

Community Food Action Initiative Three-Year Action Plan

Produced by FORC

Susan Kurbis, EYA

Christiana Miewald, CSCD-SFU

Fern Jeffries, NEVCO

Herb Barbolet, CSCD-SFU

Vijay Cuddeford

Dawn Hanson

Janine de la Salle

Holly Korstad

For Vancouver Coastal Health

August 10, 2006

Table of Contents

Executive Summary	4
Introduction	11
Environmental Scan and Food System Assessment	12
SECTION 1: Provincial Indicators and Trends	12
Dietary-related Disease	12
Food Purchasing and Dietary Trends	14
Nutrition and Vulnerable Populations	16
Future Food Trends	20
Food Marketing and Media	20
SECTION 2: Health Indicators, Social Determinants of Health, and Food Insecurity in Vancouver	22
Vulnerable Populations in Vancouver	25
Neighbourhoods Vulnerable to Food Stress	29
SECTION 3: Conditions Affecting Food Security in Vancouver	34
Childcare	34
Transportation	34
Housing	35
Access to Technology	36
SECTION 4: Food Resources in Vancouver	38
Charitable Food Sector	
Community Food Sector	
Community Kitchens	
Farmers' Markets	
Community Gardens	46
Other Urban Agriculture Programmes	49
Other Community Food Resources	50
Community Shared Agriculture (CSA)	50
Food cooperatives/buying clubs/urban delivery	51
Food Security Organizations	53
Food-Related Social Enterprises	54
Retail Food Sector	55
Food Diversion and Composting	58
City and School Food Policies and Programmes	60
School Food Programmes	66
Vancouver Food System Gap Analysis	70
Overarching Food Security Issues	70
Charitable Food Sector Gaps	70

Community Food Sector Gaps	71
Retail Food Sector Gaps	73
Social Enterprise Gaps	73
Action Plan and Outcome Measurement Framework	75
Funding Criteria	76
Promising Practices	77
Outcome Measurement Framework: Goals	
First Year Allocation of Funds	83
Outcome Measurement Framework: VCH CFAI Fund — Year 1	
Evaluation Framework Year 1	
Outcome Measurement Framework: VCH CFAI Fund — Year 2	91
Evaluation Framework Year 2	
Outcome Measurement Framework: VCH CFAI Fund — Year 3	96
Evaluation Framework Year 3	

List of Maps

Map 1: VCH Community Health Areas	23
Map 2: Urban Agriculture	102
Map 3: Charitable Food Providers	103
Map 4: Community Food Programmes	104
Map 5: Retail Food	105
Map 6: Retail Food with Buffers	106

List of Appendices (In Separate Documents)

Appendix A: Focus Group, Interview, and Community Forum Overview and Methodology
Appendix B: Community Food Action Initiative Public Forum Notes
Appendix C: Charitable Food Programmes
Appendix D: Community Kitchens
Appendix E: Community Gardens
Appendix F: Rooftop Gardens
Appendix G: Food Security Organizations
Appendix H: School Meals
Appendix I: Agricultural Education Programmes
Appendix J: Sources of Additional Funding

Executive Summary

The purpose of this report is to provide Vancouver Coastal Health (VCH) with an Environmental Scan, Gap Analysis, and Action Plan for the Community Food Action Initiative (CFAI), which is part of the Healthy Eating component of ActNow BC. This initiative is designed to enhance food security in the province by supporting initiatives that improve access to healthy foods for all members of the community.

Methodology

This report is based upon findings from the *Vancouver Food System Assessment*¹ and additional research conducted in 2006. The research consisted of focus groups with street-involved youth, Indo-Canadian women, seniors, as well as interviews with food and social service providers. The data derived from the focus groups and interviews were analyzed and coded according to themes. In addition, the location of various food resources (grocery stores, community and charitable food programmes, and urban agriculture projects) were entered into a Geographic Information System (GIS) mapping. GIS is a system for storing, analyzing, and managing spatial data (locations) and associated attributes (e.g., store size). This process allows for the identification of concentrations and gaps in the local food environment. Finally, the results of this research were presented at a community forum where participants were asked to identify gaps and potential actions to address those gaps. This information was then organized thematically and incorporated into the final document.

Environmental Scan Overview

The purpose of the environmental scan was to highlight populations and neighbourhoods vulnerable to food insecurity. In regard to food insecure populations within the City of Vancouver, the environmental scan for Vancouver found the following:

¹ FORC (2005). Funding provided by Western Economic Diversification Canada. For more information go to: <http://www.sfu.ca/cscd/research/foodsecurity/home.htm>

- One of the primary factors related to food insecurity is low income. The low-income rate for both adults and children is highest in Vancouver, compared to all other major Canadian cities. For adults, the low-income rate (2004) was 17 percent and for children, 22 percent. Food insecurity among children can affect school performance, behavior, and mental health.
- In addition 37.4 percent of recent immigrants, 40.5 percent of Aboriginal people, and 43.7 percent of lone parents are below the Low Income Cut-Off (LICO) and therefore these populations are at particular risk.
- The homeless are among the most food insecure. In Vancouver in 2005, there were approximately 719 homeless people residing in shelters and another 591 living on the street. The majority rely on the charitable food sector and many have chronic or acute medical conditions.
- In 2000, the number of injection drug users (IDUs) living in the Downtown Eastside (DTES) was estimated to be 4,700. Injection drug users are among the populations most vulnerable to food insecurity because of drug-induced anorexia, changes in dietary patterns associated with drug dependency and the associated lifestyle, poverty, and infectious disease.
- Aboriginal people have a higher rate of some nutritionally-related disease, such as diabetes. There are approximately 10,500 Aboriginal people living in Vancouver. The majority reside in the east side of the city.
- While there are seniors' centres and neighbourhood houses that provide low-cost, nutritious meals, limitations on mobility may hinder seniors' ability to access these programmes or to go shopping for themselves. Seniors may also be forced to purchase food in smaller quantities and rely on convenience stores.
- One recent study found that one out of five people in BC who are HIV positive are also food insecure. This is five times higher than the prevalence of food insecurity among the general population in Canada.
- According to the Food Insecurity in Canada Report, 12.7 percent of very recent immigrants (0 to 4 years in Canada) are food insecure, compared to 10.2 percent of the average population.
- People with disabilities are also at increased risk for food insecurity because both physical and mental disabilities may make shopping, meal preparation or obtaining food assistance (e.g., standing in line) more difficult.

In terms of the distribution of food resources:

- While charitable food providers tend to be located in the Downtown and Strathcona, there are other neighbourhoods that have few or no food programmes. Some of the specific areas that were noted as lacking charitable food services include South Granville, Champlain Heights, UBC Endowment Lands and beaches, Kitsilano area, Mount Pleasant, Fraser St, Waterfront to 41st, and the West End.
- Among the neighbourhoods with one or no urban agriculture sites are Victoria-Fraserview, Killarney, Marpole, Oakridge, Arbutus Ridge and Riley Park. These same neighbourhoods, along with Kitsilano, also lack in community food resources. Killarney, Oakridge, West Point Grey and Kerrisdale have few grocery stores, which means that people have to drive or take transit. Although these areas tend to have fewer socioeconomic indicators of food insecurity, there are populations that live within these areas (e.g., seniors, students, recent immigrants) that may be food insecure.
- While the cost of food was found to be lowest in low-income neighbourhoods, people on income-assistance would have to pay between 41 and 51 percent of their income to purchase a Nutritious Food Basket.

Gaps and Opportunities within Vancouver's Food System

The following provides an overview of the gaps and opportunities within the charitable and community food sectors as well as for enhancing food system sustainability through food policy, social enterprise and improving access to local food.

The Charitable Food Sector

Gaps: Historically, the charitable food provision in Vancouver has been heavily concentrated in the DTES, relies heavily on donated food and tends to focus on alleviating hunger rather than addressing nutritional health. This has resulted in those who are most food insecure (e.g., the homeless, those with drug addictions and mental health problems) receiving inadequate nutrition, which may further exacerbate their precarious health status.

Opportunities: There are a number of programmes that are addressing these issues by providing services outside of the DTES core, by focusing on nutrition, and by giving greater attention to the quality of food they are providing. These new models of charitable food provision address issues of hunger and health.

The Community Food Sector

Gaps: While there are many benefits of community food programmes, they also experience challenges. Vital community food programmes, such as the Good Food Box and many community kitchens, have experienced chronic problems with accessing adequate and long-term funding. In addition, some community food projects, such as farmers' markets and community gardens, are inaccessible to individuals with low-incomes.

Opportunities: There are several community gardens and kitchens that are either located in low-income neighbourhoods or provide transportation for those with mobility constraints. More are needed. Programmes such as farmers' market coupons and transportation could also enhance the accessibility of these food resources.

Food System Sustainability

Gaps: Food system sustainability is hampered in Vancouver by several factors including a lack of support and infrastructure for food-related social enterprises, increasing pressures on available land for development and the fact no large institutions within the City have policies for purchasing local food.

Opportunities: The Vancouver Food Policy Council (VFPC) is working to create a sustainable food system and has promoted several projects toward that aim, including the procurement of local food in the city. There are food-related social enterprises that are successfully blending food provision with empowerment and training. Finally, Vancouver City Council has recently recommended the creation of additional community gardens in the city, by the time of the Olympics in 2010, to bring the total to 2010.

Three-Year Action Plan

The three-year action plan provides a template for achieving the VCH CFAI long-term outcome:

“Communities in Vancouver have access to adequate amounts of safe, nutritious, culturally appropriate foods, produced in an environmentally sustainable way and provided in a manner that promotes dignity.”

Based upon the identified gaps and opportunities, the following recommended goals and actions were developed.

Year 1

Year 1 Goal: The goal for Year 1 is to address the immediate food security gaps that exist within the city by improving the quality and accessibility of food to the most vulnerable populations. These include service gaps, such as reestablishing the Good Food Box and enhancing coordination among food providers, and geographic gaps, such as providing services to food insecure populations in parts of the city that have limited food resources

Recommended Actions:

- Establish a community-based advisory committee to select two to three priority action areas for the use of CFAI funds.
- Provide funding for programmes based on success indicators and promising practices, focused on vulnerable populations and neighbourhoods as identified in the environmental scan. Priority areas are:
 - re-establishing the Good Food Box programme;
 - supporting meal programmes that fill existing temporal and geographic gaps;
 - supporting a community market or mobile grocery store.
- Work with the VFPC and other entities to support the development of food policies that support the goal of improving food quality and access for vulnerable populations.
 - One possible policy would be to develop standards for donated food.

- Support a network of food providers, including charitable providers (e.g., food bank), food-related social enterprises, daycares, and other free or low-cost meal programmes to create a local food-buying club and to improve coordination.

Year 2

Year 2 Goal: In Year 2, funding will continue for projects begun in Year 1, contingent upon need, other funding sources, and recommendations by the CFAI planning committee. The goal for Year 2 is to enhance the capability of residents to grow and cook their own food. This includes supporting community gardens and kitchens. Charitable programmes should be encouraged to include this approach within their mandate, in order to empower participants and to reduce their on-going dependency on the charitable food sector.

Recommended Actions (based upon available funds and identified priorities):

- Provide funding for urban agriculture projects (community or rooftop gardens) for vulnerable populations, focusing on neighbourhoods that currently have no gardens.
- Work with the VFPC and other entities to support the development of food policies that work toward the goal of increasing community gardens and kitchens.
- Provide funding to community kitchens that are linked with an urban agriculture initiative.
- Support programmes that teach children in inner city schools about growing and preparing food.

Year 3

Year 3 Goal: In Year 3, funding will continue for projects begun in Years 1 and 2, contingent upon need, other funding sources, and recommendations by the CFAI planning committee. In this year, VCH should devote its efforts to improving the food security of vulnerable populations by enhancing the larger food economy. This can be done by supporting local farmers, through farmers' markets and cooperative buying, and by increasing the potential for food-related social enterprise.

Recommended Actions (based upon available funds and identified priorities):

- Hire a food security coordinator to connect local farmers with food providers to develop a strategy for food processing where perishable foods can be preserved through various processing methodologies and be either distributed or sold.
- Support the development of food policies that enhance food system sustainability through social enterprise development and reduced reliance on external sources of support.
- Support the development of food-related social enterprises and incubator kitchens that provide training and employment opportunities for vulnerable populations.
- Support the creation of affordable or subsidized restaurants in social housing and/or neighbourhood houses.
- Support the development of a programme to promote use of the farmers' market by vulnerable populations (e.g., seniors) and of a system for providing transportation to the market. Alternatively, a "mobile farmers' market" could be provided.

Introduction

This report, produced for Vancouver Coastal Health, provides an Environmental Scan and Food System Assessment, Gap Analysis, and Action Plan as part of the Community Food Action Initiative (CFAI). The CFAI is part of the Healthy Eating component of ActNow BC. ActNow BC is a health promotion programme designed to support individuals and communities to protect and improve their health by 2010. The Community Food Action Initiative is a province-wide, public health programme designed to increase food security for BC residents with a focus on vulnerable populations. For the purposes of this document, vulnerable populations are defined by as *“those made vulnerable by their financial circumstances or place of residence; health, age, or functional or developmental status; ability to communicate effectively; presence of chronic or terminal illness or disability; or personal characteristics.”* Because of these characteristics, these populations may not have the same resources and/or abilities to obtain adequate nutrition. As a result, these populations may suffer from poorer health and social outcomes. In turn, food security is defined as: *“A community enjoys food security when all people, at all times have access to adequate amounts of safe, nutritious, culturally appropriate foods, produced in an environmentally sustainable way and provided in a manner that promotes dignity.”*²

Within the context of improving food security for vulnerable populations, the CFAI has developed the following goals in order to improve health outcomes:

- awareness regarding food security;
- access to local healthy food;
- food knowledge and skills;
- community capacity to address local food security;
- development and use of policy that supports community food security.

The purpose of this document is to help identify vulnerable populations within the City of Vancouver and the gaps in the food system that provides for these populations, and to suggest possible actions to address these gaps within the context of the CFAI goals.

² FORC (2005) Vancouver Food System Assessment. Available on-line at <http://www.sfu.ca/cscd/research/foodsecurity/home.htm>

Environmental Scan and Food System Assessment

The following environmental scan presents information on the social, cultural, demographic, environmental, and geographic indicators related to food security in the City of Vancouver. This information is based upon the *Vancouver Food System Assessment*, as well as on information from additional focus groups, interviews, a community forum, and maps and data compiled and analyzed by FORC (see Appendix A for interview and focus group details and Appendix B for the Forum Report).

SECTION 1: Provincial Indicators and Trends

Before discussing the situation in Vancouver, it is important to examine the provincial indicators and trends that affect food security in the city. The following section describes some of the health and dietary trends exist in the province and Vancouver.

Dietary-related Disease

The percentage of the population that is obese or overweight has a significant effect on population health and the health care system. According to Statistics Canada's Health Report (1999), Canadians who are obese or overweight are more likely to have Type 2 diabetes, hypertension, arthritis, thyroid disease, asthma, heart disease, and back problems.³ According to the British Columbia Nutrition Survey, the prevalence of overweight and obesity has increased from 44 percent to 55 percent over the past ten years. This study found that 37 percent of BC residents were overweight, with a Body Mass Index (BMI) between 25 and 29.9, and 18 percent were obese, with a BMI over 30.⁴

A report created in 2004 by the BC Healthy Living Alliance found that the percentage of residents in the Vancouver Health Services Delivery area (HSDA) that are either obese or overweight was 30 percent (22.3 percent for women and 37.9 percent for men). This was one of the lowest rates in the province. The report also found that while the rate of overweight had

³ Statistics Canada. (Summer 1999). Health Reports. Vol. 11(1). Catalogue no. 82-003-XIE.

⁴ BC Ministry of Population Health and Wellness (2004) BC Nutrition Survey, available on-line at <http://www.health.gov.bc.ca/prevent/nutrition/index.html>

increased by 19.3 percent between 2000 and 2003, the rate of obesity had declined by 20.1 percent.⁵

The British Columbia Youth Health Trends study found that the mean BMI for BC's adolescents remained relatively constant between 1992 and 2003. Overall, in 2003 female students were less likely to be overweight than males and demonstrated only a slight increase in obese status when compared with 1992. Older adolescents were more likely to be overweight or obese compared to younger students.⁶

When data for 2003 on overweight and obesity among students were combined, the percentage varied from 12 percent in Greater Vancouver to 20 percent in the Northwest region, with 18 percent in Aboriginal students. The report notes, "That in view of growing concern about Type 2 diabetes, both the Northwestern and the Aboriginal percentages warrant further examination."⁷

In 2004, 5.4 percent of the total population in BC, or 228,013 patients, were diagnosed with diabetes. By 2010, it is estimated that the prevalence of diabetes will increase to about 325,000 patients. Throughout the province, the rate of diabetes-related mortality is rising. Between 1986 and 2004, the rate of diabetes-related deaths has increased from 1.10 to 1.81 (per 10,000 population).⁸

Diabetes is associated with a cluster of serious complications that include coronary heart disease and kidney, nerve, or retinal damage, which can lead, ultimately, to premature death. However, in those with risk factors predisposing them to the disease, diabetes can be managed or prevented with dietary and exercise interventions. It is estimated that the economic burden of diabetes in British Columbia in 1993 was \$80 million — \$40 million in direct costs and \$40 million in

⁵ BC Healthy Living Alliance. (2004). 2010 Target Setting for Risk Factors of Chronic Disease. Available on-line at http://www.bchealthyliving.ca/resources/documents/risk_factors_background.pdf

⁶ McCreary Centre Society. (2005). British Columbia Youth Health Trends: A Retrospective 1992–2003 (prepared by Roger S. Tonkin).

⁷ Ibid.

⁸ A Snapshot of Diabetes Care in British Columbia (2003/04) Available on-line: http://www.health.gov.bc.ca/cdm/research/diabetes_snapshot_2004.pdf.

indirect costs.⁹

Aboriginals are particularly vulnerable to food-related disease because of their socioeconomic status, typically poorer access to health care, and their predisposition to diabetes. In BC, the leading causes of death for Status Indians were ischemic heart disease, cerebrovascular disease, gastrointestinal cancer, pneumonia/influenza, and cancer of the respiratory system. Overall, diabetes was the twelfth leading cause of death, resulting in 169 mortalities province-wide. The Age-Standardized Mortality Rate (ASMR) for diabetes in the Status Indian population (2.6 per 10,000 standard population) was almost twice the rate for other residents. However, in two service delivery areas, North Shore-Coast Garibaldi and North Vancouver Island, diabetes was the fifth leading cause of death.¹⁰

Another disease closely linked to diet and/or nutritional deficiencies is cancer. Cancer accounts for 30 percent of deaths in British Columbia. The economic burden of cancer in 1993 was \$1.09 billion — \$.27 billion in direct costs (drugs, physicians, hospitals, research) and \$.82 billion in indirect costs (mortality, short- and long-term benefits).¹¹ Studies have linked the consumption of fresh fruits and vegetables to a decrease in cancers of the lung, esophagus, mouth, stomach, colon, and pancreas.¹²

Food Purchasing and Dietary Trends

According to Statistics Canada the average Canadian household spent \$6,791 on food in 2003, with BC's average at \$6,784, Vancouver's at \$7,510 and Victoria's at \$6,285.¹³ The overall average percent spent on food was 10.90 percent of household income.

⁹ Dufresne, E. (2001). Increasing Fruit and Vegetable Consumption In British Columbia. British Columbia Ministry of Health.

¹⁰ Regional Analysis of Health Statistics. Birth Related and Mortality Summaries for British Columbia and 16 Health Service Delivery Areas for Status Indians in British Columbia.

¹¹ Dufresne, E. (2001). Increasing Fruit and Vegetable Consumption In British Columbia. British Columbia Ministry of Health.

¹² Steinmetz KA, J.D. Potter. Vegetables, fruit and cancer prevention: a review. *Journal of American Dieticians Association* 96(10):1027–39.

¹³ Statistics Canada. (2001). Food Expenditure in Canada, catalogue no. 62-554-XIE

Weekly spending on food in Canada ranges from an average of \$66 for households with incomes less than \$20,000, up to \$203 for households with incomes of \$80,000 or more. Individuals in the lowest household income group spent an average of \$39 a week per person on food, compared with \$59 a week for those in the highest income group. The same study found that single-parent families headed by women spend an average of \$99.36 a week on food while the average household expenditure on food was \$124. Furthermore, single adult males and females over the age of 65 spend less than singles under the age of 65. For example, single adult females over the age of 65 spent an average of \$55.07 a week while those under 65 spend \$67 a week.¹⁴

According to the Canadian Restaurant and Foodservices Association, the majority (67 percent) of all Canadian meals are prepared and eaten at home. Yet the average Canadian family visits a restaurant for a meal or snacks approximately 500 times per year and spends about one-fifth of their total household food expenditures on these meals and snacks.¹⁵ In fact, the average household in British Columbia spent \$2,013 at bars and restaurants in 2004 — a 7.2 percent increase from the previous year — due to rising disposable income and a growing labour market. British Columbia now has the highest foodservice share of the total food dollar at 25.2 percent.¹⁶

Where are people spending their food dollars — and on what kinds of foods? In 2001, almost 60 percent of restaurant spending took place in table-service restaurants, compared to 26 percent in fast-food restaurants (including take-out) and less than ten percent each in cafeterias and other types of restaurants such as snack bars and chip wagons.¹⁷ According to Statistics Canada, people in the highest income bracket (\$80,000 or more in household income) tend to spend the most on eating in restaurants. They also spend more (in dollar terms) on meat and fish, dairy, bakery, and fruits and vegetables, but not a significant amount more.

