



OPPORTUNITIES FOR LOCAL FOOD CYCLES IN VANCOUVER'S COMMUNITY CENTRES

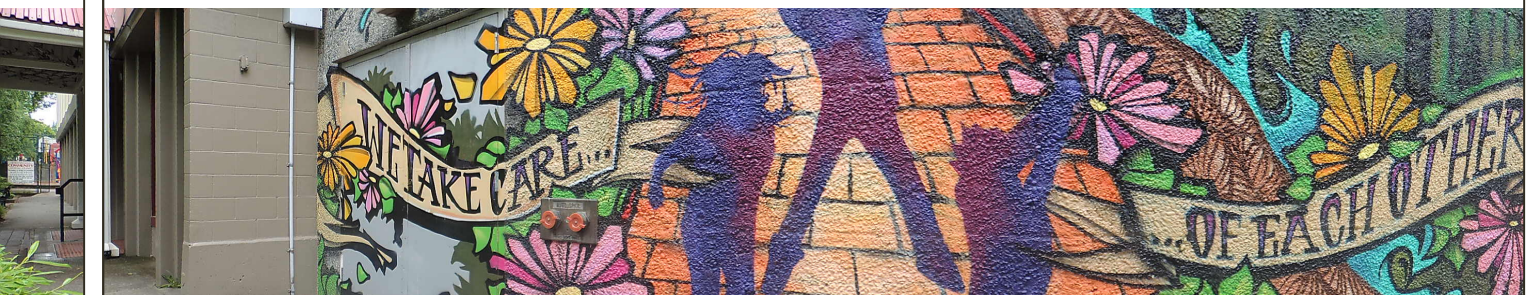
Final Report from a Greenest City Scholar 2013

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EXECUTIVE SUMMARY

This report addresses *Vancouver's Greenest City 2020 Action Plan* Goal #10: "Vancouver will become a leader in urban food systems," and has some relevance in the area of Goal #5: "Create zero waste." This report is an outcome of the University of British Columbia and City of Vancouver Greenest City Scholars Program.

Background: There is growing concern over the sustainability of our food supply and food systems. Simultaneously, there are many families in Vancouver that face food insecurity. As a result food is an important topic in Vancouver's communities and many groups are working on advocacy and action. The Park Board is responsible for Vancouver's 24 community centres where community members access services such as education and recreation classes. As part of the *Park Board Strategic Framework* and *Local Food Action Plan* the Board has an interest in the prospect of closing the 'local-food cycle' in community centres. A 'closed local-food cycle' is a model food system where food is grown, prepared, consumed and composted on site. In Vancouver's community centres, community education is an important focus of modelling local food cycles.

Objective: To identify the best opportunities and barriers to closing the local-food loop in Vancouver's community centres.

Methods: I conducted 24 semi-structured key informant interviews with 26 community centre staff and 5 community members representing 18 community centres. I also completed a scan of the websites of 20 municipalities to identify 'local-food cycle activities' in their community centres. With 3 municipalities, I followed this up with a site visit, a phone interview or an email interview to gather further information.

Results: Every interviewee was invested in delivering the best and most appropriate services to meet the needs of their community and at every community centre there was some level of engagement with food. In the interviews, themes emerged around the perception of the role of community centres in the community. Almost all of the interviewees from the centres noted the importance of food for social interaction among user groups. Interviewees tended to agree that centres have a role in providing education to community members. However, there were varying views on the role of food within the community centre's mandate. Additionally, there were differing opinions on how food programming should be incorporated into the community centre programming framework. Partnerships emerged as an important theme in the success of community centre initiatives.

Three community centres have all the components of a 'local-food cycle' and eight centres have very clear potential for implementing a 'local- food cycle' in the near future. Most commonly

community centres were involved in food preparation and consumption although few centres were producing any type of food or compost on site. There were, however, varying levels of programming focused on food preparation and fewer focused on food consumption and nutrition. Based on the results of the interviews, three general clusters of community centres emerged: Food-centric, Food-inclusive and Recreation focused.

Important themes emerged when interviewees were asked about the barriers and challenges of implementing a 'local-food cycle' at their community centre. These included adequate staff time, access to expert knowledge, direction from the Parks Board, work load prioritization, unstable funding, poor class attendance, high food costs, lack of marketing skill, and adequate facilities. However, many community centres have significant success stories from their food work. A list highlighting a few of these examples is provided in the text.

From the scan of other municipalities' work in food, Seattle stands out as a leader in 'closed local-food loops' and should be looked to as a model for Vancouver. Importantly, Vancouver has an opportunity to be a leader in local-food work within the community centres.

Two key outputs of this research include a list of attributes of an ideal 'local-food cycle' and recommendations for ways to support increasing actions towards 'local-food cycles' in Vancouver's community centres.

Key Recommendations: The principal recommendation is to encourage implementation of 'local-food cycles' in community centres by supporting community centre efforts to advance healthy and sustainable foods in their community centres. The following list includes a series of ideas for how this primary recommendation can be achieved.

Quick Start Actions

- Clearly communicate the local food goals and associated priority actions.
- Draw on current partnerships and support community resources to strengthen local-food actions in the community.
- Update the community centre's webpage to increase the visibility of food activities and events in Vancouver's community centres, especially focussing on 'local-food cycles'.
- The "Green Logo" designation should apply to classes addressing any of the 'food cycle' principles, not just local foods.
- Open the Park Board's central warehouse to community centres.
- Strengthen the existing partnership with the Vancouver School Board (VSB) by forging a role for community centres to oversee school gardens during the summer months.
- Improve the ease of the permitting processes for gardens and kitchens in community centres and offer support to centre staff to pursue permitting.

Medium Term Actions

- Dedicate a Parks Board staff person to support food-related goals.
- Dedicate community centre staff time specifically to support food-related goals.
- Produce and implement city wide guidelines and provide supporting resources for community centre staff for key food topics.
- Implement innovative food programming to better meet the needs of the community.
- Launch a City wide marketing campaign advertising the community centre's local food focused facilities and programming.
- Implement a sustainability oriented version of the FitCity program in the community centres to encourage sustainable behaviour change.
- Conduct a food audit of all community centre programs.

Recommendations with a Forward View

- Hire community centre Programmers with a wide variety of expertise, interest and skill.
- As centres are remodelled and new centres are built, include adequate and secure kitchens, cold food storage, dry food storage and equipment storage to fully support food activities.
- Consider implementing an urban farm adjacent to a community centre.

