

A number of organizations in Waterloo Region advocate for adequate incomes. Awareness of Low Income Voices (Aliv(e)) is a group supported by Opportunities Waterloo Region that draws attention to the extent of poverty in the Region, disproving myths, and informing the public of policy changes that have negatively impacted low income families. Poverty Makes Us Sick (PMUS) is an anti-poverty advocacy group based out of Kitchener-Waterloo that focuses on improving Ontario Works and ODSP assistance, and emphasizes the need for enough money for healthy food to be provided by these programs. Poverty Free Waterloo Region calls upon the provincial and regional governments to increase funding for social assistance programs and reinvest in the Provincial Poverty Reduction Strategy (2009 Poverty Reduction Act).

At the provincial and national levels, there are a number of advocacy, coordination, and monitoring groups trying to address poverty and adequate incomes. The Ontario Coalition Against Poverty (OCAP) gives the poor, unemployed, or homeless a means of voicing grievances against government policies ranging from unemployment to increased assistance for food purchasing. The Income Security Advocacy Centre (ISAC) educates individuals on their legal rights to ensure they receive the financial assistance they deserve and advocates for the adoption of government policies that strive for a decent standard of living for all Ontarians. Finally, the National Council of Welfare (NCW) was a federal monitoring program that provided objective information regarding the status and adequacy of welfare programs and research and advocacy on the broader economic impacts of poverty. Federal government funding of the NCW was eliminated in the 2012 Federal Budget, and the organization has been disbanded.

Emergency Food

The number of people seeking emergency food assistance in Waterloo Region remains high. Across Ontario, the number of people accessing food banks spiked during the recession which started in 2008, and has not declined since. In March 2012, 412,998 people accessed food banks in Ontario, which was a 31.4% increase over the pre-recession month of March 2008. ¹⁸⁹ 38.7% of food bank beneficiaries were children. In Waterloo Region, 77,415 food hampers were distributed and 451, 411 community meals were served in 2011, serving a total of 36, 458 different people. This represented an 18% increase compared to 2008.

Further, there is evidence that only one in four people who experience food insecurity actually access emergency food services. Valerie Tarasuk of the University of Toronto has studied this issue since 1994, and finds that many people choose not to use emergency food services because of the perceived stigma associated with their use. In addition, some people recognize that the food they can access through emergency food services is often inadequate nutritionally or culturally inappropriate. A Canadian Journal of Public Health article describes the food available at food banks as "often inadequate to meet recipients' nutritional needs, and therefore provides respite from severe hunger but little else."

Waterloo Region is served by a Food Assistance Network that consists of two food banks and a network of over 100 food assistance providers (meals, hampers, residential & shelter programs). The two food banks are Food Bank of Waterloo Region (FBRWR) and Cambridge Self-Help Food Bank (CSHFB). FBWR works on the supply side of the emergency food distribution network: soliciting donations of food and money from farmers, large food companies, and the public; it operates a warehouse and distribution network to the many direct providers of food assistance in the region. 192 CSHFB has integrated the traditional food bank model with a co-operative model of delivering food directly to individuals. It does some of its own soliciting of donations, but also encourages people to join its co-operative and participate in the work of running the food program to gain them access to the bank's co-op food store. 193

In 2006, the two food banks partnered with Woolwich Community Services, the House of Friendship, and Region of Waterloo Social Services complete research on the Emergency Food System. The Waterloo Region Shares report led to a project of the Food Assistance Network to address nine recommendations that included improving coordination of food collection and distribution, improving consistency of service levels, and addressing service area gaps. ¹⁹⁴ The Waterloo Region Shares progress report in December 2011 lists a number of

accomplishments for the five years of work on the recommendations, including defining the roles and responsibilities of network members, the creation of consistent guidelines for food hamper programs, and the development of a system for collecting data on food distribution from all partner agencies. The Food Assistance Network in Waterloo Region continues to provide accessible programs & services that provide nutritious & culturally appropriate food, coping & prevention supports & community development programs to improve overall food security in our community.