The British Columbia Nutrition Survey found that most B.C. adults do not follow Canada's Food Guide to Healthy Eating, particularly in the area of fruit and vegetable and milk product intake.

¹⁴ Ibid

¹⁵ Canadian Restaurant and Food Services Association, cited in Agriculture and Agri-Food Canada, An Overview of the Canadian Agriculture and Agri-Food System, May 2005. http://www.agr.gc.ca/spb/rad-dra/publications/system/ocaaafs_2005_e.pdf.

¹⁶ B.C. now home to Canada's top restaurant spenders, http://www.crfa.ca/research/2006/bc_now_home_to_top_restaurant_spenders.asp

¹⁷ Ibid.

In 2003, 55 percent of BC's residents ate fewer than five servings of fruits and vegetables a day.¹⁸ However, it was also noted that in most cases, it would only require an additional one to two servings to achieve the goal. In Vancouver, 55 percent of the population (60.1 percent men, 51.1 percent women) ate fewer than five servings of fruits and vegetables a day.¹⁹

In addition, there are nutrient deficiencies that are of concern for large proportions of the B.C. population, including folate, calcium, and fibre. These nutrients have consequences for chronic disease prevention. For example, there is convincing evidence that diets high in vegetables decrease the risk of colorectal cancer. The data is strongest for both raw and green vegetables, which may exert anticancer effects through the vitamins, dietary fibre, and phytochemicals that they contain. There is less consistent evidence for fruit.²⁰

Nutrition and Vulnerable Populations

Certain populations are particularly like to benefit from enhanced nutrition, including infants and children, pregnant women, the homeless, injection drug users, recent immigrants, seniors, and people with disabilities including those suffering from diseases such as HIV/AIDS.

Infants and Children. There are a number of immediate and long-term health benefits associated with breastfeeding. Infants who are breastfed show an increased immunological resistance to disease and may also be less susceptible to type 1 diabetes and some forms of cancer. Exclusive breastfeeding for the first six months may promote weight loss for the mother and reduce the risk of overweight and obesity in the baby.²¹ Over half (55 percent) of BC mothers breastfed their babies for at least six months, compared to 30 percent for Canada overall.²²

Research regarding children has found relationships between food security and school performance, behavioral problems, and mental health. For example, one study found that six- to

¹⁸ BC Healthy Living Alliance (2004) 2010 Target Setting for Risk Factors of Chronic Disease. Available on-line at http://www.bchealthyliving.ca/resources/documents/risk_factors_background.pdf

¹⁹ Ibid.

²⁰ Trends and risk factors for colorectal cancer, *BC Medical Journal* 42, 3, April 2000, pages 131–135

²¹ Gillman, M. W. et al. Risk of overweight among adolescents who were breastfed as infants. *JAMA* 285: 2461-2467, 2001

²² Statistics Canada, Canadian Community Health Survey, 2003

eleven-year-old food-insufficient children had significantly lower arithmetic scores and were more likely to have repeated a grade, to have seen a psychologist, and to have had difficulty getting along with other children. Food-insufficient teenagers were more likely to have seen a psychologist, to have been suspended from school, and to have had difficulty getting along with other children.²³

The Homeless. Although it is clear that the homeless have difficulties accessing food, there have been few detailed studies of the effect of homelessness on nutrition. One study conducted in Dublin, Ireland found that a proportion of homeless adults had lower intakes of starch, fibre, vitamin A equivalence, vitamin D, vitamin E, folate, and iron; this indicates low consumption levels of pasta and rice products, wholegrain cereals, fruit and vegetables (especially green leafy vegetables), fish (especially oily fish), cereal products, and dairy products.²⁴ Access to food is hampered by lack of income to purchase food and problems with storage and preparation.

Aboriginals. According to a Statistics Canada report, more than one-quarter (27 percent) of Aboriginal people living off-reserve reported at least some food insecurity, and 24 percent experienced a compromised diet.²⁵ Numerous studies have detailed the shift in dietary intake from traditional to non-native foods among Aboriginal people and the associated health problems.²⁶ According to Willows, “Partly because of the substitution of traditional foods with market foods, the current diet of Aboriginal peoples is often low in iron, folacin, calcium, vitamin D, vitamin A, fibre, fruit and vegetables; high fat and sugar intakes are commonly reported.”²⁷

Recent Immigrants. According to the Food Insecurity in Canada Report, 12.7 percent of very recent immigrants (0 to 4 years in Canada) are food insecure, compared to 10.2 percent of the

²³Alaimo, K., C.M. Olson, and E.A. Frongillo Jr. (2001). Food insufficiency and American school-aged children's cognitive, academic, and psychosocial development. *Pediatrics*, 108(1): 44–53.

²⁴Hickey, C. (2004). Hungry For Change: Social Exclusion, Food Poverty And Homelessness In Dublin. *Focus Ireland*. Available on-line: http://www.focusireland.ie/htm/housing_homelessness/fi_research/Chap_percent201to4.pdf.

²⁵Che J. and J. Chen. (2001). Food insecurity in Canadian households. *Health Reports*, 12: 11–22

²⁶For example, see Kuhnlein, H.V. (1992). Change in the use of traditional foods by the Nuxalk native people of British Columbia. *Ecology of Food and Nutrition*; 27: 259–82.

²⁷Willows, N.D. (2005). Determinants of Healthy Eating in Aboriginal Peoples in Canada: The Current State of Knowledge and Research Gaps. *Canadian Journal of Public Health* 96(3)

average population.²⁸ In addition, they may face a lack of availability and/or the high cost of foods used in traditional diets, changes in lifestyle and working conditions, and pressures for integration to a new culture resulting in dietary modifications, often with negative impacts on health.²⁹ Recent immigrants, particularly those who do not speak English, may be unaware of food resources available within a community, and there may be cultural prohibitions against accepting charity. For example, one study of food security among recent immigrants in Toronto found that food banks were typically not used by recent immigrant because they were viewed as stigmatizing, intrusive (in terms of screening), and inappropriate in terms of the foods provided.³⁰

Injection Drug Users. Studies of heroin users have shown low intakes of vitamin A, iron, thiamin, ascorbic acid, and calcium; low body mass index (BMI); protein-energy malnutrition; higher and delayed insulin response; and altered glucose tolerance and metabolism.³¹ These conditions are not only caused by difficulties with accessing food because of lack of money, but are also due to the replacement of foods rich in fat and animal proteins with carbohydrate-laden foods because of the cravings for sweets that tend to accompany these addictions. Nutritional deficiencies, in turn, can reduce resistance to disease and contribute to slow healing, which exacerbates chronic conditions. According to Islam et al., “there is evidence that lack of immunity, infection and malnutrition are synergistic...[leaving] the drug addict in a state of immunonutritional deficiency and susceptible to infectious agents, including HIV.”³²

Seniors. In the most recent survey by Statistics Canada, seven percent of seniors reported food insecurity. The report notes that illness or physical restrictions may limit seniors’ ability to shop

²⁸Rainville, B and S. Brink. (2001). Food Insecurity in Canada 1998–1999 (2001). Applied Research Branch Strategic Policy Human Resources Development Canada. Available on-line:

<http://www11.sdc.gc.ca/en/cs/sp/arb/publications/research/2001-000066/page00.shtml>

²⁹Koc M., and J. Welsh. (2001). Food, Foodways, and Immigrant Experience. Paper written for the Multiculturalism Program, Department of Canadian Heritage at the Canadian Ethnic Studies Association Conference Halifax.

³⁰Welsh, J. (1999). Food Security Health and the Immigrant Experience. Research report. 1997-1998. CERIS-funded project. Available on-line: <http://ceris.metropolis.net/virtualpercent20library/default.asp>.

³¹Mohs, M.E. et al. (1990) Nutritional effects of marijuana, heroin, cocaine, and nicotine. *Journal of the American Dietetics Association* 90 (9): 1261–1267.

³²Nazrul Islam S.K, et al. (2001). Nutritional Status Of Drug Addicts Undergoing Detoxification: Prevalence Of Malnutrition And Influence Of Illicit Drugs And Lifestyle *British Journal of Nutrition*, 88(5): 507–513.

and prepare meals.³³ This is particularly true of low-income seniors and those who lack a strong support system. Food insecurity is known to be associated with poor nutrition and health outcomes for elderly people, and age aggravates the negative effects of poor nutrition. Food-insufficient seniors have consistently lower intakes of a dozen nutrients, including energy, protein, iron, zinc, vitamins B-6 and B-12, riboflavin, and niacin. Poor nutrient intakes and barriers to eating can increase the risk of hospitalization in vulnerable groups such as the elderly.³⁴

People with Disabilities. People with disabilities are also at increased risk for food insecurity, because both physical and mental disabilities may make shopping, meal preparation, or obtaining food assistance (e.g., standing in line) more difficult. One study found that persons with disabilities are more likely than those without disabilities to experience food insecurity.³⁵ About one-quarter of women and men aged 15 to 34 with disabilities experienced food insecurity (24.4 percent and 25 percent, respectively), compared with 12 percent and 10.6 percent of their non-disabled counterparts.

People with HIV and AIDS. Nutrition has direct impacts on an individual's ability to resist opportunistic infections associated with HIV/AIDS. Inadequate nutritional status has been shown to contribute to the progression of HIV-related disease and mortality. The causes of poor nutritional status include HIV-related gastro-intestinal diseases and abnormalities, as well as an increased requirement for energy and nutrients. Poor dietary intake may also be an important contributing factor to inadequate nutritional status in some groups of HIV-infected individuals.^{36,37}

³³Statistics Canada. (2005) *Health Reports Vol. 6(3)*. Ottawa.

³⁴Mowe, M., T. Bohmer, and E. Kindt. (1994). Reduced nutritional status in an elderly population (>70 y) is probable before disease and possibly contributes to the development of disease. *American Journal of Clinical Nutrition*, 59: 317–24.

³⁵Canadian Council on Social Development. (2003). Disability Fact Sheet No.10.

³⁶Campa, A. (2002). Inadequate food and micronutrient intake in HIV+ drug users. International Conference on AIDS, Barcelona, July 7–12

³⁷Ysseldyke, L.L. (1991). Nutritional complications and incidence of malnutrition among AIDS patients. *Journal of American Dietetics Association* 2: 217–218.

Future Food Trends

According to Agriculture and Agri-Food Canada, the top trends that will affect food consumption to 2020 are:

- demographic shifts such as an aging population and shrinking household size;
- a growing disconnect from food preparation and more snacking and portable meals;
- less income spent on food but a greater emphasis on small portions and gourmet items;
- an increasing awareness of health problems associated with obesity, the nutritional value of food, and food safety;
- an increase in ethnic and fusion cuisines, meatless meals, and organics.³⁸

Food Marketing and Media

Studies have shown that television viewing is *the* major media for food advertising, that children are more likely to buy/consume what they are exposed to on TV, and that food advertising to children is skewed very strongly to high sugar/high fat foods, which would lead to obesity and other health problems if followed as a diet.³⁹ Given these findings, it is likely that hours of television watched is a useful indicator of exposure to unhealthy eating patterns.

The trend in the number of hours that children aged two to 11 watch television in BC has shown a recent increase. In 1998, BC children watched an average of 14.5 hours a week. In 2003, BC children watched 12.4 hours a week. However, in 2004 the number of hours increased to 14.4, which is approximately the same as the Canadian average of 14.1.⁴⁰ This increase may signal an alarming trend toward increasing use of television among this age group. At the same time, television viewing by teens was lower, at 11.7 hours a week, which was the lowest in all

³⁸ Agriculture and Agri-Foods Canada (2005) Canadian Food Trends to 2020: A Long Range Consumer Outlook. Available on-line at: http://www.cbac.org/ns/display_lib.cfm?Code=167391&coll=NS_LIB_COLL_E

³⁹ Dennison, B. E., A. Tara, and P. L. Jenkins. (2002). Television viewing and television in bedroom associated with overweight risk among low-income preschool children. *Pediatrics*, 109, 1028–1035.

Dietz, W. H., and S.L. Gortmaker. (1985). Do we fatten our children at the television set? Obesity and television viewing in children and adolescents. *Pediatrics*, 75, 807–812.

⁴⁰ <http://www.statcan.ca/Daily/English/060331/d060331b.htm>.

provinces.

SECTION 2: Health Indicators, Social Determinants of Health, and Food Insecurity in Vancouver

This section of the environmental scan examines the relationship between socioeconomic factors and health factors related to nutrition. Known as the social determinants of health (SDOH), conditions such as income inequality, lack of affordable housing, and social exclusion have been linked with increased rates of morbidity and mortality. According to Raphael, “The weight of the evidence suggests that the SDOH have a direct impact on the health of individuals and populations, [and] are the best predictors of individual and population health”.⁴¹ In particular, research on food insecurity in Canada has found that some level of food insecurity exists among 10.1 percent of Canadian households, representing three million people. The likelihood that someone is food insecure increased with declining income and reliance on social assistance. The prevalence among Aboriginals and lone mothers with children is higher than the Canadian average.⁴²

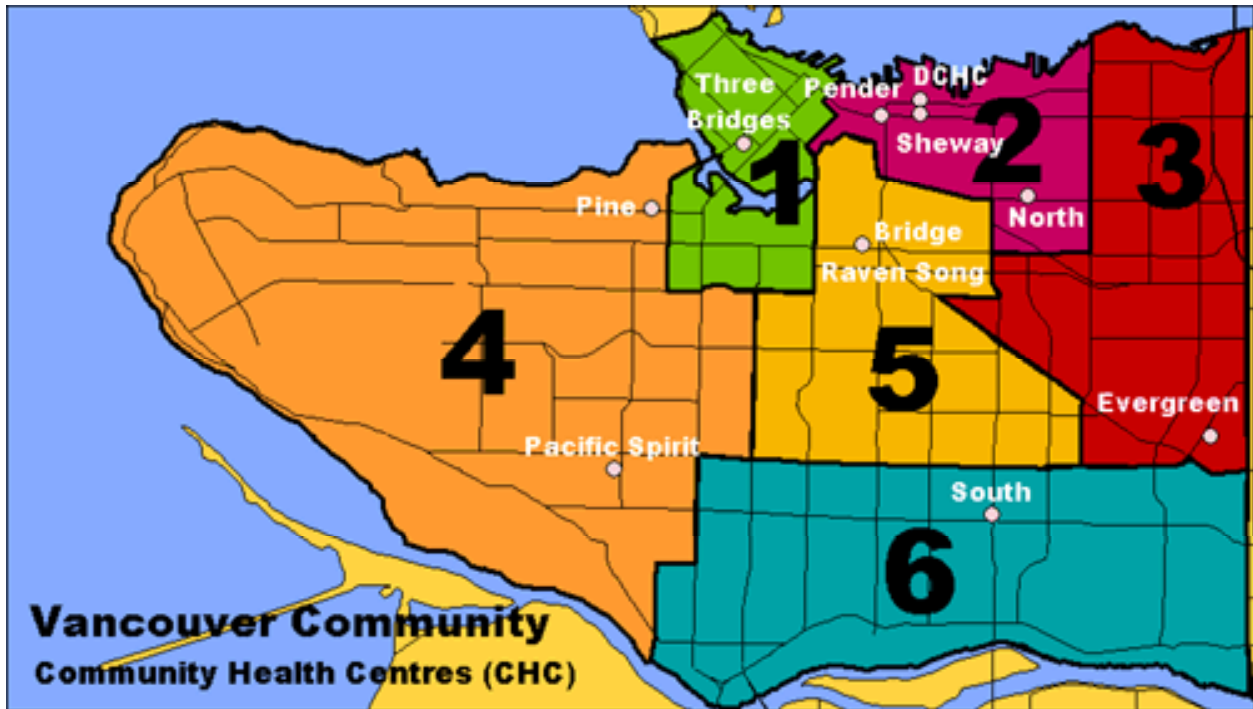
In examining Vancouver’s six health regions (see map 1), it becomes clear that socioeconomic factors are related to poor health.⁴³ One contributing factor to poor health outcomes is food insecurity. However, within the healthcare sector, there is a lack of resources dedicated to helping patients/clients improve the quality of food they eat. Programmes are often disconnected which causes people to fall through the cracks. In addition, there are few charitable food programmes that specifically link food with health (notable exceptions include A Loving Spoonful and ADAPT).

⁴¹ Raphael, D. (2003/02). *Addressing the Social Determinants of Health in Canada: Bridging the Gap between Research Findings and Public Policy*. Paper given at The Social Determinants of Health Across the Life-Span Conference, Toronto, November 2002.; article in *Policy Options*, 35-44.

⁴² Che, J. and J. Chen. (2001). Food insecurity in Canadian households. *Health Reports*, 12: 11–22.

⁴³ The following Community Health Area statistics were obtained from Vancouver Coastal Health (2005) Community Health Area 1, 2, 3, 4, 5 and 6: A Health and Social Profile. Available on-line at http://www.vch.ca/community/Docs/comm_health_area1.pdf

Map 1: Community Health Areas



Demographics

City Centre (CHA1) has the highest percentage of people over 65 years who live alone. South Vancouver (CHA6) has the highest percentage of visible minorities.

	CHA1	CHA2	CHA3	CHA4	CHA5	CHA6
People 65 and older living alone	55	49	17	32	21	22
Visible Minority Population	25.5	40.5	68.2	28.2	56.2	69.7

Socioeconomic Conditions

The Downtown Eastside has the highest percentage of lone-parent families. The Downtown Eastside is most unequal in terms of income inequality; the Northeast (CHA3) has the greatest equality.

	CHA1	CHA2	CHA3	CHA4	CHA5	CHA6
Lone parent families as a percent of	38.2	41.9	27.3	22.5	30.4	23.4

families with children at home						
Income Share of Poorest Households ⁴⁴	19.5	16.0	21.3	17.3	20.7	19.6

Children and Youth

The Downtown Eastside has the greatest percentage of children in care. This area also has the highest percent of children (0-18) and youth (18-24) who receive income assistance. City Centre had the highest percentage of 18-year-olds who did not graduate.

	CHA1	CHA2	CHA3	CHA4	CHA5	CHA6
Children in Care, Dec 2005 (rate per 1,000 pop)	6.0	9.1	7.2	3.5	7.2	6.3
Percent of Children 0-18 Living in Families that Receive Income Assistance for More than 1 year – Sept 2005	1.5	8.8	3.7	.4	3.5	2.7
18-year-olds who did not graduate, Ave. 2003-2005	61.0	37.0	23.3	16.8	30.7	10.2
Percent of Youth 19-24 Receiving Income Assistance – Sept. 2005	1.3	9.8	2.8	.6	4.2	2.0

⁴⁴ The proportion of each region's household income that accrues to households earning less than the median income. In a situation of perfect equality, the bottom half (poorest) households would receive 50 percent of the total income.

Rates of dietary-related disease

Within the City of Vancouver, the Downtown Eastside (CHA2) has the highest rates of nutritionally-related disease including colorectal cancer, diabetes, and diseases of the circulatory system (red shading indicates a rate above the expected, based on provincial averages).

	CHA1	CHA2	CHA3	CHA4	CHA5	CHA6
Colorectal Cancer, Standardized Mortality Rate (SMR) ⁴⁵	1.06	1.33	.91	.76	1.01	1.00
Diabetes (SMR)	.79	1.37	1.16	.56	1.20	1.00
Diseases of the Circulatory System (SMR)	1.09	1.17	.96	.84	1.02	.92

Vital Statistics

Midtown (CHA5) has the highest birth rate; however, the highest rate of teen pregnancy is in the Downtown Eastside. Life expectancy is lowest in the Downtown Eastside and highest in the Westside (CHA4).

	CHA1	CHA2	CHA3	CHA4	CHA5	CHA6
Birth rate	8.02	8.70	10.85	8.33	11.05	10.10
Teen Pregnancy Rate	12.4	41.5	19.6	5.8	27.1	16.8
Life expectancy	79.7	73.6	81.4	83.3	81.0	82.7

Vulnerable Populations in Vancouver

⁴⁵ The SMR is the ratio of the number of deaths occurring to residents of a geographic area (Community Health Area) to the expected number of deaths in that area based on provincial age-specific mortality rates. An SMR of 1 shows that the observed deaths in the area are essentially what would be expected, based on provincial rates. An SMR greater than 1 indicates that the observed deaths are higher than expected; an SMR of less than 1 shows that the observed deaths are lower than expected.