Conclusion: Vancouver has the opportunity to be a leader in local food systems by engaging and supporting community in its 24 community centres. The City is fortunate to have enthusiastic and committed staff that largely see potential for 'closed local-food cycles' in the centres as vehicles of community engagement and education around healthy and sustainable food. However, there are barriers and challenges to implementing these cycles. Addressing these are prerequisites their success. Additionally, each community centre responds to its community needs in a unique way. As such, local-food cycles fit the model of community engagement at some facilities better than at others. These differences should be recognized and a gradient of local-food priority actions should be promoted so that centres can choose actions that best fit their centre, community and staff. Recommendations for further research are summarized in the text.

TABLE OF CONTENTS

Executive Summary.....	1
Table of Contents.....	4
Preface	5
Acknowledgements.....	5
Introduction	6
An Overview of the Research Objectives & Methods	6
What is a ‘Closed Local-Food Cycle’?.....	7
A Case Study Review of ‘Closed Local-Food Cycles’ In Municipal Community centres.....	8
Objectives:	8
Methods.....	8
Summary of Findings.....	9
Conclusion on Case Studies	10
Semi-Structured Interviews	11
Background	11
Objective:.....	11
Methods.....	11
Results.....	12
Summary of the Interview Results.....	13
Interpretation	20
Study Strengths and Limitations.....	22
Interview Conclusions.....	22
Synthesized Recommendations.....	23
City Level Recommendations for Community Centres.....	23
Prerequisites for Success	29
Project Outputs.....	30
Attributes of an Ideal ‘Closed Local-Food Loop’ in Vancouver’s Community Centres.....	30
Conclusions & Future Research	32
Work Cited	33

PREFACE

This report is the outcome of the 2013 Greenest City Scholars Program, a partnership between the University of British Columbia (UBC) and the City of Vancouver. In 2013, 11 UBC students were selected as the Greenest City Scholars and each was tasked with addressing a research question aimed at advancing one of ten goals outlined in the *Vancouver's Greenest City 2020 Action Plan*. This report addresses Goal #10: Vancouver will become a leader in urban food systems and has some relevance in the area of Goal #5: Create zero waste.

ACKNOWLEDGEMENTS

This project relied on the knowledge and expertise of the City of Vancouver Community Centre Staff who generously participated in this research project. Their openness, enthusiasm, commitment and hard work has inspired and informed the work presented here.

Additionally, this project was made possible by the guidance and dedication of my supervisors Lindsay Cole and Brenda Racanelli. Thank you for your support.

INTRODUCTION

Food is one of the most basic human rights (1). However, there is growing concern over the availability and accessibility of food in Vancouver and other urban centres in North America as the effects of our global environmental and economic crises become more evident. In Vancouver, food insecurity has been an important concern for many years, yet hunger and poverty persist today. In fact, 21% of Vancouver's children are in low income (2) and according to Dietitians of Canada these families spend about 34% of their income on food each month and another 31% on housing (3). Additionally, there is growing concern over the short and long term environmental sustainability of our food supplies. This is especially true in densely populated urban environments where city planners historically have planned for the basic necessities of shelter, air and water but largely have not taken food into consideration (4).

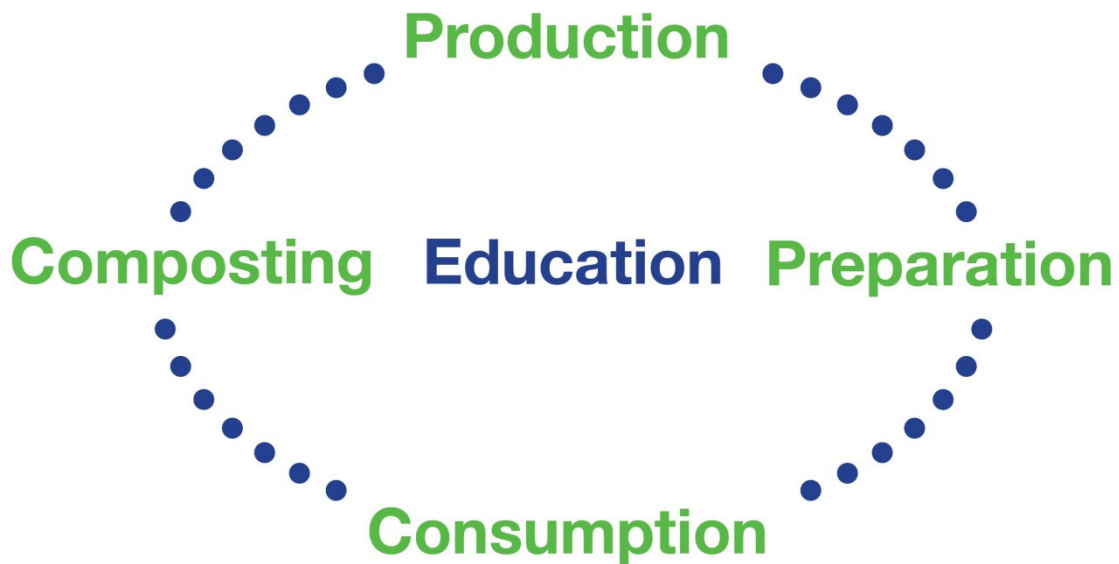
Food system sustainability is a topic of importance to Vancouver's communities and government alike. In *Vancouver's Greenest City Action Plan 2020* the city has pledged to become a leader in urban food systems (5). In advancement of this goal the *Vancouver Food Strategy*, a work produced by the Vancouver Food Policy Council, was approved by the Vancouver City Council in 2013. The strategy outlines clear actions to be taken for the city to be a leader in food systems (6). Vancouver's Board of Parks and Recreation has an important role to play in our urban food system as it is responsible for Vancouver's 300 parks and 24 community centres (7). Importantly, the Board of Park and Recreation's five year *Park Board Strategic Framework* identifies supporting local food system infrastructure and community education as two priorities areas within the larger goal of being a "leader in greening" (8). The Board appointed Local Food Asset Task Force produced the *Local Food Action Plan* which outlines specific and measurable actions Vancouver's Parks Board can take towards meeting these goals. One possibility is to "close the local-food cycle" in Vancouver's community centres. This report explores opportunities to do this and to support community efforts to improve the local food system and engage new community members in the City's local food goals (9).

An Overview of the Research Objectives & Methods

As a Greenest City Scholar, the primary research objective I was tasked with was to identify the best opportunities and barriers to closing the local-food loop in Vancouver's community centres and to present recommendations based on the findings. For the first component of the project, I reviewed what other municipalities have done in their community centres around local-food cycles. For the main body of research, I conducted a series of semi-structured key informant interviews with community centre staff and community members. Two key outputs of this process include a list of attributes of an ideal 'local food cycle' and recommendations for ways to support increasing actions towards 'local-food cycles' in Vancouver's community centres.

What is a ‘Closed Local-Food Cycle’?