Walkable Food

One of the first projects to get off the ground after the adoption of Waterloo Region's Healthy Community Food System Plan was a pilot project to bring healthy local food to select neighbourhoods. In 2007, Region of Waterloo Public Health initiated a pilot project funded by the Lyle S Hallman Foundation to establish five neighbourhood markets in areas that had poor walkable access to fresh foods. Communities were chosen based on whether or not there were food stores within walking distance as well as the socioeconomic status of the area. ¹⁹⁶ An evaluation of the markets suggested that they were successful in enabling people on low and fixed incomes to improve their fruit and vegetable consumption. 90% of these regular customers indicated that they ate more vegetables and 53% said that they ate more fruit as a result of the markets. ¹⁹⁷ Three of the neighbourhood markets continue to operate seasonally to date.

The neighbourhood markets encountered many barriers in their first year, as zoning and licensing regulations did not permit temporary structures set up in parking lots to sell food. Area municipal staff only permitted the markets after seeing that Regional government was promoting them as part of its *Food System Plan*. In 2009, the Region adopted a new policy in its Official Plan that required area municipalities to establish policies in their own Official Plans to permit "temporary farmers' markets" wherever appropriate. The Preston neighborhood market, which operates to this day in Cambridge, was the first to receive permission to operate without the intervention of the Region after the implementation of the new ROP provisions. ¹⁹⁸

In addition to this new ROP policy on temporary farmers' markets, area municipal Official Plans in Waterloo Region have made more progress towards improving walkable access to food. The Region of Waterloo's Official Plan encourages developments that have a mix of land uses, including food destinations, within close proximity of each other to facilitate access to locally grown and other healthy food products. ¹⁹⁹ The City of Waterloo Official Plan aims to make this a reality by setting targets of one small- to mid-sized food store for every 10,000 residents, and a food store within a 2km walking distance of every resident. ²⁰⁰ Both

Cambridge's 2012 Official Plan ²⁰¹ and Kitchener's draft Official Plan ²⁰² emphasize the importance of developing "complete communities," which would make streets more bicycle and pedestrian friendly and result in a full range of services within walking distance of residences and employment centres. Although walkable food access can be more difficult for the townships to achieve due to low population densities, Woolwich has attempted to improve food store access for residential communities by encouraging food stores as appropriate "Neighbourhood Commercial Facilities" and a means of reducing travel times. ²⁰³

A 2010 University of Waterloo report examined whether or not the sale of local food was possible at convenience stores in Waterloo. The authors found that convenience stores provided necessary infrastructure for the display and sale of local food throughout neighbourhood communities. However, as with most products carried in convenience stores, the cost of local food would be higher than in farmers' markets or larger grocery stores. Space within convenience stores is also limited, and extra shelving and refrigeration units for local products is not always possible. The study concluded that while convenience stores could potentially support municipal plans by improving local healthy food access in some areas, they cannot replace small to mid-sized grocery stores as the main source of food service in the surrounding neighbourhood.²⁰⁴

A recent study by Region of Waterloo Public Health in partnership with the University of British Columbia, University of Alberta, and the University of Waterloo will help bring understanding to the question of how much of the Region has walkable access to healthy food. Known as NEWPATH (Neighbourhood Environments in Waterloo Region: Patterns of Transportation and Health), the study is analyzing the effects of the built environment and the food environment on physical activity, transportation patterns, diet, and health. The study created a walkability index for every postal code in the region, and assessed the "nutrition environment" of every food retail location in the Region, and will be able to state whether there are relationships between distance to food destinations, nutrition environment of those destinations, and diet quality and health outcomes. As of this writing, researchers are awaiting publication of some initial findings: one is that over three times as much shelf-space is dedicated to energy-dense snack food as compared to fruits and vegetables within 1km of Waterloo Region homes. Another finding is that women who lived closer to convenience stores had higher body weights than those further away: every kilometre closer from home to the nearest convenience store predicted increased body weight of 5.9kg (13.2lbs) for an average height female (1.63m; 5'4"). And finally, people who lived closer to food destinations where nutritious foods were more affordable relative to non-nutritious foods had a lower Body Mass Index (BMI) rating. These findings seem to add weight to the evidence that we need to be

more concerned with the proximity and convenience of unhealthy foods than the proximity of healthy foods.²⁰⁵