Low-income

One of the primary factors related to food insecurity is low income. The low-income rate for both adults and children is highest in Vancouver, compared to all other major Canadian cities. For adults, the low-income rate (2004) was 17 percent and for children, 22 percent. Food insecurity among children can affect school performance, behavior, and mental health. In addition 37.4 percent of recent immigrants, 40.5 percent of Aboriginal people, and 43.7 percent of lone parents are below LICO and therefore these populations are at particular risk.⁴⁶

Homeless and Street Youth

In 2005, there were approximately 719 homeless people residing in shelters and another 591 living on the street in Vancouver. This total of 1,310 represents a 109 percent increase from 2002.⁴⁷ Almost all are adult men between the ages of 19 and 70. In addition, there are an estimated 45 homeless street youth aged 18 and under in Vancouver.⁴⁸ The male/ female ratio varies among neighbourhoods, ranging from no women in some areas to one third in others. Aboriginals are disproportionately represented. At least one quarter of the people found sleeping outside were Aboriginal, though only two percent of the city's population claims Aboriginal status. There are approximately 550 year-round shelter beds and 150 mats/beds added during the cold wet season, for a total of 700 beds during the winter months. Sixty percent of those living in shelters received government transfers as their main source of income, and 15 percent reported no source of income. In addition, there are 40,000 people (eight percent of the city's population) living in 20,500 households that are at risk of homelessness (i.e., they are in 'core need' and paying 50 percent or more of their income on shelter).⁴⁹

A recent study of homeless youth in Vancouver found that 59 percent of those aged 19 and younger and 49 percent of those between 19 and 24 reported being hungry due to a lack of food

⁴⁶ Heisz, A. (2006). Trends and Conditions in Census Metropolitan Areas. Powerpoint Presentation. Available on-line at: http://www.rvu.ca/dmdocuments/Stats_Can_DataChew_Presentation.ppt.

⁴⁷ Greater Vancouver Regional District. (2005). Homeless Count 2005, Preliminary Results. Available on-line: <http://www.gvrd.bc.ca/homelessness/research.htm>.

⁴⁸ Verdant. (2000) Homeless street youth in downtown south: a snapshot study. Vancouver, BC: City of Vancouver

⁴⁹ City of Vancouver. (2004). Homeless Action Plan. Social Planning Department. BC: City of Vancouver

at least once a month.⁵⁰ Street youth in Vancouver also report scavenging for food in dumpsters and shoplifting in order to obtain food.⁵¹

Injection Drug Users

In 2000, the number of injection drug users (IDUs) living in the DTES was estimated to be 4,700, with 12,000 in the Greater Vancouver region. However, IDUs who live outside the DTES may access services within the DTES, making it an important hub for resources. Injection drug users are among the populations most vulnerable to food insecurity because of drug-induced anorexia, changes in dietary patterns associated with drug dependency and the associated lifestyle, poverty, and infectious disease.⁵²

Aboriginals

There are approximately 10,500 Aboriginal people living in Vancouver.⁵³ The majority reside in the east side of the city. In 2001, there were an estimated 4,040 Aboriginal individuals living in CHA2 (which encompasses Strathcona, the DTES, and Grandview-Woodlands). Overall, the health status and life expectancy of Aboriginal people within Canada is significantly poorer than the general population.⁵⁴ For example, the life expectancy of Vancouver's Aboriginal residents is 67 for women and 59 for men (compared to 83 and 76 for non-Aboriginal Vancouverites).

Seniors

Citywide, seniors make up almost 13 percent of the population. However, in the neighbourhoods of Strathcona and Arbutus-Ridge, more than 20 percent of the population is comprised of seniors. In addition, there are heavy concentrations of seniors over the age of 65 living alone in CHA2,

⁵⁰McCreary Centre Society. (2002). *Between The Cracks: Homeless Youth In Vancouver*. Burnaby, BC: The McCreary Centre Society.

⁵¹McCarthy, B. (1995). *On the streets: youth in Vancouver*. Vancouver, BC: Ministry of Social Services.

⁵²Santolaria-Fernandez, J.L. et al. (1995). Nutritional Assessment Of Drug Addicts *Drug and Alcohol Dependence*.38: 11-18.

⁵³Vancouver Coastal Health. (2002). *Vancouver Community Profile*. Available on-line

http://www.vcn.bc.ca/vrhh/Down_Loads/VancouverCommunityProfile/VancouverCommunityProfile_Oct-2002.pdf

⁵⁴The gap in life expectancy between Aboriginal people and the general Canadian population, for instance, varies from six to 14 years. Health Canada found that infant mortality rates among Aboriginals were up to 3.5 times higher than the national rate. The neonatal mortality rate was up to two times higher, while the post-neonatal mortality rate was almost five times higher in the Aboriginal population than in the general Canadian population. Health Canada. 2001. *Statistical Profile on the Health of First Nations in Canada*. Ottawa: First Nations and Inuit Health Branch.

suggesting that this is an area where seniors may be particularly food insecure.⁵⁵ One study of at-risk seniors in the Lower Mainland found that the cost of food is a major issue for low-income seniors, many of whom are unable to pay for food because of high housing costs. While there are seniors' centres and neighbourhood houses that provide low-cost, nutritious meals, limitations on mobility may hinder seniors' ability to access these programmes or to go shopping for themselves.⁵⁶ Seniors may also be forced to purchase food in smaller quantities and rely on smaller, convenience-type stores. In addition, seniors may feel unsafe shopping outside of their immediate building or neighbourhood due to fear of violence or accidents. Finally, functional impairments may impede the preparation of food among the elderly.⁵⁷

People with Disabilities

A high percentage of people living in the DTES have physical or mental disabilities. While it is difficult to estimate the exact number of people with disabilities living in the DTES, one survey of SRO residents found that 16 percent were receiving disability benefits.⁵⁸ Another study found that 39 percent of single room occupancy (SRO) hotel or rooming house residents reported some form of physical disability (although not all were receiving benefits). Of this disabled group, 22 percent were seriously disabled, 33 percent were moderately disabled, and 45 percent were slightly disabled.⁵⁹ Homeless populations often have high rates of disability. A study conducted in Toronto estimated that 33 per cent of single men and as many as 75 percent of single women in hostels have mental illness.⁶⁰ Annual counts of the homeless in Vancouver have found that about one quarter of street homeless and sheltered homeless people have a mental illness.⁶¹

⁵⁵Vancouver Coastal Health. (2005). Community Health Area 2: A Health and Social Profile. Available on-line http://www.vch.ca/community/Docs/CHA2_percent20HealthSocial_percent20Profile_percent202_percent20v5_percent20final.pdf.

⁵⁶Hightower, H. C. et al. (2003). *Out of Sight, Out of Mind: The Plight of Seniors and Homelessness*. Vancouver, BC; Seniors Housing Information Program.

⁵⁷Payette, H. and B. Shatenstein. (2005). Determinants of Healthy Eating in Community-dwelling Elderly People. *Canadian Journal of Public Health* 96(3).

⁵⁸McLean, M. (2001). Vancouver Drug Use Epidemiology 2001, Canadian Community Epidemiology Network on Drug Use, Vancouver Site.

⁵⁹Butt, L. (1991). Single Room Occupancy Hotel Residents of Downtown Vancouver. Planning/Social Planning/Housing and Properties City of Vancouver. Available on-line: <http://www.city.vancouver.bc.ca/commsvcs/housing/pdf/ButtSRO.pdf>.

⁶⁰Golden, A., et al. (1999) Report of the Mayor's Homelessness Action Task Force: Taking Responsibility for Homelessness: An Action Plan for Toronto. City of Toronto.

⁶¹City of Vancouver. (2004). Draft Homeless Action Plan. Available on-line <http://www.city.vancouver.bc.ca/ctyclerk/cclerk/20041102/rr1.htm>.

People with HIV and AIDS

One recent study found that one out of five people in BC who are HIV-positive are also food insecure. This is five times higher than the prevalence of food insecurity among the general Canadian population. The strongest predictor for food insecurity is annual income. HIV-positive individuals earning \$10,000 or less were four times more likely to be hungry than individuals with an income of \$10,000 and above. Other risk factors for food insecurity in HIV-positive individuals were female gender, low education, aboriginal ethnicity, injection drug or alcohol use, unstable housing, and having children at home.⁶²

Recent Immigrants

As a group, recent immigrants in Vancouver and in particular refugees, are less likely to be in the workforce and more likely to be receiving social assistance.^{63,64} The issue of language as a barrier to food security among recent immigrants is particularly relevant in the CHA2 area. While six percent of Vancouver's population is not literate in English or French, this number is 13 percent for CHA2.⁶⁵

Neighbourhoods Vulnerable to Food Stress

In addition to community health areas, there are neighbourhoods within Vancouver that are vulnerable to food insecurity by virtue of the socioeconomic conditions and available food resources (charitable, community, urban agriculture, and retail). The analysis of neighbourhood food vulnerability is based upon maps and statistics obtained through the Human Early Learning Programme (HELP). The analysis of community food resources is based upon maps developed

⁶²Normén, L.K., et al. (2005). Food Insecurity and Hunger Are Prevalent among HIV-Positive Individuals in British Columbia, *Canada Journal of Nutrition* 135: 820–825.

⁶³Husbands, W. (1998). Immigration Status And Food Bank Assistance In The Greater Toronto Area. *Daily Bread Food Bank*. Available on-line: [http://ceris.metropolis.net/Virtual percent20Library/other/husbands1/husbands1.html](http://ceris.metropolis.net/Virtual%20Library/other/husbands1/husbands1.html).

⁶⁴Citizenship and Immigration Canada. (2001). Recent Immigrants in the Vancouver Metropolitan Area A Comparative Portrait Based on the 1996 Census. Available on-line: <http://www.cic.gc.ca/english/pdf/research-stats/1996-vancouver.pdf>.

⁶⁵Vancouver Coastal Health. (2002). Vancouver Community Profile. Available on-line http://www.vcn.bc.ca/vrhh/Down_Loads/VancouverCommunityProfile/VancouverCommunityProfile_Oct-2002.pdf.

as part of this project that display charitable, community, urban agriculture, and retail food sources (see maps 2 through 5).⁶⁶, ⁶⁷

Strathcona

Strathcona has the highest number of indicators for food insecurity. It has the highest percent of population without a grade nine education or a high school diploma. It has the lowest median family income and lone-parent family income. It also has the highest percentage of seniors at 26 percent. Strathcona also has the highest rate of government transfer payments and percent of population below the Low-Income Cut-Off (LICO). The neighbourhood has the highest percent of individuals who suffer from housing stress. The area has the second highest percent of Aboriginals. Approximately one fourth of the population is unemployed and one fourth consists of lone-parent families.

In terms of community food resources, Strathcona has 13 community kitchens but no direct access to a farmers' market. Strathcona also has a large number of charitable food providers including free and low-cost meals and shelters with meals. There are also two food bank depots. There is an abundance of grocery stores in the neighbourhood, especially in Chinatown. In terms of urban agriculture, Strathcona has three community gardens, two school gardens, and one rooftop garden. Finally, although the Urban Aboriginal Community Garden Kitchen is located on UBC land, it does serve residents of the DTES and surrounding areas.

Grandview-Woodlands

Grandview-Woodlands ranks second in terms of vulnerability to food insecurity. Grandview-Woodlands has the largest number of families in the city — 14,355 according to the 2001 Census. It has the highest percentage of Aboriginals, the highest rate of unemployment among families with small children, and the highest percentage of lone-families. It also has the second-lowest median family income and median income for lone-parent families. The neighbourhood

⁶⁶ Because food programs change constantly, it is not possible to describe them all. For example, there are a number of programs that provide food hampers to people that are not included in this analysis because they operate sporadically or only provide food on an “emergency basis” (e.g., in the case of eviction). Therefore, we only discuss Greater Vancouver Food Bank Depot sites and a few other selected locations that have ongoing programs.

⁶⁷ Because food programs change frequently and we were unable to capture all food programs within the city, these numbers and the corresponding analysis should be interpreted as suggestive.

also has the second lowest median family income and median income of lone-parent families. The neighbourhood has the second highest percent of the population below LICO. It has the third highest rate of aggregate income from government transfers and individuals experiencing housing stress.

Grandview-Woodlands has approximately five locations where people can access free or low-cost meals, and two shelters with meals. However, there are no food bank depots. They also have four community gardens, one rooftop, and four school gardens. There are four community kitchens in the neighbourhood. The area is also served by a diversity of retail stores.

Mount Pleasant

Mount Pleasant ranks third for vulnerability to food insecurity. It has the second highest rate of unemployment among families with small children and the second highest percentage of lone-parent families. It has the third lowest median family income and median income for lone-parents. It also has the third highest rate of persons below LICO and the third highest Aboriginal population. It also ranks third highest for housing stress.

Mount Pleasant has eight locations where people can access free or low-cost meals and one shelter that provides meals. There is also one food bank depot. The community has three community kitchens, six community gardens, and two school gardens. The neighbourhood also has a number of large, medium, and small stores.

Hastings-Sunrise

Hastings-Sunrise has the second-highest percentage of people who have income from transfer payments. It also has the second highest percent of population without a ninth grade education and without a high school diploma.

Hastings-Sunrise has one school garden, located on the border with Renfrew-Collingwood. It does, however, have three community kitchens. There are also two food bank depots in the community and five locations for accessing free or low-cost meals. There are, however, no

shelters that provide meals. There are fewer stores located in this neighbourhood than in those previously discussed.

Kensington-Cedar Cottage

Kensington-Cedar Cottage has 11,640 families, the third highest number in the city. It has the second highest percentage of population under the age of five. In addition, 15 percent of aggregate income comes from transfer payments. This neighbourhood also has the third highest rate of population without a ninth grade education and without a high school diploma.

Kensington-Cedar Cottage has three community kitchens and one farmers' market. There are also two shelters that provide meals and two places for free or low-cost meals and one food bank depot. In terms of urban agriculture, there are six school gardens and one community garden. There are a high number of grocery stores although they are concentrated along Kingsway.

Downtown

In the Downtown neighbourhood, 34.6 percent of households are below the LICO and almost half are experiencing housing stress (this is half the rate of Strathcona).

The Downtown has a large number of free and low-cost meals and shelters with meals and has one food bank depot in the neighbourhood. Although there are no school or community gardens, there are 13 rooftop gardens. There are also 14 community kitchens. Although there are no farmers' markets in the neighbourhood, there is easy access to the West End market. In addition, there are many grocery stores of varying sizes.

Sunset

In Sunset, approximately 15 percent of aggregate income is from transfer payments. The neighbourhood also has the highest percentage of the population under five years of age. Approximately one fourth of the population is 19 or under.

Sunset has two free or low-cost meal locations, but no other charitable, community, or urban agriculture food resources. There are a number of retail grocery stores but these are concentrated along the major streets.

Other Neighbourhoods

In addition to the neighbourhoods noted above that are likely most vulnerable to food insecurity, there are other parts of the city that rank high in one or two indicators. For example, both Oakridge and Marpole have a large percentage of population who are recent immigrants. Oakridge also has a large concentration of seniors, with 20 percent of the population 65 years or older. In Arbutus-Ridge, 22 percent of the population are seniors. In Renfrew-Collingwood, approximately 15 percent of the population receive income from transfer payments. Neighbourhoods with the greatest income inequality between female lone-parents and family income are West Point Gray, Kerrisdale, and Riley Park. Dunbar-Southlands has the highest percentage of the population 19 years of age or younger (26.2 percent).

There are also a number of areas that lack food resources. While charitable food providers tend to be located in the Downtown and Strathcona areas, there are other neighbourhoods that have few or no food programmes. According to interviews and focus groups, providers do not want to locate outside of the DTES because the number of clients is smaller and it is less economical to provide food in these outer areas. Some of the specific areas that were noted as lacking charitable food services include South Granville, Champlain Heights, UBC Endowment Lands and beaches, Kitsilano area, Mt Pleasant, Fraser Street, Waterfront to 41st, and the West End.

Among the neighbourhoods with one or no urban agriculture sites are Victoria-Fraserview, Killarney, Marpole, Oakridge, Arbutus Ridge, and Riley Park. These same neighbourhoods, along with Kitsilano, also lack community food resources. Killarney, Oakridge, West Point Grey, and Kerrisdale also have few grocery stores. Although these areas tend to have fewer socioeconomic indicators of food insecurity, there are populations that live within these areas (e.g., seniors, students, recent immigrants) who may be food insecure.

SECTION 3: Conditions Affecting Food Security in Vancouver

In this section, we discuss the various conditions that can affect community food security, including childcare, transportation, housing, as well as access to community and charitable programmes, urban agriculture, and grocery stores.

Childcare

In 2005, there were 8,892 full- and part-time childcare spaces in the City of Vancouver. This number provides space for 13 percent of children under the age of 13 in the city. There are 24 childcare centres that are defined as “inner-city” (meaning that they serve a population of high-need children and/or low-income families). According to an assessment of food and nutrition conducted in 2002, personnel in 95 percent of facilities felt that some of their children come to school hungry and all felt that families would benefit from a take-home food package. It was estimated that 80 percent of families using these childcare facilities utilized the food bank. However, at the time of the study, only 35 percent were sending leftover food home with the children.⁶⁸

Transportation

It is often necessary for people to travel outside of their neighbourhood to access *any* food. This can be difficult for a number of reasons. Although the majority of charitable, community, and retail food resources are accessible via public transportation, there are other barriers to accessing public transit, such as cost and time. It is also difficult to transport large quantities of food using public transit.

The current cost of transportation is up to \$130.00 for a monthly pass. While concession prices are lower (1-zone = \$1.50, 2-zones = \$2.00, 3 zones = \$3.00, monthly pass = \$40.00), they are only available to those 65 and older, those who have a permanent physical or cognitive

⁶⁸ Peters, Asia. (2003). Inner-city Childcare Facilities: Menu Assessment and Food and Nutrition Needs Assessment. Vancouver Coastal Health: Vancouver.

disability, and students ages 14 to 19. This excludes the homeless as well as the poor and working poor families.

There are also mobility issues for people with physical or mental disabilities, as well as for seniors. According to our interviews, some people with mental health difficulties may be uncomfortable leaving their immediate neighbourhood or even their building, which severely limits their ability to access food.

Housing

The cost and availability of housing has been shown to affect the ability to purchase healthy food.⁶⁹ High housing costs are affecting residents throughout the city. In 2005, the average rental cost for a two-bedroom apartment was \$1,192. According to interviews and focus groups, areas such as Kitsilano are particularly affected. A 2001 study conducted by the GVRD found that 31 percent of Vancouver residents are at risk of homelessness (households that are in core housing need are spending at least 50 percent of their income on housing).⁷⁰

In addition, the lack of social housing means that those who are very low-income must rely on Single Room Occupancy (SRO) hotels. However, even these locations are not affordable. In 2005, the average rate for a room in an SRO was \$361 per month. Social assistance provides \$325 for housing, which means that many residents of SROs are using funds intended for other purposes (such as food) to pay for housing.⁷¹ In addition, living in a typical SRO severely prohibits residents from preparing their own meals. Some may have a hot plate but lack a place to wash dishes; they have no place for food storage, and inconsistent electricity. In addition, because the availability of food is inconsistent, people may hoard food in their rooms; however, without proper storage, this food often becomes a health hazard.

⁶⁹ Long, Sharon. (2003) Hardship among the Uninsured: Choosing among Food, Housing, and Health Insurance. The Urban Institute.

⁷⁰GVRD (2005) Census Bulletin: At-Risk of Homelessness. Available on-line at:
http://www.gvrd.bc.ca/homelessness/pdfs/Census_bullet_INALH_Apr2005.pdf

⁷¹ Pivot Legal Society. (2005). Backgrounder on the City of Vancouver Low-Income Housing Survey and Pivot Legal Society.

Access to Technology

Access to the internet is an important resource for improving nutrition as it provides citizens with the means to learn about programmes and policies that affect their individual and community food security. For Vancouver, 73.5 percent of the population had access to the internet in 2003; 64.9 percent had access at home, 42.5 had access at work, and 23.5 had access at school.⁷² However, national statistics note that only 35 percent of those in the lowest quartile income category have access to the internet and only 24.9 percent of those 65 and older had access.⁷³ This suggests that these populations may require other means of communication in addition to the internet.

Community internet access sites are places where individuals can use the internet for a limited amount of time. Access sites have a range of services, such as community training labs and specialized equipment. These sites are located in schools, libraries, community centres, and similar organizations. Most of these sites have been set up under Industry Canada's Community Access Programme.⁷⁴ The following list provides community internet access sites in the DTES. Sites in other parts of the city can be found at <http://cap.vcn.bc.ca/>

- Britannia Outreach, 380 E. Hastings, Vancouver, V6A 1P4
- Carnegie Learning Centre, 401 Main Street, Vancouver, V6A 2T7
- Downtown Eastside Residents Association (DERA) (Call'N'Post), 12 East Hastings Street, Vancouver, V6A 1N1
- Downtown East Education Centre, 2425 Oxford Street, Vancouver, V5K 1M7
- Downtown Eastside Neighbourhood Safety Office, (NSO) 501 East Hastings Street, Vancouver, V6A 1P9
- Living Room Activity Drop In, 528 Powell St, Vancouver, V6A 1G9
- Lookout Shelter, 346 Alexander St, Vancouver, V6A 1G9
- Main and Hastings Housing Society, Bruce Erikson Place, 380 Main Street, Vancouver, V6A 2T1
- Main and Hastings Housing Society, The Oasis, 40 East Hastings Street, Vancouver,

⁷² <http://www40.statcan.ca/101/cst01/comm13t.htm>

⁷³ <http://www40.statcan.ca/101/cst01/comm10a.htm>

⁷⁴ <http://cap.vcn.bc.ca/>

V6A 1N1

- Native Health Society, 437 East Hastings St, Vancouver, V6A 1P5
- Pendera @ Pendrell Street, 133 West Pender Street, Vancouver, V6B 5N2
- Purple Thistle Community Society, #3 - 1163 Commercial Drive, Vancouver, V5L 3X3
- Ray-Cam Cooperative Community Centre, 920 East Hastings, Vancouver, V6A 3T1
- Seymour Elementary School, 1130 Keefer Street, Vancouver, V6A 1Z3
- Sheway Project of Vancouver, 533 East Hastings, Vancouver, V6A 1P9
- Strathcona Community Library, 592 East Pender Street, Vancouver, V6A 1V5
- Tellier Tower, 16 East Hastings Street, Vancouver, V6A 1N1
- The Door is Open, 373 East Cordova Street, Vancouver, V6A 114
- Tradeworks Training Centre, 816 Cordova Diversion, Vancouver, V6A 3R3
- Triage Emergency Services and Care Society, 707 Powell Street, Vancouver, V6A 1H5
- UBC Learning Exchange, 121 Main Street, Vancouver, V6A 2S5
- Vancouver Cooperative Radio, 110 - 360 Columbia Street, Vancouver, V6A 4J1

SECTION 4: Food Resources in Vancouver

Charitable Food Sector

The charitable food sector includes food re-distribution (e.g., food hampers), free or low-cost meals, and shelters with meals. There are approximately 100 charitable food programmes operating in the City of Vancouver (see Appendix C).⁷⁵ Together these providers serve between 5,000 and 6,000 meals a day.⁷⁶ Organizations that provide the greatest number of meals are the Dug-out Drop In Centre, the Evelyn Saller Centre, the Franciscan Sisters of Atonement, and the Carnegie Centre. In addition, the Greater Vancouver Food Bank (GVFB) provides food through their depots throughout the city and aids over 100 agencies within these areas, providing help to another 16,000 individuals weekly. In 2006, the Greater Vancouver Food Bank had 13 depots in Vancouver. These depots are open Tuesday through Friday, except the week social assistance cheques are issued. Individuals can access the food bank once a week and are provided with three to four days' worth of food.