A food system is the web of interacting components leading from farm to plate and back to the soil. The *Vancouver Food Strategy* defines food systems as being composed of 1) food production, 2) food processing/distribution, 3) food access, and 4) food waste management (6). However, within this simple framework are many relationships that form a complex web of interactions. A ‘food cycle’ is a simplified food system. A ‘closed local-food cycle’ brings together the growing, processing, procuring, distributing and composting of food in one location. It also supports knowledge sharing and skill building with the community around local food. In Vancouver’s community centres, a ‘local-food cycle’ is a simplified food system which illustrates one path from plant to mouth and back to soil.



According to the City of Vancouver’s *Greenest City Action Plan 2020* local food is food that travels the shortest distance possible from farm to plate. According to the document, a definition of local food also considers social issues such as working conditions for farmers and the affordability and accessibility of the foods to residents as well as ecological factors such as use of pesticides, fossil fuel use, biodiversity, and human health (5). At present, the City of Vancouver is working on a formal definition of ‘local food’ for procurement and policy purposes. This definition should be applied as appropriate to the context of community centres as well.

A CASE STUDY REVIEW OF ‘CLOSED LOCAL-FOOD CYCLES’ IN MUNICIPAL COMMUNITY CENTRES

This review is a scan of available information on what other municipalities are doing with regard to local-food and especially closed local-food cycles in their community centres. This review was conducted to help me build a wider context for this project and to form future actions in Vancouver’s own community centres.

Objectives:

- 1) To identify other municipalities that have “closed the local food cycle” in one or more community centres and for those municipalities identified,
- 2) To review the operational models for the ‘closed local-food cycles’.

Methods

First, I compiled a list of municipalities to review based on one or more of the following criteria:

- A similar climate or geographical proximity to Vancouver (West Coast)
- Is competing to be the world’s “Greenest City” (10)
- A large Canadian city, especially if a leader in sustainability

Next, I reviewed the websites for the department responsible for the municipality’s community centres, usually the ‘Parks and Recreation Department’ for the identified municipalities. Specifically, I looked for any food related content within the community centres area of the website, focusing on “closed food loop” systems. I prepared a brief summary of the information for the municipalities that had food related content in their community centres. For three municipalities that appeared to offer a substantial amount of food related programming and activities, I followed-up the website review with an email, phone or in-person interview. Additionally, I reviewed three local urban farm case studies and made site visits. Although none of these are associated with a community centre they provide interesting perspectives into urban food production systems.

Summary of Findings

I reviewed the following municipalities' websites for food related content.

1. Victoria, BC
2. Richmond, BC
3. Edmonton, AB
4. Regina, SK
5. Winnipeg, MB
6. Ottawa, ON
7. Toronto, ON
8. Quebec, QC
9. Halifax, NS
10. Seattle, WA
11. Portland, OR
12. San Francisco, CA
13. Oakland, CA
14. Santa Cruz, CA
15. Los Angeles, CA
16. Denver, CO
17. Chicago, IL
18. Philadelphia, PA
19. Boston, MA
20. Washington D.C.

Of all of the municipal websites reviewed only Seattle highlighted food programming at their community centres in a comprehensive way. On its municipal website, Seattle showcases its community centre run “Good Food” program and provides easily accessible information on food activities in the City’s community centres. Seattle has a similar number of community centres to Vancouver and has been successful in its ability to implement “local food cycles” in one-third of its centres with minimal staff support. Therefore, Seattle offers important experience that Vancouver can draw from. In Seattle nine of 27 community centres host a community run community garden. All the food produced is returned to the community centres and associated programming. The goals of the programs are to increase knowledge of how to grow food, where food comes from and what healthy food is and to increase the food security of the involved communities. The program brings community members into the community centre and nurtures intergenerational learning and cross cultural interaction and knowledge exchange (11). The program is coordinated by one full-time city staff member who is also responsible for the 120 cooking programs in the community centres across the city. Seattle’s Recreation Department and community centres have faced substantial staffing cut backs in the last few years and as such the program runs on less than the bare minimum staff resulting in programming compromises. Although there is enough work for five staff members the program survives because of a strong volunteer base, committed community centre staff and the central Program Coordinator who keeps the essential components of the program running (McElroy, personal communication, 2013).

Other municipalities I reviewed offered cooking classes and a few offered gardening classes, but these were often difficult to identify because they were buried in complex course listings, often unsearchable across the system of community centres. Almost none of the centres appeared to offer composting or waste reduction classes.

Conclusion on Case Studies

Based on this review there is a noteworthy opportunity for Vancouver's Board of Parks and Recreation to be a leader by showcasing our community centres' work in sustainable and healthy food systems by increasing the visibility and accessibility of information on-line, a clear gap among peer municipalities. Seattle is an excellent model to draw from to inform future directions in implementing 'local food cycles' in Vancouver's community centres. Vancouver can also draw on some innovative programming offered by other municipalities. Some ideas are outlined in the recommendations section of this report.

SEMI-STRUCTURED INTERVIEWS

Background

Vancouver's Board of Parks and Recreation oversees 24 community centres across the city. All of the community centres are run by City employees and the land and buildings are City owned. Each community centre has its own supporting community association. Each centre responds to its unique environment and community. As this is the first piece of work exploring 'closed local-food cycles' in Vancouver's community centres it is important to capture detailed and nuanced information to build a genuine picture of the community centre environment and yield practical information on everyday challenges and potential barriers to advancing the concept of 'closed local-food cycles'.

Objective:

To elicit the perspectives of community centre staff and community members around the opportunities and barriers to implementing 'closed local-food cycles' in Vancouver's community centres.

Methods

We selected semi-structured interviews as the primary method of data collection for this project. Semi-structured interviews are useful to elicit the interviewee's perspective on a topic, allowing for nuances and contradictions to arise. This method also allows for understanding the interviewees understanding of complex relationships. Importantly, interviews allow for attitudes and beliefs to be more clearly captured by the interviewer than other research methods might allow (12).

Interview Design

The interview questions aim to answer the primary research objective and to allow for additional relevant information to surface in the interview process. The choice of interview questions was guided by the City of Vancouver's *Greenest City 2020 Action Plan* and *Vancouver's Park Board Strategic Framework*. Questions were both practical and theoretical and were specific to Vancouver's community centres. Interviewees were asked about the strengths of the community centre's food activities, the community centre's "food culture", the attributes of an ideal 'local food cycle' in the context of the community centre and the requirements and barriers around the implementation of such a system in the centre. I worked with Brenda Racanelli and Lindsay Cole to design interview guide. Brenda Racanelli and I piloted the questions in one interview session.