Culturally Appropriate Food

Waterloo Region is the second largest market for ethnic vegetables in Ontario, and a 2010 University of Waterloo study identified numerous opportunities as well as challenges for getting local producers to grow more of the currently imported vegetables and fruit. The market for ethnic vegetables is growing in Waterloo Region, presenting an opportunity for local economic development of this sector. Although not all crops can be grown locally, production of a number of varieties is possible. The Vineland Research and Innovation Centre is currently researching the viability of growing many ethnic vegetables in Ontario soils. The challenges, however, are not small. There are very few registered pesticides for growing ethnic vegetables, making the prospect of growing them conventionally on a large scale feel risky for established farmers, and the prospect of navigating the regulatory system can feel too daunting for New Canadian farmers. It is also not clear that consumers are willing to pay the premium that would likely come with domestically-produced vegetables, since competing with imported produce is already a challenge for Ontario farmers, and growing them organically or on a smaller scale would be more labour-intensive and result in higher costs. 208

FarmStart, the Guelph-based program which trains new farmers (mentioned in the Farm Viability section above) is making a contribution to training farmers interested in growing ethnic vegetables. The program has become an attractive training centre for new Canadians in particular, as they can use the program to integrate their traditional agricultural knowledge and foods into the local food system and ensure that their new crops and practices meet government regulations.²⁰⁹

Many New Canadians in Waterloo Region grow foods from their home countries in community garden plots. Through careful seed saving, they are able to continue to grow foods that are either only available in stores in Toronto or not at all. The Patchwork Community Gardens in Waterloo Region was founded in 2011 to enable New Canadians to grow foods that are familiar to them and to facilitate their integration into the community. Organizers have successfully tapped into the Region's cultural diversity by uniting people from many cultures around a shared passion, in spite of language differences. The African Community Wellness Initiative has seen that these gardens offer an opportunity to increase communication among cultural community leaders in the Region. The Initiative sees "all culture" gardens as a means of reconnecting immigrants with the land, improving food education, and preserving cultural practices.

Current Assessment

New research is beginning to call for a different focus on the concept of Access to Healthy Food. Based on evidence demonstrating that the accessibility of non-nutritious foods may have more effect on diet quality than the lack of accessibility to healthy foods, more voices are calling for measures to limit access to non-nutritious foods.

The lowest income people in our community still struggle to be able to afford enough nutritious food to feed themselves. While incomes have improved since 2005 for those who rely on minimum wage jobs and for those with children, thanks to the advocacy of several local and provincial anti-poverty groups, the cost of a nutritious food basket for these people still leaves little to pay for other basic expenses. Single adults on Ontario Works cannot even afford a nutritious food basket after paying rent.

While **Emergency Food** usage has increased substantially in the last four years, the Region's food banks and emergency food programs have coordinated with one another to meet this challenge, and initiatives like Waterloo Region Shares have helped to strengthen the emergency food network.

A successful pilot of neighbourhood markets has demonstrated the potential of small temporary farmers' markets to increase walkable access to food, fruit and vegetable consumption, and farmer incomes. New policies in municipal Official Plans now permit these ventures in most land use designations and set goals for ensuring healthy food is available within walking distance of all residents.

Finally, as Waterloo Region becomes more culturally diverse, we may see an increase in demand for **Culturally Appropriate Foods** grown locally. Vineland Research and Innovation Centre is researching the viability of growing ethnic vegetables on a conventional scale in Ontario, and FarmStart is helping new farmers enter this emerging market. Meanwhile new community gardens in Waterloo Region are specifically targeting New Canadians to give them the opportunity to grow their own foods that are familiar to them.

Conclusion

This report provides an update on the status of Waterloo Region's food system. It is structured along the lines of the six Food System Priorities of the Waterloo Region Food System Roundtable. For each Priority, it summarizes what we knew in 2005 when *Towards a Healthy Community Food System for Waterloo Region* was written, and then updates the state of progress towards realizing that priority by reviewing new research, initiatives, or active organizations which have surfaced since then. Each section concludes with a brief assessment of where we are today on the priority.

We hope that this report will be useful to everyone who is interested in improving the health of Waterloo Region's food system by providing them with information they need to do that work.

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