According to the GVFB, a third of their recipients are children under the age of 18, while 40 percent are families. While the majority of those who receive food through the food bank are on assistance or are homeless, approximately 14 percent are employed and this number is increasing. In addition, approximately ten percent are seniors and six percent are students.⁷⁷ The Food Bank, in conjunction with Vancouver Coastal Health, is operating the Food 2 U programme in which volunteers deliver food bags to clients in the Downtown Eastside, Strathcona, and Grandview-Woodland neighbourhoods who are unable to stand in line-ups due to physical or mental injury or disability and who have no other means of accessing food.

As well as the GVFB, Quest serves as a “donated food broker.” In 2004–2005, Quest rescued \$7.15 million worth of food from the landfill and successfully redistributed it to 45,000 hungry

⁷⁵Because many programs open and close at various times or only operate at specific times, it is difficult to determine an exact number.

⁷⁶Based upon counts contained in the Families in Action database. This does not include the 9,000 people served by the Vancouver Food Bank per week.

⁷⁷Greater Vancouver Food Banks. (2005). Personal communication.

people per month.⁷⁸ They receive donations of excess food from over 235 food suppliers, such as grocery stores, bakeries, restaurants, farmers, wholesalers, producers, processors, and packagers. Quest redistributes the donated food to 70–80 social service agencies throughout the Lower Mainland, including food banks, community centers, neighbourhood houses, daycares, shelters, drug, alcohol, and HIV clinics, school programmes, and charities. The recipient group then makes a financial “counter-donation” of 30 percent of the retail value of the food, in-kind services and/or volunteer support to help Quest cover operational costs.

The charitable food system in Vancouver obtains funding from a number of public and private sources. Data collected in 2002 by Families in Action reveals that the primary contributors to charitable food providers⁷⁹ are Vancouver Coastal Health programmes, followed by federal sources (e.g., Health Canada), the provincial government (including the Ministry for Children and Families, Ministry of Human Resources, and the Ministry of Community, Aboriginal and Women’s Services), foundations (e.g., United Way, YWCA, and Vancouver Foundation), individual donations (such as fees for services), and the City of Vancouver. Business donors and gaming revenues each supported ten programmes and unions supported three programmes. Charitable Food Providers (CFPs) also obtain goods and services through in-kind donations. For most agencies, it is necessary to obtain resources from a wide range of funders because few funding sources provide support for facilities, staff, and food. For example, one drop-in centre obtained funding from businesses, foundations, unions, and individual donors in addition to the City of Vancouver. They also received in-kind donations of labour and services.

There are a number of different avenues through which food is provided to the charitable food system in Vancouver. Food may be purchased, donated, or obtained from the Vancouver Food Bank or Quest. The monthly amount that charitable food organizations spend on food ranges from \$70.00 to \$156,000, although there are a number that report no food costs. According to the Families in Action database, the most commonly mentioned source of donated food was from

⁷⁸ Quest Outreach Society. (16 February, 2006). “Who is Quest?”, <<http://www.questoutreach.org/>>

⁷⁹This list reflects 145 programs within 27 agencies or organizations that provide food through drop-in centres, food lines, neighbourhood houses, senior centres, food co-ops, community kitchens, youth centres, housing, and training programs. Childcare programs were not included in this analysis.

local grocery stores.⁸⁰ The most commonly mentioned stores were Sunrise, Norman's Eastside Food Co-op, and Army and Navy. Other sources of donated food included supermarkets such as Canadian Superstore, Safeway, and Costco, food distributors such as Sysco and Konings, individual donors, the GVFB, and Quest, food producers such as Kraus Brothers, businesses (e.g., Starbucks, Tim Hortons), churches, Food Runners, gardens (e.g., Plant a Row), the Vancouver School Board, and unions. Most charitable food providers rely on a combination of these food sources. For example, one charitable food provider obtained food from business and individual donors, local grocery stores, and food processors.

Although the quality of food provided through the charitable food sector (food banks, free meals, and shelters) is said to be improving as providers become educated about the role of nutrition, focus group respondents emphasized that *food is medicine*; specifically that food has a vital role to play in helping people obtain and maintain physical and mental health. This is particularly important for low-income populations who may already be suffering from poor health due to their socioeconomic status. Diseases such as HIV and AIDS, Hepatitis C, cancer, heart disease, and diabetes are all influenced by nutrition. In addition, proper nutrition can help people who have mental health problems.

“We are keeping people alive, but are we keeping them nourished? We provide free needles for drugs but don’t have food for them.”

One of the ongoing problems with food quality is the type of food that is donated. Often donated food consists of products that are either unacceptable to paying customers (e.g., old, damaged) or have been produced in too large a quantity (e.g., bread). As a result, donated food is lacking in fresh produce and dairy and is high in carbohydrates and fats. At the same time, food providers are often reluctant to refuse to accept a donation even if it is unacceptable because they may not receive any food from that donor in the future. According to one food provider,

⁸⁰This does not tell us how much food was obtained from each source but only that it is one of the sources utilized by an organization.

“Educating donors results in higher quality food, but may scare off potential donors if there are too many rules and guidelines around donations. We should provide info for donors so they can begin to make more informed, quality donations. Can still be respectful and thankful for what has been donated while sharing info about additional or future donations.”

Despite the apparent abundance of charitable food programmes, there are those who find it difficult to access these services. For example, it is difficult for residents in the DTES to conform to a set meal schedule. This is particularly true for those who have mental health problems or who are drug- or alcohol-addicted. According to focus group participants,

“People are choosing to eat only once a day so that their whole day isn’t taken up with accessing food — they have others things that they need to get done, such as medical appointments or phone calls.”

“Some have been so undernourished for so long that their bodies don’t notice hunger, so they don’t think about accessing food.”

Another issue that affects food access is the availability of acceptable food options. Food choices may be limited due to medical conditions (e.g., diabetes), allergies, religious restrictions on food, and cultural preferences. One focus group member noted,

“Choice in food is important. What do they want to eat? Can they eat it? [We should be] offering opportunities for individuals to make empowering choices and take baby steps [to better health and diet].”

Notable Programmes for Vulnerable Populations⁸¹

Carnegie Centre (open to all). This programme provides high-quality meals, three times a day, seven days a week at an inexpensive price. Volunteers are given coupons for food at the centre. Located at 401 Main St. in the DTES-Strathcona.

⁸¹ Most of these programs provide services to a wide range of vulnerable populations including low-income, homeless, IDU, and those with mental or physical disability.

Renfrew-Collingwood Breakfast Programme (low-income, homeless). This programme works to connect those that use the programme with the wider community and raise awareness of homelessness. The programme is located at 5288 Joyce St. in the Renfrew-Collingwood neighbourhood.

A Loving Spoonful (low-income with HIV or AIDS). This programme strives to provide personalized service for all of its clients. It provides high-quality food and recipients can choose what they want to eat. The programme operates throughout the City of Vancouver but most clients are in Strathcona, the Downtown, or West End.

The Community Food Sector

We defined community food resources as: community kitchens, community gardens, farmers' markets, good food boxes, and other programmes intended to increase the long-term food production and preparation capabilities of participants by providing opportunities for individuals to grow their own food (e.g., community gardens) or to support local farmers (e.g., farmers' markets). As such, these programmes are typically more time- and money-intensive and, without special efforts to include low-income groups (through subsidies), it may be difficult for them to participate.

Community Kitchens

A community kitchen is defined as a location that offers cooking and food preparation equipment to a group of individuals who meet regularly to cook meals. Community kitchens typically have ten to 15 participants at any one time. Participants are encouraged to be involved in menu selection, shopping, preparation, and cooking. There are an estimated 48 community kitchens in Vancouver.⁸² Most do not charge a fee and food is typically provided for participants through the GVFB or other funders. Some, however, do charge a small fee (\$3.00–\$5.00). Most kitchens meet on a weekly basis, but some may operate more or less frequently (see Appendix D). Some kitchens are specifically designed to address specific health problems such as diabetes, HIV, or

⁸² Community kitchens start up and close down frequently. This number is an approximation of what was available at the time of the research.

Hepatitis C, while a few provide food-related training to participants. Some kitchens are focused on providing services to particular populations, including new mothers, seniors, or those with mental health or substance abuse issues.

The role of community kitchens is to provide the opportunity to socialize and make personal connections in addition to accessing food. Focus group participants in particular felt it was positive to have contact with people outside of the neighbourhood.

“I like that (the volunteers) are not part of the neighbourhood and that they’re healthy, they aren’t using. They are a good influence, it’s refreshing. I like to be with people from outside of the neighbourhood.”

According to focus groups, many people already know how to cook but do not like to do that for themselves; they are not motivated. This gives them a chance to use their skills. However, community kitchens are difficult to organize. There are decisions about purchasing food, transportation, what to cook, storage. They are very difficult to run well, especially when the food needs to be provided for the participants.

“Our goal it to get people to really experience food, to have really fresh pineapple, asparagus, etc. — stuff they wouldn’t usually get to have in the neighbourhood.”

Notable Programmes for Vulnerable Populations

The Downtown Eastside Community Kitchens (DECK) and Neighbourhood Helpers (low-income, homeless, SRO residents, seniors, IDUs). These programmes focus specifically on residents of the DTES and surrounding neighbourhoods who may lack cooking facilities. There is a strong emphasis on providing food and a supportive environment. Programmes operate in the Strathcona, Downtown, and West End neighbourhoods.

Cooking Fun for Families (children in inner-city schools). This programme operates in twelve schools and community centres in Vancouver. It focuses on food skill-building

that supports families around a variety of issues including food security, life skills, socialization, and integration within communities. The programme has been endorsed as a core programme for inner city schools by the Inner City School Advisory Committee of the Vancouver School Board. Programmes are operating in various schools throughout Vancouver (see Appendix D).

The WATARI Latin American Lunch (Latin American Immigrants). This community kitchen provides a nutritious lunch for approximately 45 people. This programme was mentioned in focus groups as good blend of community and charitable food. Located at 410 E. Cordova (DTES-Strathcona).

The Urban Aboriginal Community Kitchen Garden Project (urban Aboriginals). This project combines community gardening with their kitchen, thereby providing a field-to-plate experience for participants. Located at UBC Farm.

Farmers' Markets

Farmers' markets are usually open-air locations where farmers can sell their produce to the public during specified hours. Products at such markets are typically locally grown and sold directly to the public. It has been suggested that farmers' markets could act as a mechanism to improve urban residents' access to fresh produce and serve as an alternative to food charity.⁸³ Research conducted at Vancouver's farmers' markets indicates that they are having a positive impact on both the consumption of healthy foods and on increasing markets for organic and/or locally grown foods. For example, a survey at the Trout Lake Market found that 54 percent of respondents indicated that their shopping habits have changed since attending the East Vancouver Farmers' Market. Of the 54 percent, 72 percent reported that they eat more fruits and vegetables (similar findings were noted from a survey at the West End Market). This suggests that the farmers' market is an effective vehicle for encouraging consumers to eat more fruits and vegetables. Additionally, 80 percent indicated that they eat more organic produce, while almost 90 percent have been inspired to look for BC-grown produce when shopping elsewhere.

⁸³Community Food Security Coalition. (1999). *Hot Peppers and Parking Lot Peaches: Evaluating Farmers' Markets in Low Income Communities*. Venice, CA: CFSC.

Vancouver currently has four farmers' markets. Three are run by Your Local Farmers' Market Society and are located in the Kensington-Cedar Cottage, Riley Park, and West End neighbourhoods. The fourth is located on Granville Island in the Fairview neighbourhood.⁸⁴ In comparison, Seattle has six markets (or 108,895 people for every market) and Portland as 11 (or 48,101 people for every market). In Vancouver, the ratio of people to markets is 158,750:1.

In terms of the proximity of farmers' markets to low-income neighbourhoods, all of the farmers' markets are in neighbourhoods that border low-income neighbourhoods, but none of the farmers' markets are actually *in* low-income neighbourhoods. In particular, people with low income in Strathcona and the Downtown Eastside would have difficulty getting to a farmers' market because they do not live in an area bordering on a neighbourhood with a farmers' market.

Another potential barrier to accessing farmers' markets is expense. An assessment of relative cost of Vancouver's farmers' market food compared to conventional sources (e.g., supermarkets or produce stands) was outside of the scope of this project. However, findings from preliminary research conducted in the farmers' markets in Greater Vancouver suggests that while organic food tends to be more expensive than conventionally-grown food (at both the farmers' market and grocery stores), conventionally-grown food at farmers' markets may not be more expensive and in some instances even costs less than some grocery stores.⁸⁵ At the same time, it is vital for farmers who sell at local markets to obtain a fair price for their product; the goal of creating a sustainable food system would not be served by suggesting that farmers lower their prices. Rather, in order to make farmers' markets more economically accessible, there should be support, in the form of coupons or vouchers, for those with lower-incomes to shop at the market.

⁸⁴The Trout Lake Farmers' Market is located at East 15th and Victoria Drive and operates from 9:00 a.m. to 2:00 p.m. Saturdays from May to October. The farmers' market is walking distance from the #20 bus line, which goes down Commercial Drive and Victoria Drive. The Market at Nat Bailey Stadium is located at 30th and Ontario Street and runs from 1:00 p.m. to 6:30 p.m. Wednesdays, June to October (Ontario is between Cambie and Main Street). It is approximately two blocks from the #3 bus which goes down Main Street. The West End (Nelson Park) Market is located at Comox Street between Bute and Thurlow. Its hours of operation are 9:30 a.m. to 2:00 p.m. Saturdays, June to October. This market is within walking distance from many downtown buses.

⁸⁵ Research conducted in the UK has found that the cost of organic food is actually less expensive in farmers' markets than in supermarkets.

Notable Programmes for Vulnerable Populations

Healthiest Babies Possible (HBP) (low-income pregnant women and women with young children) provides \$10 coupons that can be redeemed at the farmers' markets. Recipients can receive multiple coupons if they use them. In 2005, HBP spent \$600 on the programme, which provided coupons for between 40–50 mothers. This programme provides the opportunity for HBP participants to access fresh, local food and helps support farmers at the market. Located at Evergreen Community Health Centre (Renfrew-Collingwood) but serves women throughout Vancouver.

In the US, the Senior Farmers' Market Nutrition Programme provides access to “fresh, nutritious, unprepared, locally grown fruits, vegetables, and herbs from farmers' markets, roadside stands, and community-supported agriculture programmes to low-income seniors” by providing vouchers to seniors who are at least 60 years old and have an income of not more than 185 percent of the federal poverty income guidelines.⁸⁶ A similar programme has been developed in the UK in which local residents can register for vouchers that can be used at the farmers' market. In addition, volunteers shopped for those who were unable to reach the market themselves because of mobility limitations.⁸⁷

Community Gardens

There are a number of benefits that can be derived from community gardens. For example, in Milwaukee nearly half of the community gardeners said they saved between \$101 and \$300 per growing season with the food they raised in their garden plots. In Philadelphia, community gardeners reported an annual savings of \$700 dollars per family.⁸⁸ Community gardens can increase social capital and exercise among participants.⁸⁹ Other studies have shown that gardening on city parkland significantly increases the biological diversity of the site, further increasing the net benefits of community gardening. Vancouver's temperate climate and abundance of rainfall make gardening a perfect west coast activity. In focus groups, respondents

⁸⁶ <http://www.fns.usda.gov/wic/SeniorFMNP/SeniorFMNPoverview.htm>

⁸⁷ http://www.lfm.org.uk/news_issues.asp

⁸⁸ Community Food Security Coalition. (2003). *Urban Agriculture and Community Food Security in the United States: Farming from the City Center to the Urban Fringe*.

⁸⁹ Public Health Agency of Canada. (2004). *Community Gardens: Growing More than Just Vegetables*. Available on-line: <http://www.canadian-health-network.ca>.

noted that there is an enormous opportunity for health improvement amongst vulnerable populations through community gardens and other urban agriculture programmes, including food/nutrition, fresh air, exercise, therapy working with plants, as well as fostering intergenerational, cultural, and community connections.

There are 25 community gardens operating in the City of Vancouver (with an additional garden at Broadway and Clark being planned as well as an extension of the Arbutus Victory Garden). Most of these fall under a licence from the Vancouver Parks Board, the City of Vancouver Engineering Department Greenways Branch, or the Vancouver School Board. In addition, two gardens (Renfrew-Collingwood Food Security Institute and My Own Back Yard) are utilizing Translink land. However, some are on private property but allow public access (e.g., Salsbury). (See Appendix E) Licensing agents have their own policies governing operation of the site.

Community gardens range in size from as small as ten small plots (approx. 200 square feet) to as large as several acres. The largest and oldest community garden in Vancouver is the Strathcona Community garden, consisting of three interlinked gardens that encompass seven acres adjacent to downtown Vancouver. Overall, there are approximately 1,000 garden plots within the city.⁹⁰ Membership fluctuates at these gardens, as does the annual harvest; thus, a determination of the number of people per year who are fed from them is not possible within the scope of this study. However, given that over 1,000 member plots exist, with many being shared as family plots, we can safely estimate it is in the low thousands. Gardening occurs year round at community gardens in Vancouver, where several hardy varieties of greens can be grown through our mild winter. However, the bulk of food production occurs between March and October. In some instances, a small membership fee (e.g., \$10) is requested by the society operating the garden with additional fees per plot. Resources required to garden include: insurance, water, tools, seeds, and soil amendments, etc.; these resources are usually covered by the operating society through the annual plot and membership fees and other fundraising efforts. Most gardens use open-pollinated seeds for this purpose and frequently compost on-site to encourage low impact ecological gardening practices.

⁹⁰This is an increase from 1998 when Vancouver had a dozen community gardens with 580 community garden plots. See *Community Gardening in Major Canadian Cities: Toronto, Montreal and Vancouver, Compared* by Sean Cosgrove (1998). Available on-line; <http://www.cityfarmer.org/canadaCC.html>.

A survey of community gardens conducted by FORC in 2005 found that while three gardens reported having plots available, most had waiting lists, one as large as 70. Obtaining access to land for community gardens on Vancouver Parks Board land is difficult, generally because the focus of the Parks Board is on traditional recreational activities such as sports. Most recently, the Vancouver Food Policy Council in Cooperation with the City of Vancouver Councillors through Liaison Councillor Ladner have announced the creation of 2,010 new garden plots (community, rooftop, and private) in time for the 2010 Olympics.⁹¹

Notable Programmes for Vulnerable Populations

Strathcona Community Garden. (open to all). Several community organizations have plots within the Strathcona Community Garden including Carnegie, WISH, Strathcona Mental Health, and Crabtree Corner. This garden has served as “centre for excellence” in urban agriculture for the city.

Environmental Youth Alliance (EYA) sponsors a seed and nursery programme within their garden, so that low-income gardeners have access to free seeds and vegetable starts. Gardeners are encouraged to save their own seed and trade within the garden.

Other gardens that provide space specifically to low-income or other vulnerable populations, including low-income, urban Aboriginals, and street-involved youth, include:

- Renfrew-Collingwood Food Security Institute,
- Jacob’s Well Community Garden,
- EYA’s Youth and Means of Production Gardens,
- Urban Aboriginal Community Kitchen Garden Project.

⁹¹ In 2006, The Vancouver Food Policy Council reported a total of 900 garden plots exist in the City of Vancouver.