Interviewee Selection

We selected community centre staff members who were known to the research team and who were known to be interested and/or involved with aspects of the community centre food system (purposive sampling). We aimed to interview 1 staff member at each community centre and where possible to interview a second staff or community member in order to get multiple perspectives on a centre. The primary staff member was contacted by email and requested to participate in the interview. They were also asked to recommend another staff or community person for the second interview.

Interview Procedures

For each staff interview, I met the interviewee at the community centre, which allowed for onsite observation of the centre and a site-visit of the food related facilities. Each interview took between 30 and 90 minutes, depending on the amount of food related activities in the centre and the length of responses. I began each interview session with a brief self-introduction, an explanation of the project objectives and an explanation of how the project fit into the City of Vancouver and the Board of Parks and Recreation's sustainable food related goals. I took an informal, discussion based approach to the interviews to encourage a casual and comfortable encounter for the interviewees. I generally followed the interview guide assuring all appropriate questions were answered. In some interviews, I skipped specific questions if previously divulged information invalidated the question. When interesting information arose, I asked additional probing questions to provoke more information. Brenda Racanelli attended some of the interviews.

After each interview, I summarized the interview question responses and provided them to the interviewee for review. The interviewee was invited to make changes to the summary before approving the final version.

Results

I conducted a series of 24 semi-structured interviews with 26 staff and 5 community members representing 18 of Vancouver's 24 community centres. Community centres were selected based on obtaining a representative sample of centres across the city while maintaining an achievable number of interviews for the research period. Of the community centres contacted, only one was not interviewed due to lack of available staff. Additionally, three representatives of community organizations that have worked closely with community centres were identified by community centre staff as being important sources of information. Therefore, these interviewees were included in the interview process as well.

Summary of the Interview Results

The following is a brief summary of some of the information collected in the interviews. One important observation I made was that every interviewee I spoke to was genuinely invested in the health and wellbeing of their community members. Every interviewee was enthusiastic to support their community centre in delivering the best and most appropriate services to meet the needs of their community. Another important theme was that interviewees at every community centre reported some level of engagement with food at their centre. Importantly, every interviewee also agreed there is value in the City's Greenest City Actions and reported current or potential connections between the plan and community centres. Additionally, the large majority of interviewees were enthusiastic about food activities at their community centre and felt there was value for the community in the concept of local-food cycles especially with an education focus.

Perceptions of the Role of Community Centres

In the interviews, themes emerged around the perception of the role of community centres in the community. Food plays a role in every community centre visited with a gradient of importance within the centres. Almost all of the interviewees from the centres noted the importance of food for social interaction among all user groups in the centres. One important point of agreement among all centres was the role of the centre to provide education to community members. Many interviewees commented that the community centres have a responsibility to educate community members in food skills and food system sustainability, which fits well with the City's and Board of Parks and Recreation's local food goals.

One of the most important differences among interviewees was their perspectives on the mandate of community centres. One group of interviewees reported their centres are actively involved in a wide variety of food related activities and feel that community centres have a responsibility to address a wide array of modern community needs including those arising from food insecurity and climate change. Among the centres represented by these respondents, some currently run food security initiatives that provide food to a wide variety of at-risk groups in the community and others work to increase food skills among community members. However, for another subset of interviewees, there was a perception that "food" is outside of the mandate of community centres. The associated centres focus almost entirely on providing recreation activities and interviewees at these centres tended to question the centre's role in growing and distributing food in the community, citing there are other organizations that already do this work. However, most of the centres represented by these respondents provide at least some food oriented programming. Additionally, these interviewees identified food related activities such as gardening and cooking as components of a healthy and active lifestyle, which is widely promoted by community centres. There was a request that the Board provide

clarification on the community centre mandates and the associated actions that should be taken within community centres.

There were differing opinions among interviewees on how food programming should be incorporated into the community centre programming framework. Of note, there are different types of programming at community centres. Some programming is housed within the community centre while other programming is provided by outside groups who rent community centre space. Three main models emerged for accommodating food related programming in the centres.

- 1) Include food system education in the community centre core programming (most mentioned)
- 2) Community centres host City operated workshops (several interviewees discussed this option)
- 3) Community centre host workshops provided by community organizations either at a fee for space or for free depending on the Park Board mandate (this was a topic of discussion with pros and cons posed by several interviewees).

Of note, partnerships with community organizations emerged as an important theme in the success of community centre initiatives. Some centres had a very collaborative view of partnerships in which the centre and community organization work together to meet the community's needs through sharing of resources and facilities. A few centres view successful partnerships as those where the centre provides the space, often for a fee, and the partner provides the expertise, materials and attendees. Some common partners for community centres include:

- The Vancouver School Board (VSB)
- BC Housing
- Evergreen Environmental Youth Alliance (EYA)
- Corporate sponsors and donors including- Starbucks, Urban Fair, Choices Market

Hot Topics in the Community

Interviewees were asked about the “hot food topics” in their communities. Food topics of interest differed across the city but some themes emerged. The following is a brief list of the main food topics of interest.

- Food Insecurity and affordable food
- Growing food and food production
- Cooking food and food skills
- Local food and food miles
- Lack of access to land for growing food for high-rise and apartment dwellers

Additionally, many respondents identified new immigrants as a group that are under represented among community centre user groups.

Local-Food Cycle Components

Most commonly community centres were involved in food preparation and consumption. However, varying levels of programming focused on food preparation and fewer focused on food consumption and nutrition. The following outlines themes that arose within the components of a ‘food loop’.

- Food production (vegetable and herb gardens, fruiting trees and perennials, etc.)
 - Many of the centres that do not have gardens are interested in implementing gardens. Some centres have already started the internal process to establish a garden, others have staff and community members that are seriously interested but face barriers to pursuing a garden and others are theoretically interested but have not yet taken any action.
 - A few centres have offered gardening classes.
 - Some of the identified barriers to implementing gardens include staff time that can be contributed to the application process, lack of expertise in gardening or lack of time to coordinate community members and groups to oversee the garden implementation and subsequent management.
 - There was some concern about the long term maintenance of a garden space including lack of staff time to coordinate and oversee the garden, lack of expertise in growing food and a need for ongoing maintenance of the facilities.
- Food preparation and food skills
 - All but one community centre was equipped with a kitchen. In a number of centres the kitchens were reported to need updating and/or were too small to accommodate food activities.