Other Urban Agriculture Programmes

Urban agriculture is defined “as the growing, processing, and distribution of food and other products through intensive plant cultivation and animal husbandry in and around cities.”⁹² This includes green belts, farming at the city’s edge, community gardens and vacant inner-city lots, fish farms, farm animals at public housing sites, municipal compost facilities, schoolyard greenhouses, restaurant-supported gardens, backyard orchards, rooftop gardens and beehives, and window box gardens — to name a few. Promoting urban agriculture through backyard, community and rooftop gardens is one strategy to enhance the food security of urban residents. In addition, such projects have been shown to improve social capital, provide exercise opportunities, increase housing prices, and decrease crime. Many cities continue to source a large percentage of their food from within city boundaries. Urban agriculture is strongest in developing countries such as Cuba. However, even in the Netherlands, 33 percent of total agricultural production is within urban lands. According to the Toronto Food Policy Council, the potential for urban Canadians to grow their own food is vastly underutilized.⁹³

Backyard (or other) Food Gardens

In 2002, the polling company Ipsos-Reid conducted a poll on behalf of City Farmer that found that 44 percent of people in Greater Vancouver grow at least some food for their household. However, as responses were limited to ‘yes’ and ‘no’, and results were not broken down by neighbourhood, income level, or other indicators, this figure provides little indication on whether household food production addresses food security in a meaningful way within the city.

Rooftop Food Gardens

Rooftop gardens provide an opportunity to increase local food production within the city. By growing food on rooftops, citizens have an opportunity to contribute to the local economy, increase their own food security, grow fresh organic produce, and decrease the time and transportation costs associated with importing food.⁹⁴

⁹²Community Food Security Coalition (2003) *Urban Agriculture and Community Food Security in the United States: Farming from the City Center to the Urban Fringe*.

⁹³Kortright, R. (2001) *Evaluating the Potential of Green Roof Agriculture*. City Farmer. Available on-line: <http://www.cityfarmer.org/greenpotential.html#green>.

⁹⁴Hobbs, H. (2002). *Greening Rooftops in the Garden City*. Lifecycles. Available on-line: <http://www.lifecyclesproject.ca/learningresources/rooftop/benefits.htm>.

There are approximately 21 food-producing roof gardens in Vancouver that provide food to vulnerable populations (see Appendix F), most of which are located in the downtown core. Most food growing gardens are on the rooftops of social housing projects or co-ops. Specifically, rooftop gardens are located at Bruce Erikson Place, the Portland Hotel, Lore Krill Co-op, Four Sisters Co-op, Gresham Hotel, and the Old Continental Hotel, all of which house vulnerable populations. Rooftop urban agriculture is a vastly under-tapped resource for food production in the city. According to focus group respondents, there are many other sites within the city that would be good for rooftop gardening, particularly in areas where local residents have limited access to other food-producing lands.

Other Community Food Resources

In addition to those food resources discussed above, there are a number of organizations that help to support the local food system through community shared agriculture, purchasing local food, and food retailing (food cooperatives, buying clubs, urban delivery, and farmers' markets), through the school system or through urban agriculture.

Community Shared Agriculture (CSA)

CSAs create connections between consumers and farmers. Consumers purchase shares in the season's harvest and in turn receive a weekly package of food. There appears to be two CSA farms operating in the Lower Mainland.

Nathan Creek Organic Farm in Abbotsford provides produce to an estimated 160 adults plus children. For the 2006 season, a full share for a 20-week season will cost between \$400.00 and \$500, depending upon when deposit is received. New members pay a \$25 bin fee and all members pay a \$25 transport levy, unless they pick up their share at the farm. Distributions take place on Tuesday afternoons and Saturday mornings at the farm, at Simon Fraser University, and at several other locations in Vancouver. Website: <http://www.nathancreek.com/>

Yarrow EcoVillage Farm in Chilliwack. Half shares are between \$175 and \$195 and the full share is between \$350 and \$400 depending upon when individuals sign up (discounts for those who sign early). Each week, the farm harvests fresh, organic produce according to what is seasonally available. CSA members may choose to pick up the harvest box Friday at the farm or Saturday at the East Vancouver Farmers' Market (plus a \$20 delivery fee if the box is delivered to the farmers' market). Boxes can be shared between friends or households. Website: <http://www.yarrowecovillage.ca/farm/csa.html>

Food cooperatives/buying clubs/urban delivery

Food cooperatives, buying clubs, and urban delivery systems are important pieces in the food security system. Each has the ability to provide a link between the consumer and the producer.

Good Food Box

A good food box programme operates like a large buying club with centralized buying and coordination. Although food boxes vary in terms of size, cost and contents all are intended to be both inexpensive and provide healthy food (typically fresh fruits and vegetables). In some instances, preference is given to local food and some good food boxes provide an organic option. Originating in Toronto, good food box programmes are now available in many parts of British Columbia, including the Lower Mainland.

While a good food box programme, sponsored by Vancouver Coastal Health, did operate in Vancouver until 2004, it has since ceased operation. The reasons for this included problems with food quality causing consumers to stop purchasing the boxes, and difficulties in maintaining core funding. There is one good food box programme, called the Fruit and Veggie Deal, operating out of Steeves Manor (a social housing complex for the elderly and disabled). This programme was started in 2004 because of dissatisfaction with the quality of food being provided through the Good Food Box Programme. The Fruit and Veggie Deal currently provides between 26 and 40 boxes to Steeves Manor residents and members of the surrounding community. Boxes cost either \$10 or \$15 dollars depending upon quantity and are available once a month. The programme is entirely volunteer run and therefore all money goes to purchasing food, which is done through a wholesaler.

In addition, there is a good food bag programme operated by Healthiest Babies Possible. In this programme, mothers are able to purchase three bags of groceries for \$5 a month. The programme buys its food from a wholesaler and they are sponsored by Pro-Organics. There are approximately 70 families participating in this programme. However, the food is not delivered; mothers must pick it up which is difficult for those without transportation or who have other difficulties.

Co-ops

A grocery co-op is an entity owned and managed by its members. Participants pool their money (called equity), and purchase food at lower prices than would be possible if purchasing elsewhere.

East End Food Co-op. A consumer-owned grocery store located on Commercial Drive. The purpose of this co-op is to distribute high quality and nutritious food and products in order to foster health and vitality in the community and to reflect an optimum number of fair prices.

Sprouts, the UBC Food Co-op. This is a not-for-profit, student-run co-operative. Their mission is to provide affordable organic and fair-trade products to the UBC community, to encourage and contribute to campus sustainability by supporting local producers and obtaining produce from the UBC Farm, and to inspire students to take an active role in their community's food system.

Buying Clubs

Buying clubs are made up of individuals, families, or organizations that place orders from a distributor who then delivers the food to a central location. Members typically work together to order and distribute the food.

Neighbours Organic Weekly (NOW BC). Neighbours is a network of organic buying clubs operating in the Greater Vancouver area. Each club has a neighbourhood drop

off/pick up location that minimizes travel. They support local farmers as much as possible.

Urban Delivery

Urban delivery services provide local and/or organic food to individuals at their home or office. By operating without “bricks and mortar” locations, these businesses can often provide food at a reduced cost.

Organics Delivery BC. Organics Delivery BC offers free home delivery to North Vancouver, West Vancouver, Vancouver, Burnaby, New Westminister, Coquitlam, Port Moody, and Port Coquitlam. They deliver organic produce at 30–40 percent less than retail costs and support small organic farmers

Green Earth Organics. Green Earth Organics is a home and office delivery service that offers weekly or bi-weekly delivery of organic fruits and vegetables and other organic foods to the customers’ door. Earth Organics buys local produce when possible and ten percent of sales goes to local non-profits.

Spud (Small Potatoes Urban Delivery). SPUD delivers organic produce and other grocery products throughout the GVRD. Over 50 percent of produce sold is locally sourced. Delivery is free with a purchase of \$35.00 or more; otherwise there is a \$3.00 delivery charge.

Organics at Home delivers organic produce and groceries to the North Shore, Vancouver, Burnaby, New Westminister, and Tri-Cities. The produce bins come in three sizes: personal (\$25), regular (\$35) and family (\$45).

Food Security Organizations

There are dozens of organizations active in food security efforts in Vancouver, including hunger advocacy and food security organizations and projects. It is difficult to estimate the number of food security organizations as they fluctuate annually, because many of these programmes do not

have secure funding. There are organizations active in every spectrum of Vancouver's food system, including food production, food waste diversion, food processing, advocacy, education, and policy development, research, networking, outreach, and social enterprise creation. Within the City of Vancouver, there are seven sustainable agriculture organizations, (see Appendix G). The largest and most active is Farm Folk/City Folk, which runs regular events on sustainable agriculture and food issues.

Food-Related Social Enterprises

Social enterprises are components of the social economy that are run like businesses, producing goods and services for the market economy, but which manage their operations and redirect their surpluses in pursuit of social and environmental goals. Starting a social enterprise is one way for a non-profit organization to obtain the funds necessary to provide services and avoid the need to rely on external funding. Food-related social enterprises may consist of catering, restaurants/cafes, or selling value-added food products, among others. The following are examples of the variety of food-related social enterprises.

- *Cook Studio Café (Food Service Resource Group)* has a café with a take-out deli and bakeshop that is run by students; a cook training facility for long term unemployed, at-risk youth (including various levels of cook training from youth internship, to professional level); and catering, commissary production (muffin batter, biscotti), and a food and beverage contract with the Edgewater casino.
- *Potluck Café/Potluck Catering* provides cafe meals on a sliding scale (a free meal programme, a low-income programme at \$2.50/meal, and market-rate meals); a catering business; and a training and employment programme (in meal preparation, serving, hosting, etc) for local area residents.
- *The South Vancouver First Cup Coffee Kiosk* is a partnership between South Vancouver Neighbourhood House (three days/ week) and Aunt Leah's (two days/week). For immigrant volunteers with South Vancouver Neighbourhood House, it provides an

opportunity to practice English and to gain experience to boost their resumes. School-aged students in Aunt Leah's programme gain cash handling and customer service experience to supplement restaurant and barista skills gained in their training facility.

- *Coast Social Enterprise Foundation* runs several businesses that provide employment opportunities for the recovery of persons with mental illness, including Catering with Heart (CWH), a lunch catering business. CWH provides employment on a part-time, flexible basis to accommodate those whose mental health is cyclical, to allow them increased income and to improve the stability of their daily lives while gaining work skills.
- *RayCam Community Centre Coffee Bar* provides an opportunity for youth to manage responsibility, gain work experience, and earn an honorarium (around \$5/ hr). They are trained in food-safe and kitchen management techniques and serve coffee, smoothies, hotdogs, pizza pops, etc. The coffee bar employs six youth, including one kitchen manager, and was able to break even after eight months of operation. The staff and community love the service.
- *Urban Seeds* is a programme developed by the Environmental Youth Alliance (EYA) for their Youth Garden at Cottonwood Community Gardens when they expanded their focus seven years ago to include growing and saving organic heritage seeds. Packets of seeds are available through EYA and at local retailers for \$2–3 each, and at low cost to schools, community groups, and those on low income. Urban Seeds and the garden help train young people in organic food production, seed saving, and plant propagation as a means to self sufficiency and career development in the environmental sector. The Youth Garden is an opportunity for youth to gain employment experience, build community, and connect with the land.

Retail Food Sector

There are approximately 361 grocery stores in the City of Vancouver. Nine percent of stores are defined as large (these are large chain or independently owned supermarkets such as Safeway or T and T), 13 percent are medium (independently-run, smaller supermarkets), 34 percent are small (small markets often specializing in the cuisine of a particular population), and 43 percent are the smallest size (convenience stores).

Grocery stores are most heavily concentrated in the downtown core (the West End, Downtown, and Strathcona). There are also shopping streets that have a variety of small, medium, and large stores in Grandview-Woodlands, Mount Pleasant, Kitsilano, and Kensington-Cedar Cottage (map 5). However, there are also a number of neighbourhoods that have relatively poor access to grocery stores, such as Victoria-Fraserview, Sunset, Killarney, Hastings-Sunrise, and Oakridge.

Although most grocery stores are accessible via public transit, there are a number of neighbourhoods within the city that do not have a medium or large store within walking distance (500 meters). These include Victoria-Fraserview, which does not have any large or medium-sized stores, Oakridge, Killarney, West Point Grey, Grandview-Woodlands, Sunset, and the western side of Strathcona (map 6). Residents in these neighbourhoods must drive or take public transit to obtain a wide range of food, which may be particularly challenging for those with mobility barriers.

According to the 2005 *Cost of Eating in BC* report, the average monthly cost to feed a family of four (two parents, two children) from the Nutritious Food Basket (NFB) is \$654, up 3.5 percent from last year. A family with the average household income of \$66,900 would spend approximately 15 percent of its budget to purchase the NFB. However, a family with low-income (\$20,160) would pay 29 percent of its budget for the same basket of groceries and a family on income assistance would pay 44 percent of its budget for food.⁹⁵

The Vancouver Food System Assessment provides more detailed information on food prices within the city. The weekly cost in Vancouver to purchase the foods in Health Canada's

⁹⁵ These figures were based upon families paying \$875 dollars a month on rent for a three-bedroom apartment. However, the average rent for a two-bedroom apartment in Vancouver is \$1,450 (2005). Even families paying at the low end of the rental market are likely to be spending around \$1,000 for rent.

Nutritious Food Basket for a family of four (two adults and two children under 16) varied from \$130 to \$177 in the seven neighbourhoods sampled, a difference of 26 percent. Prices were most expensive in high-income neighbourhoods, less expensive in middle-income neighbourhoods, and least expensive in the lower-income neighbourhoods. A significant portion of the price differential was accounted for by higher prices for meat, fish, and produce in high- and middle-income neighbourhoods. When these foods were removed from the calculations, foods from middle-income and low-income neighbourhoods were roughly equal in price, while foods from high-income neighbourhoods were about ten percent higher in cost.

Although food was less expensive in lower-income neighbourhoods, low-income residents have difficulty affording food regardless of where they reside. The cost of purchasing the foods in the Nutritious Food Basket ranged from 7.3 percent of family income in Dunbar to 21.2 percent in Strathcona. The cost of the Nutritious Food Basket for a family of four whose income was at the level of the Low Income Cut-off (for 2003) ranged from 21.5 percent to 29 percent in the seven neighbourhoods. This is higher than the 16 percent a family of four with an average income would spend on the same basket of food.⁹⁶ Furthermore, a family of four on income assistance in Vancouver would need to spend between 41 percent to 51 percent of their income to purchase the foods in the Nutritious Food Basket.⁹⁷

In order to determine if certain food items were more expensive in various neighbourhoods, we examined the average price for six categories: dairy and eggs, meat and fish, other protein (legumes), grains, produce, and processed foods. We were particularly interested in determining which food categories were higher or lower priced in Strathcona than the mean. As shown in Chart 5, the prices for meat and fish (\$34.79 in Strathcona vs. \$38.01 for the city mean) and produce (\$37.40 in Strathcona vs. \$46.17 for the mean) were less expensive in Strathcona than the average. Grains were slightly more expensive in Strathcona (\$32.46 in Strathcona vs. \$30.92 for the mean). Other categories were very similar in price.

⁹⁶Dieticians of Canada (2004) Cost of Eating in BC Impact of a low income on food security and health. Available on-line http://www.bcasw.org/currentnewsPDF/coeibc2004_fullreport.pdf.

⁹⁷According to the Dieticians of Canada, a family of four on income assistance would pay approximately 42 percent of their income on food.

Notable Programmes for Vulnerable Populations

The **Washington Community Market** has been in operation since 1975 but moved in 2004 from its former location at the Downtown Community Health Clinic. This store is funded by Vancouver Coastal Health and provides a range of packaged foods to residents of the DTES. The market serves approximately 150 customers a day; for the most part people come on foot. The store also holds cash for their customers as a safeguard against robbery and to ensure that customers do not run out of money. Food is purchased in bulk and then repackaged into amounts that are usable by customers who may have little or no storage (e.g., baggies of laundry detergent or single rolls of toilet paper). They do not, however, provide fresh produce as they feel that local merchants are already addressing this need. Prices for staples such as bread, milk, and eggs are kept low but the store charges more for non-essential items like chocolate and other junk food. Food is kept behind the counter to discourage shoplifting; however, this is very labour-intensive.

Programmes elsewhere that have attempted to increase access to food in underserved locations include **People's Grocery** (Oakland, CA), which has a mobile grocery van and “good neighbourhood” programmes in which small stores are encouraged to devote a greater percentage of their shelf space to health food.

Food Diversion and Composting

The issue of food diversion, reclamation, and composting are critical for the health and well-being of Vancouver residents. First, food donation to charitable organizations is a means to avoid waste and help feed those who are food insecure. However, this food must be healthy, acceptable, and provided in an ethical manner (see food provider interview and focus group results). In addition, there are two primary concerns regarding greenhouse gas (GHG) emissions as they relate to inedible food waste. The first is related to the GHG created by trucks transporting food waste — mainly CO², but also other chemical pollutants. In addition, GHG emissions are created by food waste via anaerobic decomposition at landfill sites — mainly methane (CH⁴).

According to a recent pilot survey (conducted by Environmental Youth Alliance) of ten retail grocers, 90 percent gave edible food away to food recovery programmes such as Quest and Food Runners, or to individual groups or people in need.

Four out of eight restaurants surveyed (50 percent) gave food away to similar programmes. On the other hand, inedible food waste was usually not composted. Fifty percent of food retailers do not compost because they feel they produce too little waste to bother or because they have a low understanding of options for composting and/or no safe way to store compost. In addition, only one of the eight restaurants we surveyed composted their waste.⁹⁸ Another reason for not composting is the fact that waste management companies will not pick up from restaurants that have smaller amounts of compostable waste. Many restaurants claimed that they have very little food waste left to compost.

This study also found that among food processors, only 33 percent (three out of nine) donated food and that 11 percent (one out of nine) composted inedible food. The study concludes that food that is being given away or composted is being done locally and informally (given to customers as samples, given to families that owners/ employees know, neighbours coming around asking for compost). This study also found that food processors are not aware of the options for composting or for giving food away such as the food bank services, QUEST, or Food Runners. Finally, the study surveyed 37 charitable food providers and found that the majority (57 percent) use some recovered food. This demonstrates that recovered food is an important food source for poverty relief in Vancouver. Main sources of donated food were Food Runners, Quest, and individual companies such as Cobbs, Capers, Safeway, and Starbucks.

Overall, there is still a significant amount of organic compostable waste going into the city's waste stream that could be diverted through eating or composting before it goes to the landfill. In total, food waste contributes to 16.47 percent of waste found in GVRD landfills: 46.66 percent of

⁹⁸ Vancouver Food Policy Council (2006) Food Diversion Report. Environmental Youth Alliance. Report used with permission.

curbside waste is organic; 46.97 percent residential drop off waste is organic waste; 37.86 percent of industrial, commercial, and institutional waste is organic.⁹⁹

Since 1990, the City of Vancouver has sold approximately 36,900 backyard composters for a subsidized rate of \$25¹⁰⁰. That is about 43 percent of the single-family properties in Vancouver. There is also an unknown percentage of people who bought composters through retail outlets or built their own. In terms of use, a Vancouver survey conducted in 1999 indicated that about 36 percent of single-family properties in Vancouver had used a backyard composter. Vancouver has sold 3,900 worm compost bins, which is about three percent of the 130,000 multi-family dwelling units¹⁰¹.

City and School Food Policies and Programmes

City of Vancouver Food Policy

There are a number of areas in which the City of Vancouver affects food access include by-laws, zoning and land-use planning, and other food-related policies. The Vancouver Food Policy Council was created in 2004 in order to oversee, coordinate food policy, and to make recommendations.

The Vancouver Food Policy Council (VFPC) “supports the development of a just and sustainable food system for the City of Vancouver that fosters equitable food production, distribution and consumption; nutrition; community development, and environmental health. The mandate of the VFPC is to act as an advisory, advocacy, and policy development entity for the City of Vancouver. The primary goal of the Vancouver Food Policy Council (VFPC) is to examine the operation of a local food system and provide ideas and policy recommendations for how it can be improved.”

In addition to education and awareness-raising strategies, the Vancouver Food Policy Council

⁹⁹ Ibid.

¹⁰⁰ Moffit, Lindsay - Recycling Coordinator Solid Waste Management. <lindsay.moffit@vancouver.ca> “Home Composting in Vancouver” Personal Email. (April 7, 2006)

¹⁰¹ Ibid.

works on specific projects and goals in support of issues and action items developed in the *Food Action Plan*. These work areas are facilitated by food policy staff. Currently, the VFPC has identified four priority work areas including:

- increasing access to groceries for residents of Vancouver;
- institutional food purchasing policy for public facilities;
- recovery, reuse, and recycling of food;
- food charter for the City of Vancouver.

The priority work areas build on the expertise of community-based organizations that have been developing and delivering food-related programmes and services in Vancouver for over a decade.

In addition, there are a number of city by-laws and resolutions that affect food access including those related to urban agriculture, food retail, and farmers' markets as well as charitable food provision. Descriptions of some of the more relevant documents are highlighted below. For more information see *City of Vancouver By-laws, Policies, Guidelines and Decisions Related to the Food System*.¹⁰²

Urban Agriculture

Zoning and Development By-law No. 3575

RA-1 District Schedule (Limited Agriculture)

The RA-1 zoning designation refers to the agricultural district in Southlands. The zoning district is intended to “maintain and encourage the semi-rural, equestrian, and limited agricultural nature” of Southlands. Permitted land uses include greenhouses, stables, riding, golf courses, bed and breakfasts, marinas, parks or playgrounds, nurseries, and one-family dwellings, as well as some other buildings and retail.

<http://www.city.vancouver.bc.ca/commsvcs/by-laws/zoning/ra-1.pdf>

Health By-law No. 6580

This health by-law includes a section regulating the keeping of livestock and other animals

¹⁰²<http://www.city.vancouver.bc.ca/COMMSVCS/socialplanning/initiatives/foodpolicy/pdf/foodbylaws.pdf>

within the city. Section 4.1 of the Health By-law, regarding sanitation, states: *No person shall keep or permit to be harboured any horses, donkeys, cattle, swine, sheep or goats, or any live poultry or fowl, including ducks, geese, turkeys, chickens, pheasants or quail, or operate any apiary or otherwise keep bees for any purpose in the city, except that this prohibition shall not apply to a licensed pet shop or kennel, zoological park, research laboratory, veterinary hospital or slaughter house within the meaning of or where otherwise permitted by, the Zoning and Development By-law, unless otherwise stated within this By-law.*

<http://iwww.city.vancouver.bc.ca/bylaws/13376.htm>

Date last amended: July 25, 2000

Note: In 2005, Council repealed from Section 4.1 of the Health By-law the prohibition against operating an apiary or keeping of bees in the City of Vancouver.

Street Tree By-law No. 5985

The street tree by-law regulates the planting and care of trees on city boulevards. The by-law authorizes the Board of Parks and Recreation as the primary body responsible for care of street trees. Planting of street trees also requires written permission from the City Engineer. Permitted species of trees (e.g., fruit or nut trees) are not referred to.

<http://iwww.city.vancouver.bc.ca/by-laws/10249v1.htm>

Date last amended: September 1, 1992

Note: At the Vancouver Park Board meeting on Monday, February 9, 2004, a motion was passed requesting staff to explore the possibility of planting fruit trees along streets, community gardens, and parks. Options for implementation of this motion are being explored.

Parks Board Community Gardens Policy

This policy outlines the Parks Board's support for community gardens and describes the conditions that apply to park land that is converted to community gardens. The policy also outlines procedures to be followed when establishing a new community garden. A community garden is defined as a *community environmental education programme operated by a non-profit society.*

<http://www.city.vancouver.bc.ca/parks/info/policy/comgardn.htm>

Date adopted: 1996

Engineering Department Green Streets Programme

Planting, Maintenance, and Safety Guidelines for Street Gardens

These guidelines provide suggestions to citizens caring for gardens on street boulevards and in traffic circles regarding choice of plants, weeding and watering, etc. The guidelines do not prohibit cultivation of food plants, but do include height restrictions. However, the list of recommended plants provided for street gardens includes primarily ornamental plants.

<http://www.city.vancouver.bc.ca/greenstreets/guidelines.htm>, and
greenstreets@city.vancouver.bc.ca

2,010 Garden Plots by 2010 Resolution (VanRIMS No. 08-8000-01/08-3000-13)

This resolution, passed by Vancouver City Council in May 2006, states that the City of Vancouver, with the Vancouver Food Policy Council as a key partner, work together with the Vancouver School Board, the Board of Parks and Recreation, community groups, neighbourhood organizations, non-profit groups, individual citizens, and other interested parties to create 2,010 new food-producing garden plots in the city by January 1, 2010 as an Olympic legacy, and that the City of Vancouver challenge other municipalities in the GVRD to do the same.

Southeast False Creek Urban Agriculture Strategy

The Urban Agriculture Strategy was one of four studies required by the policy statement for Southeast False Creek. The report presents a series of options for food production, processing, and distribution in Southeast False Creek, as well as recommendations for implementing these options.

<http://homepage.mac.com/cityfarmer/SEFCUrbanAgStudyFINAL.pdf>

Date completed: November, 2002

Update on Southeast False Creek Official Development Plan (ODP) Planning Process

This report summarizes the work to date on the Southeast False Creek (SEFC) Official Development Plan (ODP). Staff recommendations related to urban agriculture at SEFC include: community gardens (approximately one acre) to be included in the park; agricultural

landscaping; a farmers' market; soil remediation; space for gardening (podium rooftops, balconies); and; a commercial greenhouse demonstration project.

Report Authors: K. Hiebert/I. Smith Phone: 604.871.6066 or 604.873.7846

<http://iwww.city.vancouver.bc.ca/ctyclerk/cclerk/20040311/pe3.htm>

Food Retail and Farmers' Markets

Distribution (and Marketing) By-laws

License By-law No. 4450

The license by-law outlines licensing requirements for business operators in Vancouver, as well as specific terms of operation for a number of businesses. All businesses operating in the City of Vancouver require a license. Of relevance to food policy are references to farmers' markets, caterers, restaurants, and food service outlets included in the by-law. The definition of a farmers' market is: *an open-air market, without permanent structures, operated by a non-profit society, and limited to the selling of fresh fruits and vegetables and prepared foods and crafts*. License fees for farmers' markets are listed at \$10.00.

<http://iwww.city.vancouver.bc.ca/bylaws/12353.htm>

Date last amended: April 20, 2004

Street Vending Bylaw No. 4781

This by-law outlines the regulations for mobile food vending units. A mobile food vending unit is described as: *a mobile motorized or pedal powered vehicle, bicycle, or other unit used for the sale of non-alcoholic drinks and prepared pre-packaged foods including items such as sandwiches, potato chips, and chocolate bars, and frozen novelty products including items such as ice cream bars, popsicles, yogurt bars, and similar products*. Applications for mobile food units are to be directed toward the General Manager of Engineering Services.

<http://iwww.city.vancouver.bc.ca/bylaws/11637.htm>

Date last amended: January 15, 2004

Health Bylaw No. 6580

The health by-law outlines regulations regarding the sourcing, preparation, handling, storage and sale of food. Specific regulations regarding the sale of meat and dairy products are also included.

<http://iwww.city.vancouver.bc.ca/bylaws/13376.htm>

Date last amended: July 25, 2000

Director of Environmental Health Recommendations: Permitted Food Sales at Farmers' Markets

This policy report was completed in response to a request from the East Vancouver Farmers' Market for permission to include the sale of pre-packaged fresh meats and cheese products, from approved, government-inspected sources. Permission was granted by the Standing Committee on Planning and Environment on March 25, 1999, and the Director of Environmental Health was requested to amend the Health Board's Farmers' Market Guidelines accordingly.

Report: <http://iwww.city.vancouver.bc.ca/ctyclerk/cclerk/990325/pe1.htm>

Date of decision: March 25, 1999

Information Report: Supermarkets in Vancouver

This report describes the changes in food supermarkets and food retailing in Vancouver between 1980 and 1998, and the incidence of restrictive covenants on former supermarket sites.

Covenants are put in place by supermarket chains that are closing stores to restrict the floor space that can be dedicated to food sales for off-site consumption, thereby limiting competition that might affect nearby supermarkets also owned by the chain. The report concludes that covenants restricting food sales placed on former supermarket properties (by Safeway, etc.) are preventing diversification of food retailing businesses (which is contrary to CityPlan and the Community Visions processes in Dunbar and Kensington-Cedar Cottage neighbourhoods). However, no legal resources are available to the City to remove these covenants. Notable changes in food retailing in Vancouver during the study period include a "thinning out" of supermarkets, a loss of supermarkets in three neighbourhoods, as well as an overall increase in large/mega stores and a decrease in small and medium stores.

Authors: P. French; C. Buckham Phone: 873-7041/873-7256

<http://iwww.city.vancouver.bc.ca/ctyclerk/cclerk/981117/P1.HTM>

Date submitted: November 03, 1998

Charitable Food Provision Policies, Guidelines, and Decisions

Award of Food Service Contract for the Evelyne Saller Centre

This report includes a proposal to award a five-year food service contract for Evelyne Saller Centre to Aramark Canada Ltd. (funding for centre comes from the Provincial Ministry of Human Resources). A number of criteria for selecting the contractor are listed, including: the ability to provide cost effective, wholesome, nutritious, and varied menus; as well as plans to support Downtown Eastside vendors; involvement in the community, etc.

Author: Ray Stensrud Phone: 873-7437

<http://iwww.city.vancouver.bc.ca/ctyclerk/cclerk/020910/a8.htm>

Date of decision: September 10, 2002

School Food Programmes

Schools in Vancouver provide another site where food can be accessed by vulnerable children and their families through meal programmes, education and gardening.

School Gardens

School gardens can provide many benefits to a school and its neighbourhood. It can add biodiversity and interesting landscaping to the school ground. It can bring in positive foot traffic and attract eyes to the school. If community members have access to plots, it gives them a reason and sense of purpose for coming to the school. Finally, it improves knowledge about healthy food and nutritional intake.

Currently, 26 schools (25 elementary and one high school) grow some food on site, mostly culinary herbs or berries. Approximately eight schools have food-growing programmes where children participate in food growing activities at school as a regular part of the curriculum (Grandview, Queen Alexander, Lord Roberts, Tennyson, Tyee, U-Hill elementary schools and Vancouver Technical high school). Most school gardens in Vancouver are at elementary schools, although two high schools (Windermere and David Thompson) have plans in the design stage for food gardens. The Vancouver School Board has a policy for food growing on school grounds

that determines garden size, fencing, pesticide/herbicide usage, and maintenance issues.¹⁰³ Great effort is required to get a school garden established, with the bulk of the cost being absorbed by sources outside the Vancouver School Board, such as Parent Advisory Councils, environmental groups, foundations, and other sponsors.

School gardens that serve children in inner-city schools include Grandview/Uuqinak'uuh Spirit of Nature Community Gardens, Queen Alexander, MacDonald Elementary, Strathcona Elementary, and Seymour Elementary.

Although school gardens are seen as a way to engage children with food production and healthy eating, there are problems with some school gardens at inner-city schools. Interviewees suggested that the long-term ongoing maintenance of a school garden cannot be underestimated; it is a big challenge because of the high level of vandalism and thievery (of food, hardware, etc). At one school, there is a problem with sight lines due to the high level of shrubbery as well as difficulty with hazardous waste (needles and condoms). Regular sweeps do not always catch all the hazardous waste, with which children can come into contact when they enter the garden. Other issues include continuity of staff and resources in order to link curriculum with the garden.

¹⁰³ Vancouver School Board Garden Plots on School Grounds – Regulations 1) the plan size of the garden should have a maximum area of approximately 9 metres (100 square feet) and sections with dimensions of approximately 3 m by 3 m (10 ft. by 10 ft.) and, therefore, larger areas may only be considered under exceptional circumstances; 2) the proposed site must be approved by the Board Grounds Section, school staff, and nearby residents; 3) the Board will assume no liability or responsibility for the development or on-going operation of the garden; 4) the garden plot must be fenced to a specified type and height, notably a chain link fence with a locking gate, and the height of the fence will be a minimum of 1.2 meters (4 feet) and a maximum of 1.82 meters (6 feet); 5) the arrangements for provision of water service to the garden is the responsibility of the school, so the Board will not maintain or provide water service to the garden; 6) all site preparation, fencing, and other costs incurred by the Board, as requested, will be reimbursed by the school; 7) all materials, including soil, compost, etc., will be kept within the enclosed garden area; 8) no restricted substances are to be kept, used or brought onto the grounds and, in compliance with Board policy, no insecticides or pesticides are to be used; 9) the overall condition and appearance of the garden must be maintained to the satisfaction of the Board's Grounds Supervisor, and the school must ensure there is assigned responsibility for maintaining the garden throughout the year, including the summer break; 10) the administrator or other designated school staff member will be the primary contact person for any directions or communications from the Board staff, including any changes to the garden, annual clean-up activities, and expansion or reclamation; 11) the decision to remove or reclaim the garden plot will be made by the principal, in consultation with the staff and Parent Advisory Council, and the costs for restoration will be the responsibility of the school; 12) the associate superintendent - area, in consultation with the Maintenance and Construction Division, will give approval prior to the installation or removal of any garden plot, 13) A request for a start-up grant of up to 50 percent of capital costs, not exceeding \$500, may be directed to the Secretary-Treasurer, following approval of the project. This grant may be provided from the non-shareable creative play area fund, if available. Available on-line: <http://www.vsb.bc.ca/districtinfo/policies/f/fmrgardenplotsschoolgrounds.htm>.

School meal programmes

There are 28 elementary schools that have a lunch programme. Most of these programmes charge \$50 a month or allow students to pay what they can afford by donation. Typical meals include a protein dish (meat or cheese), a grain dish (bun, tortilla, graham wafer), a vegetable and/or fruit dish, and a dairy offering (usually milk). There are 14 school breakfast programmes. Seven of these programmes request a donation, six are free, and one charges \$5 a month (see Appendix H). Whereas the lunch programmes are catered, the breakfast programme staff prepares the breakfast and organizes the programme. Churches, charitable foundations, and private industry fund the breakfast programmes.

Elementary School Agricultural Education

Elementary school agricultural education programmes provide another opportunity for Vancouver school students to link with food growing experiences. There are approximately 13 programmes which service Vancouver, including bee farms, milking operations, organic farms, orchards, and animal husbandry operations. Most of these programmes have a cost ranging from \$3 to \$8 per student (see Appendix I).

The School Fruit and Vegetable Programme

The school fruit and vegetable programme will provide fruit and vegetable snacks to all students twice a week along with information to children at elementary schools around the province. The fruits and vegetables to be served in the pilot study will be grown in B.C., subject to availability. Two elementary schools in each of the five provincial health authority areas were chosen as pilots in September 2005. In Vancouver, these schools are Britannia Community Elementary School, SD 39, and Champlain Heights Elementary School, SD 39.

Junk Food Policies

In 2005, the Ministry of Health and Ministry of Education developed Guidelines for Food and Beverage Sales in BC Schools. These guidelines apply to foods and beverages sold to students in all school locations, including vending machines, school stores and cafeterias, and at fundraisers and other special events. They support broader policies around school nutrition by dividing foods and beverages typically sold in schools into four categories:

- Not Recommended (e.g., candies, soft drink);
- Choose Least (foods that are low in nutrients such as iron and calcium and highly salted, sweetened, or processed)
- Choose Sometimes (e.g., food that is moderately salted, sweetened, or processed such as canned fruit in light syrup),
- Choose Most (foods highest in nutrients, lowest in unhealthy components, and the least processed).

By 2009, schools and districts will be required to ensure that, of the foods and beverages sold in schools, at least 50 percent are in the Choose Most category; 40 to 50 percent are in the Choose Sometimes category; and no more than ten percent are in the Choose Least category. Foods in the Not Recommended category are to be eliminated from schools by 2009.

Under the guidelines, a school that has ten slots in a vending machine could fill five slots with products from the Choose Most category, four with Choose Sometimes products and one with Choose Least foods and beverages. Products from the Not Recommended group would not be offered to students.¹⁰⁴

¹⁰⁴ http://www.bced.gov.bc.ca/health/guidelines_sales.pdf

Vancouver Food System Gap Analysis

Information contained in this gap analysis was obtained from the interviews, focus groups, and community forum described in Appendix A. In each of these events, respondents were asked to reflect upon the current food security situation for vulnerable populations and identify gaps that exist within this system.

Overarching Food Security Issues

- The need for food programmes is at least in part due to the lack of comprehensive social policy that provides for suitable housing, a livable wage, adequate social assistance, and that acknowledges the basic right to a safe, healthy, and reliable food supply.
- Food is not viewed as an integral part of health and therefore does not play a large role within the healthcare sector. Coordination is needed among food, health, and social services.
- There is a lack of charitable and community food programmes in several parts of the city, including the West Side (Kitsilano, West Point Grey) and South Vancouver.
- Lack of mobility prohibits access to healthy and inexpensive food.
- Housing issues such as high housing/rental costs, poor housing quality, and lack of food storage/preparation facilities in SROs.
- There is a need for core-funded centres across the city that are not dependent on competing with each other for government-contracted services.
- There is a need for easily accessible and comprehensive information on all food and health-related programmes and services in the city.

Charitable Food Sector Gaps

- The quality of donated food does not meet the nutritional needs of consumers.
- Food issues are not integrated with other social and health services.
- Food programmes can also be opportunities for people to access other services (e.g., detox, training) but it is important that the staff have the time and resources to get to know the people using their services.

- Mismatch between the DTES residents' schedule and charitable meals, including some meal delivery programmes.
- Meal delivery programmes are one way of getting food to those who may not be able to access other food providers. However, if clients are not home when the meal is delivered, they miss that meal and may be dropped from the programme. In addition, meals often do not arrive hot and clients are not able to heat them up.
- Line-ups at food providers restrict access by some populations. Line-ups pose a significant barrier for many individuals, including women with children, seniors, and those with physical or mental health issues. Line-ups are often dangerous, require physical stamina, and may conflict with other appointments that individuals have. Line-ups are considered demeaning and disrespectful.
- Food programmes are not able to address cultural preferences and dietary restrictions.
- Food programmes need to be aware of cultural preferences around food (e.g., vegetarianism), personal taste, and dietary restrictions.
- There is a lack of resources outside of the DTES as well as a lack of services for women, families, and children in the DTES.
- There is a lack of coordination among charitable food providers. Charitable food providers are often not able to accept food because of a lack of storage and/or transportation. In addition, food providers sometimes receive donations that they cannot use either because the quantity is too large or is not storable (either because the food is perishable or because they lack appropriate storage space) or the food is not appropriate for their population. Often, food providers use their time finding agencies that can accept part of a larger donation.
- Among populations of immigrants and new Canadians, there is a need to connect programmes that serve them with the mainstream food security initiatives.

Community Food Sector Gaps

Community Kitchens

- There is a lack of ongoing funding for community food programmes. Some community kitchens have difficulty getting funding/financial support as most of the funding available is for kitchen start-up, not for ongoing funding.
- Most community kitchens operate on a small scale and only provide one meal per week and therefore these programmes only cover a fraction of the necessary food intake.
- There are not enough community kitchens and membership is often restrictive.

Good Food Box

- The loss of the Good Food Box programme, which provided an important and affordable source of fresh produce throughout the city, has created a gap.

Urban Agriculture

- Food grown in community and school gardens is frequently stolen.
- There is a lack of secure land tenure and of political support for long-term land leases.
- Lack of resources: there is a need for support for water costs, insurance, including seeds, tools and tool sheds, high quality compost, and basic infrastructure set up.
- Community gardens may be located on sites that contain hazardous wastes and/or can be contaminated by pollution.
- There is a need for gardens that can be accessed by walking in all potentially vulnerable neighbourhoods.
- The health benefits of community gardens are not acknowledged by housing operators, government, or most service providers.
- There is a need for community orchards. More fruit trees should be planted instead of ornamentals.
- There is a need to resource food growing gardens in school grounds, each of which requires a coordinator and recognition and support from the Vancouver School Board. Some level of integration into the school curriculum is required to meet ministry learning outcomes at both the elementary and high school levels.
- For seniors and the disabled, there is a need for raised beds in community gardens.

- There is a need for a land inventory of all underutilized land in the city (municipal, provincial, federal) that enables broader access to community gardens in more neighbourhoods.
- There is a need for comprehensive and systemic approach to urban agriculture activities (e.g., not just harvesting the fruit trees, but spring pruning and year-long grooming).

Farmers' Markets

- Farmers' markets are inaccessible to low-income populations because of location and higher cost of food.
- The creation of new farmers' markets is hampered by a lack of available farmers in the region, difficulties finding appropriate locations, and city zoning regulations.

Retail Food Sector Gaps

- Aboriginals with addictions issues feel unwelcome in some retail outlets; in particular, they do not feel comfortable accessing food in some areas (Chinatown, Nanaimo and Hastings, and Commercial Drive).
- There is a lack of retail outlets that sell healthy food in the DTES. Many food outlets sell food that may be filling, but is lacking nutritional value, e.g., pizza slices, fried chicken, doughnuts.
- In some areas within the city, there are neighbourhoods that lack large or medium-size grocery stores within walking distance. Smaller outlets may be more expensive and/or lack high quality food (although this varies by neighbourhood).
- For seniors, there is a need for nearby local access to good inexpensive food sold in manageable quantities.

Social Enterprise Gaps

The *Vancouver Food System Assessment* found the following gaps in the food-related social enterprise centre:

- Many food-related social enterprises are unaware of what others are doing in this area and what support services are available to them. This limits their ability to solve problems collectively, implement solutions, share resources, and create networks.
- Although safe, healthy, and nutritious food is essential to any food programme, few funders will provide money to buy food. Money for food must become a priority if social enterprises are to stay in business.
- Accessing patient, low-interest financing is a big challenge, including both start-up and ongoing financing. Funders assume that social enterprises should be sustainable in two to three years. However, most social enterprises cannot become sustainable within this period.
- Accessing capital for commercial kitchen/production facilities can be a challenge. Individuals or groups may have an idea for a unique, marketable product, but not the capital necessary to implement the idea.
- Business skills are often lacking. People have to learn how to create an accurate budget to ensure there is enough money to cover surprise costs. Other necessary skills include bookkeeping, marketing, and sales. People may be resistant to learning and applying business skills.
- Consistency of staff and product. People in the food business often change jobs. Training businesses (social enterprises that provide on-the-job training in a market-based setting) will often hire people to train on a short-term basis, with continual turnover of staff. It is difficult to offer competitive pricing and maintain quality when people are training.
- Small profit margins in food businesses make food-based social enterprise particularly challenging, especially if you have a training programme that is being subsidized by the business. As a society, we do not place enough value on food and are not willing to spend the money that would make food business more secure.