- Additionally, many centres do not have commercial permits for the kitchens which limits the activity allowed in the kitchens. There was confusion among interviewees around what food preparation activities were allowed in the centres according to the permit type. Staff-time was mentioned as a barrier to pursuing permitting of kitchens in a few cases. Additionally there appears to be confusion around kitchen regulations. For example, many interviewees reported pot-lucks are no longer allowed, however this is not consistent with Vancouver Coastal Health's regulations.
- Food consumption
 - Healthy food is not a focus at a majority of the centres. Many interviewees reported this as an area where their centre could improve. Interviewees reported that there is no city wide policy on the health and sustainability of foods provided through community centres, however the BC Provincial Government has "Healthy School Food Guidelines," "Healthy Vending Machine Guidelines" and "Healthy Sporting Event Guidelines" that can be drawn upon.
 - Many centres reported that food costs limit their ability to provide food programming and events.
- Composting/waste reduction
 - Almost all of the interviewees asked about implementing recycling and composting systems in their community centre and were excited about the pending expansion of the Zero Waste program that is being piloted at 3 community centres in Vancouver.
 - Several centres have offered Zero Waste and composting classes in the community.
 - At present, there is no policy around use of disposable containers in community centres.
- Food system education
 - Most of the centres have in the past or currently offer food related courses. Responses were varied regarding attendance of these courses and many interviewees reported less than satisfactory turn out. At the centres with low attendance some of the possible reasons identified included inadequate marketing, inappropriate classes for the community's needs, a saturation of classes within the community and/or the cost of attending classes.
 - Food education tends to be high cost for the community centres due to the large number of materials needed and the low number of participants that can be accommodated. This is a barrier to reducing the price of these classes.
 - There were mixed feelings about the City of Vancouver "Green Logo" program for centre classes. From some interviewees perspectives it is inefficient and

unrealistic to separate the food issues faced in the community. Additionally, classes that increase food preparation skills, address food security, teach composting, build nutritional awareness and improve food production skills all contribute to an improved local food system and all have a place in more sustainable and healthier communities. Therefore, all the classes addressing the healthy and sustainable concepts contained within the food cycle should be eligible for the logo.

Barriers & Challenges

Each interviewee was asked about barriers and challenges they have encountered or that they would expect to encounter if working towards implementing a 'local-food cycle' at their community centre. Some very important and clear themes emerged. These are listed below.

- **Staff time.** In every interview staff time was identified as a critical barrier to pursuing next steps in increasing the community centre's food activities. Current staff do not have time to take on new tasks and many must prioritize among the tasks they already have. Many interviewees identified tasks that needed more attention such as coordination of kitchens, permitting processes for kitchens or gardens, nutrition auditing of food offerings and coordination of food purchasing among centre programs.
- **Access to expert knowledge.** Almost all of the interviewees identified a lack of expert knowledge in gardening, food preparation, nutrition, waste reduction and composting to be a limiting factor in supporting next steps towards improving the local-food cycles in their community centres. Some interviewees noted that within the Board of Parks and Recreation there is expertise in many of these areas, especially in growing food and that this expertise can be drawn upon in the community centre setting.
- **Direction and leadership.** Several centres felt that more clear communication and directives from the Board of Parks and Recreation would help them prioritize among their many objectives. It is important for staff to know which priority focus areas to include in their annual work plans. These respondents felt that making links between different City food related programs would be helpful for staff.
- **Work load prioritization.** Some interviewees commented that there are competing goals and priorities for staff time at the community centres. Some staff members remarked that the end-of-year performance metrics ultimately determine which areas take priority in the community centre's work plans. Therefore, it is important that local food appear in these metrics if they are to be taken seriously.
- **Stable funding.** The current model of grant funding is unstable and focuses on new initiatives rather than the maintenance of ongoing initiatives. This can result in strong and popular initiatives being discontinued due to lack of funding. The effect of this

results in an unstable program environment for community members, challenges in marketing programs for centre staff and an undermined program improvement processes. This in turn affects program participation. Additionally without any staff focused on food, it is often difficult to find staff time to write grants for funding these programs. Interviewees identified several examples of programs that are popular in the community but unstable because of high personnel turn over due to inadequate and insecure funding.

- **Poor attendance.** As previously mentioned, workshop and adult oriented food and garden class attendance has been poor in many centres. This is a major deterrent for community centre programmers to continue to offer classes. There are a variety of reasons that attendance might be poor and these were discussed previously.
- **Food costs.** At present community centre programs pay full retail price for food. Additionally, in many centres food purchase is not coordinated between programs resulting in multiple trips to the market, which is costly of staff time. The high costs of food are a barrier to purchasing local and sustainable foods and can also result in compromising on the nutritional value of the foods purchased. Several respondents were interested in ways to capitalize on bulk food prices that the City may access through their food outlets and concession stands.
- **Marketing.** Several centres felt that marketing for food related classes was insufficient. One idea was that the City launch a city wide campaign about community centre food-focused classes and infrastructure features to increase awareness among community members.
- **Adequate facilities.** The community centre facilities need to adequately support the food work carried out at centres. For many centres, the current facilities and storage space are insufficient to support starting or expanding programs. For example, many respondents noted that their centre's kitchen(s) needs updating to support cooking classes. Other centres commented that they do not have enough equipment storage space for food or gardening activities. At other centres there is interest in having gardens but the centre would likely need support in garden maintenance.

Recipes for Success

The following section highlights a few successful examples of food related activities in specific community centres.

- **Britannia Community Centre** is a leader in food activity among Vancouver’s community centres. A very important innovation is having a Food Programmer staff position dedicated to food. The position is a union position supported by the community centre. The position has its own advisory committee consisting of community members, a community centre board member and a VCH dietitian. The position works on food issues that are important to the community such as food security and sustainability. This position is considered successful because it is autonomous and can orient strongly with the community (rather than community centre administration). Through this position Britannia has developed a vibrant food community with many food-system initiatives. The interviewee cited having a supportive director and strong community partnerships as important keys to success.
- **Hastings Community Centre** has run the “Seasons of Food” family food programming with extreme success. This initiative brings families together on a weekly basis with a rotating menu of activities. Each month the program offers one session on gardening, one community kitchen, one canning workshop and one education piece. This program has been very popular with families in the community and was very well attended.
- **Strathcona Community Centre** has recently been able to add a Food Coordinator to their team of centre experts thanks to a private sponsor. The addition of this position will allow the centre to add education components, such as food preparation and nutrition, to their food security initiatives. This increased focus on education will not only help the centre meet its mandates for education, it will allow the centre to better integrate their on-site food production into centre activities in a meaningful way for the community.
- **Creekside Community Centre** has successfully piloted a weekend food scraps drop off for their apartment dwelling community. The initiative was volunteer driven and received a Greenest City Grant. The group worked with Recycle Alternatives to provide the community with weekly compost collection. Other community centres have hosted similar successful initiatives.
- **West End Community Centre** switched to “healthy vending machines” and substantially increased food sales and revenues. This is a switch that is easy and a win-win for the community centre and the community it serves.
- **Roundhouse Community Centre** runs the very successful annual Sustenance Festival that highlights Vancouver’s local food system by bringing together food innovators,

artists and community. This festival is a destination for many to celebrate, network and learn about food.

Interpretation

Three general groups of community centres emerged from the interview results. I have categorized the community centres according to my interpretation of the information provided in the interviews in table 2. As this is my interpretation, community centre staff and community members may categorize their community centre differently. However, the general themes serve to facilitate discussion of the groups of community centres.

- 1) Food-centric centres (3 centres). These centres have local-food cycles and have a strong focus on food activities in the centre. The interviewees were highly active in promoting food sovereignty, food security and food safety within the community. There was a strong presence of food activities in the community centres.
- 2) Food-inclusive centres. (10 centres). These centres had a wider range and depth of activities around food than the “recreation focused centres” (below). Most of these centres were focused on improving food skills or food insecurity in their communities. Distinguishing characteristics of these centres was the interviewee’s awareness of food activities in the centre and a feeling that food was of importance in the centre. Most of these centres did not have food production on site and identified barriers to furthering the centre’s involvement in local-food.
- 3) Recreation focused centres (5 centres). In these centres, interviewees did not perceive food as a central focus at the center. These centres tended to be identified as recreation centres. Importantly, food activities were still part of the daily community centre activities (for example, many children’s programs provided snacks, birthday parties held at the centre and workshops and classes that had a focus on food or food gardens).

‘Close Local-Food Cycles’ in Community Centres

The table 1 indicates which community centres have ‘local-food cycles’ and which have potential for implementing a ‘local- food cycle’ in the near future. For those centres that already have all the components of a food cycle there is variability in how well the components are linked. For example, at one site food is grown on site, but it is not yet used by community centre programs, while at another site all components are already functioning together but need the support of a coordinator to function at full capacity. For the centres that are possible future centres for ‘local-food cycles’ there is a wide variety of next steps that would be needed at the centre. One common theme among these centres is a keen interest in implementing a food-cycle on site. For some of these sites community consultations would be needed to gauge interest and provide direction for the centre’s food-cycle.

Table 1. Community Centres with a 'Food Cycles' or Potential for a 'Food Cycle'

	On-site 'food cycle'	Possible future 'food cycle' site
Britannia	X	
Champlain		
Coal Harbour		
Creekside		?
Douglas Park		X
False Creek		
Hastings	X	
Killarney		X
Kitsilano		X
Marpole Oakridge		X
Mount Pleasant		
Renfrew		X
Roundhouse		X
Strathcona	X	
Thunderbird		X
Trout Lake		?
West End		
West Point Grey		X

Study Strengths and Limitations

The major strength of this study lies in the large and representative sample of community centres across Vancouver included in the interview process. Additionally, in most centres two representatives were interviewed which served to verify perspectives and capture as much information as possible about the centre's food activities. In the interview process a saturation point of ideas, the point where no new ideas or themes emerged from the interviews, was reached after about three-quarters of the interviews were completed. An important strength of this study was that respondents were free to tell their own story because the interview process was not highly structured. This allowed participants to speak freely and provide the information they felt was most important to each topic.

The main limitation of the study lies in the qualitative nature of the study. This study was exploratory and hypothesis forming, rather than hypothesis testing. This qualitative study was based on interviews with respondents who were known to be involved with food activities in some way in the community centre where they worked. Therefore, the results of these interviews represent the perspectives of the respondents which may or may not match the views of other staff members at any given community centre. That being said, the interviewees were among the most qualified staff and community members to answer questions around food in each community centre.

Interview Conclusions

The interview process was highly successful in yielding intricate information on community centre staff's attitudes towards food initiatives, food culture, food activities, and local-food cycles in community centres as well as opportunities and barriers to advancement of food activities within community centres. The overwhelming response to the interview topic was positive. Even in the few centres that questioned the role of food in community centres there was a keenness to discuss the topic and provide insights and information. From this information many ideas and recommendations emerged. These are summarized in the next section of this report.

SYNTHESIZED RECOMMENDATIONS

These recommendations are the result of all of the work that was conducted over the course of the summer. Primarily, the recommendations were informed by the interviews conducted with community centre staff and community members. I also drew on concepts and knowledge gathered in the case study review and site visits. As such, many of these recommendations will require further exploration into their financial, administrative and operational feasibility from the Parks Board perspective. Additionally, further community and staff consultation will be important to verify the direction of some recommendations. Importantly, these recommendations are made in the context of the local food goals outlined by the City of Vancouver and the Board of Parks and Recreation.

The principal recommendation is to encourage implementation of ‘local-food cycles’ in community centres by supporting community centre efforts to advance healthy and sustainable foods in their community centres.

The following recommendations are more detailed and offer ideas for how this primary recommendation can be achieved.

City Level Recommendations for Community Centres

The following recommendations are aimed at the City of Vancouver and the Board of Parks and Recreation and cover a variety of ways that community centres could be supported in increasing the health and environmental sustainability of their food related activities and move the centres towards having more holistic ‘local-food cycles’.

Quick Start Actions

- **Clearly communicate the local food goals and associated priority actions.** Many community centres have competing goals for limited resources and infrastructure. If local-food is going to be a focus at community centres, it needs to be reflected in staff work plans and annual performance measures.
- **Draw on current partnerships and support community resources to strengthen local-food actions in the community.** Centres that are not yet supporting their local Food Network or other food advocacy groups may enhance the local food actions in their community by strengthening these partnerships. The Parks Board can help formalize a pathway to partnership.
- **Update the community centre’s webpage to increase the visibility of food activities and events in Vancouver’s community centres, especially focussing on ‘local-food cycles’.** Specific suggestions have been provided elsewhere.

- **The “Green Logo” designation should apply to classes addressing any of the ‘food cycle’ principles, not just local foods.** Nutrition, environmental sustainability and food security are related and need to be considered and addressed simultaneously. Additionally, the limitations on the use of the “Green Logo” have the unintended consequence of making important food-skill classes seem less important when they do not have a logo. Finally, many centres do not offer any “Green Logo” classes during a term, which can limit the visibility of the program. By being more inclusive the program may improve its visibility.
- **Open the Park Board’s central warehouse to community centres.** Streamlining community centre food orders through the Parks central warehouse would decrease staff time spent shopping, decrease the number of trips to market each week and improve access to bulk food and supply prices. Importantly, a centralized system would also allow the City to track and influence purchasing behavior among community centres. For example, if the City wanted to set a local-food target for the community centres it would be much easier to support the centres in meeting the goal and to track progress through centralized purchases. There would also be increased possibility of implementing other sustainable food policies such as “Styrofoam free community centres” by giving centres access to more affordable compostable containers. Implementing a centralized system would require community centres to change their current system and to coordinate their weekly food orders. While there may be challenges associated with implementing this change at specific centres, the incentives for centres to do so are very high.
- **Strengthen the existing partnership with the Vancouver School Board (VSB) by forging a role for community centres to oversee school gardens during the summer months.** Many community centres are located adjacent or very near to a Vancouver School. Different centres have different levels of partnership with their local school, but all share the community. Sharing food production gardens is a potential win-win relationship as schools are not in session in the summer when gardens are most productive and this would be a quick access solution for community centres to be involved in food production. It also allows for continuity of the gardening experience for students and families involved in the gardens.
- **Improve the ease of the permitting processes for gardens and kitchens in community centres and offer support to centre staff to pursue permitting.** Many centres are very interested in starting a garden, but do not have the staff time to oversee the application process, which is perceived as daunting. Providing a City staff person to manage and oversee applications would support community centre staff in advancing their ‘local-food cycle’ and programming at their site. Similarly, it would be helpful to have a City

staff member help streamline the kitchen permitting process and support community centres in meeting the permitting requirements.