Action Plan And Outcome Measurement Framework

The Ministry of Health has established the **Community Food Action Initiative (CFAI)** to increase food security in BC by supporting community, regional, and provincial initiatives that improve access to healthy foods for all members of the community, and in particular, those with low incomes. For this initiative to succeed, it is imperative that VCH, as a whole, develop a commitment to food security and that each of its organizational components takes action to support the overall vision.

Food security is not realized by any single set of practices but rather operates on a continuum from short-term relief to redesign.^{105,106,107} While programmes such as food banks or soup kitchens provide immediate relief to those who are the most food insecure, these programmes do little to enhance the capacity of the food system or improve its functioning. Capacity building programmes such as community kitchens and gardens have the potential to empower participants and to provide some relief to food security challenges. However, these programmes often require time and commitment and therefore may not be universally accessible. Further, many marginalized people are not capable of participating in organized programmes. Redesign of the entire food system, through food policy councils and social advocacy to address poverty, is broader in scope and requires time, resources, and community mobilization. Success is measured by movement across all three stages, rather than by movement from one stage to another. In fact, we recognize that for many vulnerable, highly marginalized groups, there will always be a requirement for immediate short-term relief.

We have adapted this concept of the food security continuum to include three stages: *short-term relief* (e.g., charity), *community development* models related to food (enhancing local capacity and awareness), and *sustainability* through economic and political *redesign* of the system. In this model, sustainable food programmes are those that promote physical, environmental, and

¹⁰⁵Houghton, J. (1998). The dietitian's role in British Columbia's food security movement. Toronto, Ontario, Canada: Dietitians of Canada: Members in Action Newsletter.

¹⁰⁶Kalina, L. (2001). Building Food Security in Canada From Hunger to Sustainable Food Systems: A Community Guide. Kamloops, BC.

¹⁰⁷MacRae, R. et al. (1990). Policies, programs, and regulations to support transition to sustainable agriculture in Canada, *American Journal of Alternative Agriculture* 5 : 76–92.

social/community health and well-being. For example, while charitable programmes may provide relief from hunger, they should also ensure that other criteria are being met, such as whether the food being provided is promoting long-term health and whether food programmes are enhancing community capacity or social capital. Enhancing sustainability through economic redesign can occur through social enterprise and cooperative models, while political redesign can occur through advocacy and alternative policy development. In this model, strategies can function across categories and contribute to food security in different ways. For example, the charitable food sector can expand its role into the area of capacity building. In some instances, charitable providers can be linked with farmers' markets, community gardens, or CSA farms.¹⁰⁸ Furthermore, community food programmes can play a role in community development by enhancing awareness of food issues; they can also provide training that contributes to food-related social enterprise.

Funding Criteria

Further, in order to contribute to creating a meaningful and long-term contribution to community capital development, CFAI should not use competitive tendering processes that pit one community organization against another. Rather, a portion of the CFAI funding should be devoted to supporting collaboration. Finally, this action plan supports CFAI initiatives that reflect the following funding criteria:

- respectful and non-judgmental behaviour;
- building community capacity and making the best use of existing community resources;
- focused on actions which have a direct impact and which produce the greatest results for the most vulnerable populations;
- actions which are 'low barrier' and which provide services at low or no cost;
- actions which celebrate successes and re-enforce positive behavioural changes in lifestyles;
- actions which include community residents and volunteers;

¹⁰⁸Murphy, T., R.E. Valenzuela and I. Tsagarakis. (2002). Partnering community supported agriculture and emergency food programs, *Journal of the American Dietetic Association* 102: A44.

- programmes which provide peer support;
- initiatives which reduce inter-generational and inter-ethnic divides;
- initiatives which build on existing community resources, knowledge, and experience;
- initiatives which are transparent and accountable to the community;
- actions which are based on demonstrated need;
- initiatives which address mobility barriers;
- initiatives which are sensitive to gender, language, and multi-cultural issues and preferences;
- programmes which are small-scale, allowing for meaningful interaction between providers and participants and among participants;
- programmes which reduce social isolation;
- programmes which provide practical assistance and useful information;
- support for programmes that include all aspects of the food supply chain, from farm to fork, and that help move toward greater food system sustainability (e.g., charitable food programmes that include community capacity building, or community programmes that have a social enterprise component).

It is also important to note that CFAI funding alone cannot address the full spectrum of food security gaps within the city. It will be necessary for organizations to collaborate with one another to make the best use of resources and to search for additional funding. (See Appendix J for a listing of additional funding.)

Promising Practices

The following are practices that have been found to be particularly effective in addressing the needs of food security among vulnerable populations. These should serve as models when determining which projects to support.

Meal programmes that:

- are small-scale;
- provide access to other services;

- involve clients in volunteering;
- are provided during non-standard hours;
- allow for maximum food choice;
- incorporate nutritional education.

Urban agriculture projects that:

- are integrated within the neighbourhood;
- are low or no cost;
- provide free gardening tools and seeds;
- are accessible and usable by seniors and those with disabilities;
- are connected with a community kitchen or garden market.

Community food projects that:

- are accessible to a range of users (diversity of income, ethnicity, age);
- provide a range of services in addition to food;
- incorporate social-enterprise or micro-enterprise development.

Other strategies that enhance access to health food among vulnerable populations include:

- Farmers' market coupons, coupled with transportation to the market, can enhance access to these venues for vulnerable populations.
- Mobile farmers' markets can provide, throughout the city, food that is free or low-cost from local farms and farmers' markets.
- Community supported agriculture programmes that encourage participation by low-income groups through "working shares", subsidized shares, and transportation assistance.
- Incubator kitchens, which consist of an industrial-sized kitchen and cold storage facilities, can provide opportunities for food-based, micro-enterprise development.
- Food programmes for immigrants and new Canadians should have staff that speak the language of the group and provide access to culturally appropriate recipes, foods, and techniques.
- Food programmes for those addicted to drugs or alcohol need to be provided on a continuous basis in order to feed people when they are hungry.

- Food programmes for seniors need to address issues of mobility and social isolation.
- Food programmes for Aboriginals should include the spiritual and cultural aspects of food.

Outcome Measurement Framework: Goals

The Outcome Measurement Framework presented below provides a framework for funding food projects in Vancouver for the next three years using the Splash and Ripple model.¹⁰⁹ The Splash and Ripple model essentially puts the terminology of the logic model into easy to understand language. In short, the rock is the *input* (human and material resources). The act of dropping the rock is the *activity*. When the rock reaches the water, it creates a *splash*; which are the *outputs*. The *ripples*, spreading out from the splash are the three levels of *Outcomes*, immediate, middle, and outer. The edge of the pond represents the geographic and population boundaries of the project, in this instance, Vancouver, BC.

Within the evaluation framework, the short and intermediate outcomes are given specific indicators in order to assess whether the outcomes are being achieved. We suggest that, wherever possible, data be gathered annually in order to assess the outputs (to ascertain whether or not CFAI funds being allocated appropriately) and outcomes (to ascertain whether CFAI funds are having an impact on the target population) of the programme. This year-end assessment will inform VCH about how funds have been allocated for that year and help to determine how to proceed for the upcoming year. It will be important to do these annual reflections in order to determine if VCH is still on the right path. It is possible that as external conditions change, it will be necessary to update and modify the action plan.

The goals for the three years of funding have been identified as:

1. addressing the immediate food security gaps that exist within the city by improving the quality and accessibility of food to the most vulnerable populations. These include filling service gaps such as the Good Food Box and enhancing coordination among food providers, and addressing geographic gaps such as providing services to food insecure populations in parts of the city that have limited food resources;
2. enhancing the capacity of residents to grow and cook their own food. This includes

¹⁰⁹ *Splash and Ripple: Using Outcomes to Design and Guide Community Work*, created for the Department of Canadian Heritage, Multiculturalism Program. Produced and written by Plan:Net Limited, Calgary and Strathcona Research Group, Vancouver. Philip Cox, Sherry Kozak, Louise Griep, Lisa Moffat, Alice Purdey, and Jeff Sommers.

supporting community gardens and kitchens. Charitable programmes should be encouraged to include these types of programmes within their mandate in order to empower participants and reduce their on-going dependency on the charitable sector.

3. improving the food security of vulnerable populations by enhancing the larger food economy. This can be done by supporting local farmers through farmers' markets and cooperative buying, and by increasing the potential for food-related social enterprise.

Although each year has its own focus and goal, it should also be noted that programmes funded in Year 1 will continue to receiving support providing that:

- there is a demonstrated need;
- the programme is meeting its outcomes;
- other sources of funding have not been found. Part of the work plan for each programme funded by CFAI will be to identify additional sources of funding and to develop a strategy for long-term sustainability. Programmes can and should build upon one another. For example, the Nutritious Food Basket programme could be linked with community gardens in order to obtain a supply of local produce and could also become part of a social enterprise strategy.

First Year Allocation of Funds

VCH begin planning for Year 1 allocation of funds by bringing together all interested organizations to discuss recommended actions and to find partners who would be able to provide cash and/or in-kind support (e.g., vehicles, storage space). This may reduce overall costs and allow for greater sustainability. Based upon the Action Plan for Year 1, it is recommended that VCH utilize the \$45,000 allocated for Year 1 in the following manner:

Good Food Box Programme: Approximate costs are \$20,000–\$25,000 for a part-time coordinator, promotional materials, transportation, and other start-up costs. The remaining funds can be used as follows:

- to support coordination among food providers and implement a food buying club. This would also require a coordinator; however, the position could be incorporated

- with the Good Food Box programme;
- to expand existing meal programmes to cover additional hours, to develop outreach plans to groups not currently being served, or to establish a site in an area with few food resources. The specifics (who will be served, where, and when) will depend upon the capacity of organizations and current need;
 - to support a mobile grocery store model that can deliver low-cost and healthy foods to neighbourhoods that are currently lacking these resources. Implementation of such a project should be based upon market research within the community to ensure that the store would be used and to identify which foods should be provided.

Outcome Measurement Framework: VCH CFAI Fund — Year 1

<p>Purpose: The goal for year 1 is to address the immediate food security gaps that exist within the city by improving the quality and accessibility of food to the most vulnerable populations. These include covering service gaps such as the Good Food Box programme and enhancing coordination among food providers, and addressing geographic gaps such as providing services to food insecure populations in parts of the city that have limited food resources. Activities related to this goal will be directed and monitored by a community-based advisory committee.</p>	<p>Situation Assessment: Through the environmental scan and food assessments, we have identified the following populations that are vulnerable to food insecurity:</p> <ul style="list-style-type: none"> • street-involved youth, • low-income or homeless with chronic or acute disease, • injection drug users, • Aboriginals, • low-income seniors who live alone, • people with mobility barriers, • working-poor families, • recent immigrants and refugees, • single-parent, low-income families, • people with mental illness. <p>The following neighbourhoods have been identified as lacking charitable food resources: South Granville, Champlain Heights, Kitsilano and west to the UEL area, Mt Pleasant, Fraser Street, Waterfront to 41st, and the West End.</p> <p>The following neighbourhoods have poor access to grocery stores: Victoria-Fraserview, Sunset, Killarney, Hastings-Sunrise and Oakridge.</p> <p>Other issues include the need for better access to charitable food, improved food quality and the inclusion of capacity building programmes with food provision.</p>
<p>Timeframe: 2006-2007</p>	

Raindrop (INPUTS)	Dropping the Rock (ACTIVITIES)	Splash (OUTPUTS)	Immediate Ripples (SHORT TERM OUTCOMES)	Middle Ripples (INTERMEDIATE OUTCOMES)	Outer Ripples (LONG TERM OUTCOME)
<p>Community Food Action Initiatives Funds</p> <p>VCH staff (nutritionists and community developers)</p> <p>Community service delivery agencies and community non-profits</p> <p>Other funding agencies or funders</p>	<p>Establish a community-based advisory committee to select priority 2-3 priority action areas for the use of CFAI funds and partner with other organizations and funders to support identified projects.</p> <p>Establish the infrastructure of the CFAI advisory committee.</p>	<p>Committee is established</p> <p>Number and representativeness of advisory board members (e.g., do they represent identified vulnerable populations?)</p> <p>Yearly priorities are established</p> <p>Number of meetings held</p> <p>Number of partners providing funding or in-kind support for CFAI activities.</p>	<p>Effective use of CFAI to address issues of food insecurity among vulnerable populations.</p>	<p>Projects are being successfully implemented and monitored over the length of the CFAI funding.</p>	<p>Communities in Vancouver have access to adequate amounts of safe, nutritious, culturally appropriate foods, produced in an environmentally sustainable way and provided in a manner that promotes dignity.</p>

Raindrop (INPUTS)	Dropping the Rock (ACTIVITIES)	Splash (OUTPUTS)	Immediate Ripples (SHORT TERM OUTCOMES)	Middle Ripples (INTERMEDIATE OUTCOMES)	Outer Ripples (LONG TERM OUTCOME)
	<p>Provide funding for programmes based on success indicators, promising practices, and focused on vulnerable populations and neighbourhoods as identified in the environmental scan.</p> <p>Priority areas are: Reestablishing the Good Food Box programme, supporting meal programmes that fill existing temporal and geographic gaps and supporting a community market or mobile grocery store.</p>	<p>A Good Food Box programme focused on vulnerable populations and located in but not restricted to, neighbourhoods that lack food resources is established.</p> <p>Meal programmes that provide food during non-standard hours and/or are located in areas that lack food programmes are developed.</p> <p>A community market food co-op, and/or mobile grocery store is established.</p>	<p>A reduction in food insecurity for populations who may currently be unable to access current services because of physical, psychological or geographic constraints.</p>	<p>Improved nutritional status of vulnerable groups and enhanced health status.</p>	

Raindrop (INPUTS)	Dropping the Rock (ACTIVITIES)	Splash (OUTPUTS)	Immediate Ripples (SHORT TERM OUTCOMES)	Middle Ripples (INTERMEDIATE OUTCOMES)	Outer Ripples (LONG TERM OUTCOME)
	<p>Work with the VFPC and other entities to support the development of food policies that support the goal of improving food quality and access for vulnerable populations.</p> <p>One possible policy would be to develop standards for donated food.</p>	<p>At least one VCH staff member involved with CFAI is a member of the VFPC.</p> <p>A number of policies are created and implemented that address year 1 goals and the larger goals of the CFAI (e.g., guidelines for food quality are developed).</p>	<p>Food quality increases for charitable food providers.</p> <p>Access to food is enhanced for vulnerable populations</p> <p>A reduction in the amount of donated food that is past-dated or spoiled.</p>	<p>Improved health outcomes for those who rely on charitable food.</p>	
	<p>Organize a network of food providers, including charitable providers (e.g., food bank), food-related social enterprises (e.g., Potluck Cafe), daycares and other free or low-cost meal programmes, to create a local food buying club</p>	<p># of charitable agencies meeting</p> <p># of meetings/year</p> <p># of decisions/guidelines made</p> <p>Food providers' buying club</p> <p>Creation of a website to</p>	<p>Enhanced collaboration among service providers, more efficient service delivery.</p> <p>Improvement in the nutritional quality of food donated and served to</p>	<p>Long-term, sustainability strategies to address hunger.</p>	

Raindrop (INPUTS)	Dropping the Rock (ACTIVITIES)	Splash (OUTPUTS)	Immediate Ripples (SHORT TERM OUTCOMES)	Middle Ripples (INTERMEDIATE OUTCOMES)	Outer Ripples (LONG TERM OUTCOME)
	and improve coordination.	facilitate communication	clients. Reduction in food cost for charitable food providers.		
	Affordable or subsidized restaurants in social housing and/or neighbourhood houses are created.	# of affordable or subsidized restaurants in social housing and/or neighbourhood houses.	Improved access to affordable meals for working poor and other vulnerable groups.	Improved nutritional status of vulnerable groups and enhanced health status.	

Outcome Measurement: Evaluation Framework — Year 1

SHORT- TERM OUTCOMES	INDICATORS	COLLECTION METHODS and DATA SOURCES
Effective use of CFAI funds to address issues of food insecurity among vulnerable populations.	<ul style="list-style-type: none"> ▪ # of funding decisions made based on the CFAI action plan and based on the advisory committees input. 	Meeting minutes and notes.
A reduction in food insecurity for populations who may currently be unable to access current services because of personal or geographic constraints.	<ul style="list-style-type: none"> ▪ Number of food programmes in neighbourhoods that are currently lacking these services. ▪ Number of people using these services ▪ Number of programmes that address barriers to accessing free or low-cost food. ▪ Number of people using these services. 	<p>Mapping of food programmes relative to need.</p> <p>Programme reports and databases.</p> <p>Focus groups and meetings with food and social service providers to ascertain if services are addressing the need.</p>
<p>Enhanced collaboration among service providers to support more efficient service delivery.</p> <p>Creation of a food buying club</p>	<ul style="list-style-type: none"> ▪ Number of food providers who actively participate in the collaborative. ▪ Reduction in duplication of services. ▪ Sharing of food resources between organizations (e.g., transportation) ▪ Decreases the cost of food 	Meeting minutes, reports from food providers.

<p>Improvement in the nutritional quality of food donated and served to clients.</p> <p>AND</p> <p>A reduction in the amount of donated food that is past-dated or spoiled.</p>	<ul style="list-style-type: none"> ▪ Amount of food that is spoiled or past-dated when it is received by food providers. ▪ Nutritional quality of charitable meals/hampers. 	<p>Reports from charitable providers regarding the amount of waste they discard.</p> <p>Nutritional assessment of meals and hampers by VCH nutritionists. The nutritional assessment can be done annually on a small sample of hampers and meals. Hampers and meals can be assessed on how well they meet Health Canada’s food guide.</p>
<p>Improved access to affordable meals for working poor and other vulnerable groups.</p>	<ul style="list-style-type: none"> ▪ Number of people who receive meals. 	<p>Programme records on number of individuals served.</p>
<p>INTERMEDIATE OUTCOMES</p>	<p>INDICATORS</p>	<p>COLLECTION METHODS and DATA SOURCES</p>
<p>Improved nutritional status of vulnerable groups and enhanced health status.</p>	<ul style="list-style-type: none"> ▪ Percentage of the population with dietary-related disease (e.g., diabetes, heart disease). ▪ Life expectancy ▪ Birth weights¹¹⁰ 	<p>Vital statistics</p>
<p>Long-term sustainability strategies to address hunger</p>	<ul style="list-style-type: none"> ▪ Percentage of decrease in the use of food banks and other charitable food providers due to reduced need.¹¹¹ 	<p>Food bank and other socioeconomic statistics (e.g., income, employment).</p>

¹¹⁰ These indicators are affected by many things other than food access, and may be hard to assess. They should be monitored but not reported on.

¹¹¹ Care should be given to determine if reductions in charitable food use are due to reduced need or to increased barriers to accessing food.

<p>Projects are being successfully implemented and monitored over the length of the CFAI funding.</p>	<ul style="list-style-type: none"> ▪ # of project implemented. ▪ Annual report on the status of CFAI projects is developed. ▪ CFAI-funded projects have their own set of indicators. 	<p>Project evaluation criteria and annual reports containing process and evaluative indicators.</p>
---	---	---

Outcome Measurement Framework: VCH CFAI Fund — Year 2

<p>Goal: In year 2, funding will continue for projects begun in year 1 contingent upon need, other funding sources, and recommendations by the CFAI planning committee. The goal for year 2 is to enhance the capacity of residents to grow and cook their own food. This includes supporting community gardens and kitchens. Charitable programmes should be encouraged to include these types of programmes within their mandate in order to empower participants and to reduce their on-going dependency on the charitable sector.</p>	<p>Situation Assessment: We found the following gaps in ability of vulnerable populations to grow and cook their own food.</p> <ul style="list-style-type: none"> • There are few community gardens dedicated to low-income or other vulnerable populations. • Some neighbourhoods with vulnerable populations have no urban agriculture programmes <i>within</i> the neighbourhood such as the DTES, Hastings-Sunrise, the northern part of Renfrew-Collingwood, Sunset, and Victoria-Fraserview. • Residents of SROs often lack the facilities to cook their own food which increases their dependency upon charitable food providers. • Programmes such as community kitchens and gardens can serve to link participants with other social services and increase social capital. <p>Programmes that link community gardens with community kitchens provide opportunities for people to learn cooking and growing skills. While some populations will always require charitable assistance, much can be done to enhance independence.</p>
<p>Timeframe: 2007-2008</p>	

Raindrop (INPUTS)	Dropping the Rock (ACTIVITIES)	Splash (OUTPUTS)	Immediate Ripples (SHORT TERM OUTCOMES)	Middle Ripples (INTERMEDIATE OUTCOMES)	Outer Ripples (LONG TERM OUTCOME)
Community Food Action Initiatives Funds VCH staff (nutritionists and community developers) Community service delivery agencies Other funding agencies or funders	Provide funding for urban agriculture projects (community or rooftop gardens) for vulnerable populations, focusing on neighbourhoods that currently have no gardens. Work with the VFPC and other entities to support the development of food policies that work toward the goal of increasing community gardens and kitchens.	Number of urban agriculture and community gardens that are accessible to those with physical, economic, or psychological challenges. Number of policies are created and implemented that address year 2 goals and the larger goals of the CFAI.	Improved access to self-produced food by vulnerable populations. Policies that help to support VCH priorities to enhance food growing and preparation.	Improved nutrition and health status because of increased consumption of healthy food. Enhanced skills and ability to grow ones own food and decreased dependence upon charitable food.	Communities in Vancouver have access to adequate amounts of safe, nutritious, culturally appropriate foods, produced in an environmentally sustainable way and provided in a manner that promotes dignity

Raindrop (INPUTS)	Dropping the Rock (ACTIVITIES)	Splash (OUTPUTS)	Immediate Ripples (SHORT TERM OUTCOMES)	Middle Ripples (INTERMEDIATE OUTCOMES)	Outer Ripples (LONG TERM OUTCOME)
	Provide funding to community kitchens that are linked with an urban agriculture initiative.	Number of community kitchens that are linked with an urban agriculture initiative	Enhanced participation in community garden and kitchen projects by vulnerable populations. Increased knowledge of food production and cooking by programme participants.		
	Use CFAI funds to support programmes that engage children in inner city schools in the growing and preparation of food.	Number of school garden projects	Improved awareness of healthy food by inner-city children. Enhanced ability to grow and access healthy food.		