Medium Term Actions

- **Dedicate a Parks Board staff person to support food-related goals.** At present there are no Recreation Programmers dedicated to food within the Board of Parks and Recreation. For food related initiatives and programming to be successful, it is necessary to dedicate a minimum of one full time staff member to coordinate and support food efforts across community centres. This position could be housed in the central recreation team of the Board of Parks and Recreation. The position would be responsible for designing, implementing, coordinating, evaluating and improving local-food programming, food initiatives, food related guidelines and policies in the City's community centres. Areas that need guidelines or policies include healthy food, sustainable events and sustainable menus. The zero waste initiative will need support as it is rolled out. Additionally, this staff member would serve as the main contact and source of information for the Centre's gardens and kitchens and would support community centre staff in their duties around the facilities.
- **Dedicate community centre staff time specifically to support food-related goals.** In the "food-centric" community centres it is necessary to have a community centre staff person who is formally responsible for the food elements of the centres, including nutritional health, gardens, kitchens and food education. At present, Britannia is the only centre that has a guaranteed staff Food Programmer. Strathcona has a newly hired Food Coordinator but this position is sponsored by a donor and therefore it is not a guaranteed position. Hastings is in need of a Food Coordinator. Among the "food-inclusive" community centres it is possible that Food Programmers/Coordinators could be shared between two or three community centres depending on the goals and needs of the centres involved. The "recreation focused" community centres may be able to share a single programmer. Several interviewees suggested using the "arts programmer staffing framework" as a model for food programming.
- **Produce and implement city wide guidelines and provide supporting resources for community centre staff for key food topics.** Interviewees stressed the importance of having expert resources to guide their actions at the community centres and identified a number of areas where immediate improvements could be made to the food offerings at the community centres with support from the City. Further input from centre staff would be necessary in developing the topics and materials. Two important themes are discussed below.
 - 1) Healthy food- The Province of British Columbia has "Healthy School Food Guidelines", "Healthy Vending Machine Guidelines" and "Healthy Sporting Event

Guidelines” which can be easily applied in Vancouver’s community centres. Additionally, basic nutrition and local-food training would be helpful for community centre staff who are involved with food at the centres. Ideally, this would be an in-service training provided by the City at no cost to staff.

- 2) Healthy and sustainable event menu guidelines- It would be helpful for centres to have a user friendly set of guidelines to provide to community centre user groups to promote healthy and sustainable menus and food practices. For example, the guidelines might ask event planners to prioritize local-seasonal ingredients in their menus. The guidelines could also prioritize the use of re-usable dishes and cutlery as the “best option” followed by compostable ware as the “second best alternative” and a note that Styrofoam should be avoided if possible.
- **Implement innovative food programming to better meet the needs of the community.**

Interviewees agreed that community education is an important responsibility of community centres and many noted that food system sustainability and health are important topics where there is room to improve knowledge in the community. Because attendance of traditional workshop style classes has been variable for many centres, it is important to better understand the community’s education needs in order to design and implement effective programming. Community consultation would be an important first step in designing new curriculum content and format. Below are some examples of programming innovations:

 - Include in the community centre Core Programming a limited number of workshops or classes that meet the community’s food knowledge needs and the City’s local-food goals. Potential class topics might include:
 - Sustainability (environment, people and wallet) in the super market
 - Seasonal gardening specials: Spring- successful starts; Summer- dealing with bugs and slugs; Fall- Cover crops and mulch; Winter- pruning for abundance.
 - Homemade, environmentally friendly and affordable yet effective household cleaners.
 - Balcony gardening or the one-foot garden.
 - Seasonal-local food canning; drying and dehydration
 - Prepare an all-inclusive workshop on household sustainability. The workshop could include principles of seasonal-local ingredient selection, waste reduction, proper use of the city compost, resources on home composting, etc. Resources (community centre programs, websites, organization contacts, etc.) for further information on specific topics covered in the workshop should be provided. The Neighborhood Emergency Preparedness Program could be used as a model.

- Offer in-depth gardening trainings such as the Denver, Colorado “Master Gardener Training.” A more advanced gardening option might cater to invested community members that want to advance their gardening skills. This would also increase the overall skill level in the community.
- English language cooking classes might be a creative way to engage the new immigrant population through a celebration of local food.
- **Launch a City wide marketing campaign advertising the community centre’s local food focused facilities and programming.** A campaign would help raise the profile of community centres role in sustainability education and a community resource. The goal would be to increase awareness of local-food activities at community centres and thereby increase participation from the wider community. This would help address the gaps in marketing of programs identified by interviewees. Examples of successful public marketing campaigns include the “Greenest City Action Plan” and the “power saver” ads which feature attractive images and messages found around the city including at bus stops.
- **Implement a sustainability oriented version of the FitCity program in the community centres to encourage sustainable behaviour change.** Several interviewed staff mentioned that FitCity is motivational and engaging for staff members. It has easy to follow guidelines and a variety of participation choices to choose from. Additionally, the program has built in incentives and a clear rationale that staff can understand and relate to. Sustainability activities could be tiered in their intensity to match the interest and capabilities of the different types of community centres (“recreation focused”, “food-inclusive” and “food-centric”).
- **Conduct a food audit of all community centre programs.** Many interviewees identified a need to improve the nutrition of the foods offered at community centres. One of the main barriers to implementing nutritional guidelines was conducting an audit of program food offerings and generating guidelines. With community centre approval, this is a task that the City could oversee city wide for all community centres. This would also act as a baseline assessment for local food use. The BC Recreation and Parks Association (BCRPA) has resources to support food environment audits.

Recommendations with a Forward View

These recommendations are for longer term consideration.