Outcome Measurement: Evaluation Framework — Year 2

SHORT- TERM OUTCOMES	INDICATORS	COLLECTION METHODS and DATA SOURCES
<p>Improved access to self-produced food by vulnerable populations</p> <p>Increased participation in community gardens and community kitchen projects by vulnerable populations.</p> <p>Increased knowledge of food production and cooking by programme participants.</p>	<ul style="list-style-type: none"> • Increased consumption of fruits and vegetables among community garden participants. • Number of community gardens and kitchens • Number of participants overall. • Number of participants from specific categories (e.g., street-involved youth, low-income seniors, individuals with physical and mental health issues). • Number of participants from vulnerable categories who experience planting and cooking food. • Percentage of food used in community kitchens that is produced by community garden. • Percentage of participants who have knowledge of nutritional food preparation and are comfortable cooking. • Examples of food preparation techniques described by participants. 	<p>Number of community gardens and kitchens can be measured through a database that is updated annually.</p> <p>Increases in food consumption can be measured through basic dietary recall methods at the beginning and end of the project to determine if consumption of produce has increased.</p> <p>Survey of participants.</p> <p>Community kitchen records of purchases to determine how much of the food they use is from their community garden.</p>
<p>Policies that help to support VCH priorities to enhance food growing and preparation.</p>	<ul style="list-style-type: none"> • Number of new policies that support VCH priorities. 	<p>Review of food-related policies (municipal, school, institutional, etc.).</p>
<p>Improved awareness of healthy food by inner-city children and an enhanced ability to grow and access healthy food.</p>	<ul style="list-style-type: none"> • Percentage of children who participate in school garden programmes in inner city schools. • Percentage of schools with school gardens. 	<p>School garden records</p>

INTERMEDIATE OUTCOMES	INDICATORS	COLLECTION METHODS and DATA SOURCES
Improved nutrition and health status because of increased consumption of healthy food.	<ul style="list-style-type: none"> • Percentage of the population with dietary-related disease (e.g., diabetes, heart disease). • Percentage of children and adults that are overweight and obese. • Life expectancy • Birth weights 	Vital statistics
Enhanced ability to cook and grow one's own food and decreased dependence upon charitable food.	<ul style="list-style-type: none"> • Percentage of people who participate in community gardens and kitchens. • Percentage of people who participate in charitable food programmes. 	<p>Community kitchen and garden records.</p> <p>Charitable food provider records.</p>

Outcome Measurement Framework: VCH CFAI Fund — Year 3

<p>Goal: In year 3, funding will continue for projects begun in years 1 and 2 contingent upon need, other funding sources and recommendations by the CFAI planning committee. In this year, VCH should devote its efforts to improving the food security of vulnerable populations by enhancing the larger food economy. This can be done by supporting local farmers through farmers’ markets and cooperative buying, and by increasing the potential for food-related social enterprise.</p>	<p>Situation Assessment: Enhancing access to healthy, local food can increase its consumption as well as improve the viability of local food production. However, there is currently no connection between local food providers and producers.</p> <p>There are few food-related social enterprises in Vancouver and most are small and struggling. However, a social enterprise model, coupled with training and other support, has the potential to enhance the economic sustainability of food programmes.</p>
<p>Timeframe: 2008-2009</p>	

Raindrop (INPUTS)	Dropping the Rock (ACTIVITIES)	Splash (OUTPUTS)	Immediate Ripples (SHORT TERM OUTCOMES)	Middle Ripples (INTERMEDIATE OUTCOMES)	Outer Ripples (LONG TERM OUTCOME)
<p>Community Food Action Initiatives Funds</p> <p>VCH staff (nutritionists and community developers)</p> <p>Community</p>	<p>Food security coordinator hired to connect with local farmers and support food buying club.</p>	<p>Number of food providers buying from local farmers (either directly or through a cooperative) through the food buying club.</p> <p>Examples of</p>	<p>Food providers have regular access to fresh, local produce in order to supply to programme participants.</p>	<p>Improved health outcomes due to increased consumption of fresh produce.</p> <p>Greater economic opportunities in the food sector for vulnerable populations and reduced dependence</p>	<p>Communities in Vancouver have access to adequate amounts of safe, nutritious, culturally appropriate foods, produced in an environmentally sustainable way and provided in a manner that promotes dignity.</p>

Raindrop (INPUTS)	Dropping the Rock (ACTIVITIES)	Splash (OUTPUTS)	Immediate Ripples (SHORT TERM OUTCOMES)	Middle Ripples (INTERMEDIATE OUTCOMES)	Outer Ripples (LONG TERM OUTCOME)
service delivery agencies Other funding agencies or funders		local, fresh produce available for purchase by providers.		on charitable food. Greater demand for local produce by food providers.	
	Support the development of food policies that enhance food system sustainability through social enterprise development and reduce reliance on external sources of support.	Policy is developed and implemented. Number of food programmes that have a social enterprise component.	Reduced barriers for food programmes wishing to engage in social enterprise.		
	Food-related social enterprises and incubator kitchens that	Number of food-related social	Greater opportunities for vulnerable		

Raindrop (INPUTS)	Dropping the Rock (ACTIVITIES)	Splash (OUTPUTS)	Immediate Ripples (SHORT TERM OUTCOMES)	Middle Ripples (INTERMEDIATE OUTCOMES)	Outer Ripples (LONG TERM OUTCOME)
	<p>provide training and employment opportunities for vulnerable populations are developed.</p>	<p>enterprises that provide training and/or an incubator kitchens.</p> <p>Number of providers participating in development.</p> <p>Amount of funding accessed to support these enterprises.</p> <p>Number of funders.</p>	<p>populations to receive training and entrepreneurial support.</p>		
	<p>Food providers network develops a strategy for food processing where perishable foods can be preserved through various processing methodologies and be either distributed or sold.</p>	<p>A food-processing strategy for surplus donated food.</p>	<p>Enhanced utilization of donated food products and reduced waste.</p>		

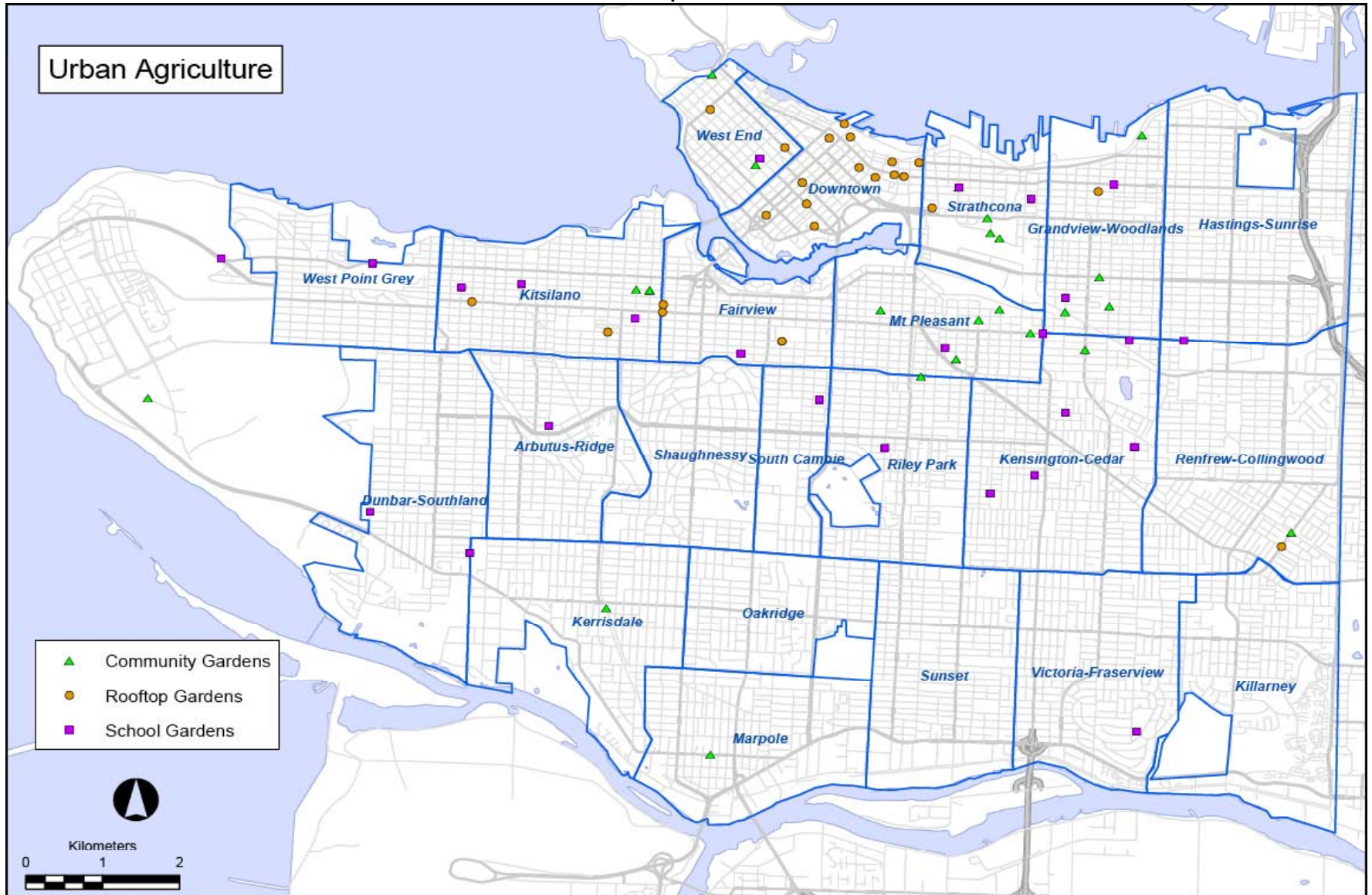
Raindrop (INPUTS)	Dropping the Rock (ACTIVITIES)	Splash (OUTPUTS)	Immediate Ripples (SHORT TERM OUTCOMES)	Middle Ripples (INTERMEDIATE OUTCOMES)	Outer Ripples (LONG TERM OUTCOME)
	<p>A programme to promote use of the farmers' market by vulnerable populations is developed (e.g., seniors).</p> <p>AND</p> <p>A system for providing transportation to the market is developed.</p> <p>OR</p> <p>A "mobile farmers' market" is provided.</p>	<p>A farmers' market coupon programme is developed for vulnerable populations.</p> <p>A mobile farmers' market is implemented.</p>	<p>Greater access to fresh, local produce by vulnerable populations through direct sales.</p>		

Outcome Measurement: Evaluation Framework — Year 3

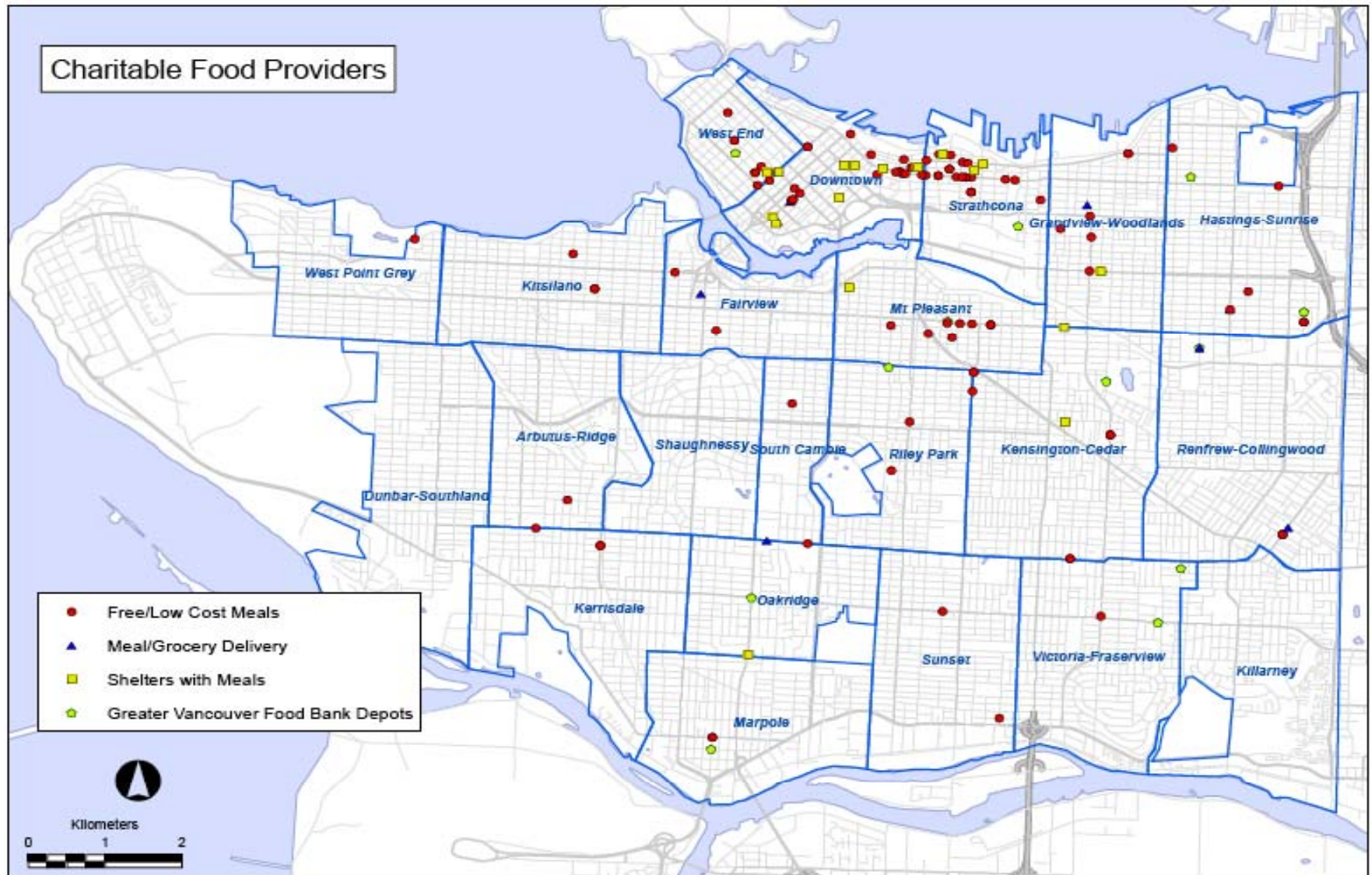
SHORT- TERM OUTCOMES	INDICATORS	COLLECTION METHODS and DATA SOURCES
Food providers have regular access to fresh, local produce in order to supply to programme participants.	<ul style="list-style-type: none"> ▪ Amount or percentage of local produce used by food providers. 	Food provider records of where purchased food comes from.
Greater opportunities for vulnerable populations to receive training and entrepreneurial support.	<ul style="list-style-type: none"> ▪ Number of participants in food-related job training and/or food-related micro-enterprise. ▪ Examples of jobs created. 	Programme records of numbers of jobs created and number of participants in job training.
Reduced barriers for food programmes wishing to engage in social enterprise.	<ul style="list-style-type: none"> ▪ Number of food-related organizations which have a social enterprise component. 	Database of food-related social enterprises. The CFAI report provides a baseline.
Greater access to fresh, local produce by vulnerable populations through direct sales.	<ul style="list-style-type: none"> ▪ Number of participants who obtain food from farmers' markets. 	Programme records.
Enhanced utilization of donated food products and reduced waste.	<ul style="list-style-type: none"> ▪ Amount of food that is processed compared to the amount that must be thrown away. 	Food providers' records of amount of food produced compared to amount of food wasted.
INTERMEDIATE OUTCOMES	INDICATORS	COLLECTION METHODS and DATA SOURCES
Greater demand for local produce by food providers.	<ul style="list-style-type: none"> ▪ Number of farms in the lower mainland. ▪ Percentage of agricultural land in production. ▪ Percentage of decrease in purchase of imported food by food providers ▪ Percentage of increase in purchase of fresh, local food by food providers 	Agricultural Census
Greater economic opportunities in the food sector for vulnerable populations.	<ul style="list-style-type: none"> ▪ Number of food-related micro-enterprises and number of employees. ▪ Percentage of participants with more 	Database and survey of food-related micro-enterprise.

	<p>disposable income resulting from being employed by a food-related micro-enterprise.</p> <ul style="list-style-type: none"> ▪ Percentage of vulnerable populations receiving food from these sources that have access to greater quantities of fresh food. ▪ Charitable food provider records (people and/or meals served). 	
Improved health outcomes due to increased consumption of fresh produce.	<ul style="list-style-type: none"> ▪ Percentage of the population with dietary-related disease (e.g., diabetes, heart disease). ▪ Percentage of children and adults that are overweight and obese. ▪ Life expectancy ▪ Birth weights 	Vital Statistics

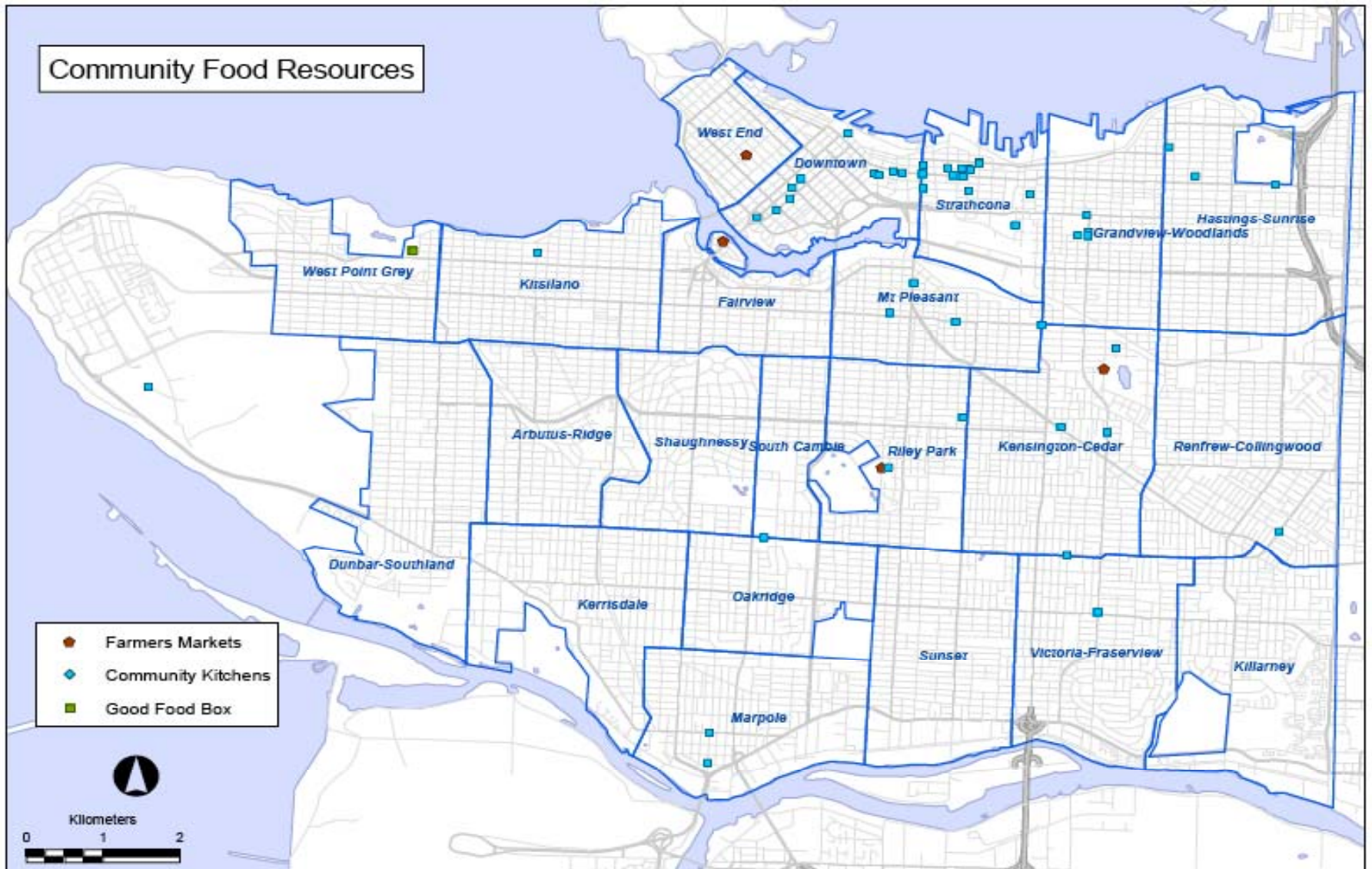
Map 2



Map 3



Map 4



Map 5



Map 6