- **Hire community centre Programmers with a wide variety of expertise, interest and skill.** For community centres to fully meet the community's diverse and modern needs it is important to have staff who are passionate about a variety of topics important to the community. In light of this, the Board of Parks and Recreation would benefit from hiring community centres Programmers with community development and food-system qualification or skills (gardening, food preparation, and nutrition) who would be equipped to support the community centres' many current and potential food activities. Expertise in these areas would help complement the already rich staffs' expertise in arts and recreation.
- **As centres are remodelled and new centres are built, include adequate and secure kitchens, cold food storage, dry food storage and equipment storage to fully support food activities.** Many centres need kitchen upgrades to support food programs in their community.
- **Consider implementing an urban farm adjacent to a community centre.** In the *City's Greenest Action Plan* there is a goal to implement five urban farms in Vancouver by 2020 (5). An urban farm is larger than the typical community gardens and demonstrates sustainable, local, seasonal and organic food production on a large scale. An urban farm is a model for productive vegetable growing and a location for in-depth community education on local food production. Because of the strong potential for public education, there are important benefits to locating an urban farm together with a community centre. Positioning an urban farm adjacent to a community centre would improve the farm's outreach to community and allow for the space to be used by the community centre for education purposes.

Prerequisites for Success

The following recommendations are cross cutting themes and prerequisites to success in implementing a “local-food cycle” according to the interviews with community centre staff. Any changes that are made within the community centre need to be positively accepted by the staff to be successful. Park Board staff may be resistant to new programs of this size and without extra funding to hire new staff to help with facilitation. Therefore, it is important to carefully consider the goals and implications of a new program from the perspective of centre staff and to plan accordingly. The work and expertise required to implement, maintain and coordinate a garden should not be underestimated. Specific recommendations are listed below.

- **Provide sufficient supporting resources (time, budget, facilities, etc.) to the project.** Community centre staff work very hard to deliver services to the community. It is very important to consider staff workload in the planning process and to assign tasks to specific positions. For new and large initiatives to be received positively by staff, sufficient supporting resources must be provided.
- **Get buy-in from staff.** It is important to clearly communicate the purpose and outcomes of the local-food initiatives. Provide incentives and make participation fun. Work with people who are already “converted” and use their energy to advance the initiatives and build positive staff support. According to staff, this will help create momentum and inspire others to join in.
- **Create innovative funding models that will support initiatives beyond one year.** Interviewees suggested that new funding models need to be spread over several years (3-5 years) to support successful projects rather than focusing on start-up funds only.

PROJECT OUTPUTS

Attributes of an Ideal ‘Closed Local-Food Loop’ in Vancouver’s Community Centres

The following is a list of ideal attributes of a model ‘closed local-food cycle’ in Vancouver’s community centres. These attributes were synthesized from local food related policies from the City of Vancouver and the Board of Parks and Recreation and a series of interviews with community centre staff and community members.

A model ‘closed local-food cycle’ at a community centre has the following attributes:

- The food cycle is a model for sustainable food systems and provides opportunities to learn a wide variety of food skills. The ‘food-cycle’ contains the following components:
 - Food production and environmental services, which may include one or more of the following components:
 - Vegetable garden
 - Fruit or nut trees or bushes
 - Herb garden
 - Pollinator gardens
 - Gardens that promote environmental sustainability, such as art materials production
 - Food preparation
 - Foods are prepared for use at the community centre by community members and centre staff (lunch program, community kitchen, cooking class, event, etc.)
 - Community members engage in preparing foods in a community setting (community kitchens)
 - Access to food
 - Community members have access to environmentally sustainable, affordable and healthy foods
 - Local, sustainable and healthy foods are used in community centre programs and events
 - Community members consume the foods grown at the community centre
 - Composting & adding nutrients to the soil
 - The centre actively diverts organic waste and facilitates community members to do the same
 - The centre provides a compost bin with each landfill bin

- The centre has a working and well maintained composting system that community members can use and learn from (three bin system/vermicomposting/other)
 - When necessary, the City compost disposal system is used instead of the landfill bins
 - The compost system is well maintained and is a community model
 - The compost created on site is used in the on-site gardens
 - City of Vancouver compost is used in the on-site gardens and landscaping
- Celebration, education, and programming:
 - There are formal and informal hands-on learning opportunities in all aspects of the food-cycle, where people can increase their skills in food production, preparation, healthy eating, and composting (for example, people learn gardening skills, the role of gardens in city ecosystems, food skills, environmentally sustainable food consumption, how to use home and city composting systems and more)
 - Sustainable and healthy food focused events and celebration are held and include the whole community in the centre food-cycle
- All aspects of the ‘closed local-food cycle’ are:
 - Accessible and inviting for all members of the community
 - Increase awareness and knowledge of healthy and sustainable food systems
 - Build capacity within the community
 - Build community networks
 - Encourage a sense of place, social engagement and community participation
 - Promote intergenerational and intercultural interaction and knowledge sharing

CONCLUSIONS & FUTURE RESEARCH

Vancouver has the opportunity to be a leader in local food systems by engaging and supporting the communities in its 24 community centres. The Parks Board is fortunate to have enthusiastic and committed staff that largely see potential for ‘closed local-food cycles’ in the centres as vehicles of community engagement and healthy and sustainable food education. However, there are barriers and challenges to implementing these cycles and addressing these are prerequisites to their success. Additionally, each community centre responds to its community needs in a unique way. As such, local-food cycles fit the model of community engagement at some facilities better than at others. These differences should be recognized and a gradient of local-food priority actions should be promoted so that centres can choose actions that best fit their centre, community and staff. Additionally, it is important for food issues (health, food security and environmental sustainability) to be considered together to fit the holistic view of food held by the community and staff. As the Board of Parks and Recreation increases the support to and the visibility of the local-food work being done in Vancouver’s 24 community centres, it might consider how community centres can be “re-branded” as places that meet the modern needs of all community members.

This project has brought to light many important themes. Future research is needed to support many of the recommendations presented in this paper. For example, as food programming is reviewed and redesigned, it is important to solicit community member and staff input. Focus groups would be an excellent tool to further map the potential directions for programming. Additionally, focus groups would be useful in gathering feedback on proposed new programming ideas. Similarly, staff focus groups would be an appropriate first step towards identifying what topics should be included in community centre food guidelines and food resources. Once guidelines and resources are drafted, feedback and input should be solicited from appropriate staff before finalization. Finally, a baseline food audit should be conducted of community centre programs to understand what is being served in centre programs. The audit should focus on both the health and sustainability of the food offerings.

WORK CITED

- (1) United Nations. The Universal Declaration of Human Rights. 2013; Available at: <http://www.un.org/en/documents/udhr/>. Accessed August, 2013.
- (2) Statistics Canada. Table 202-0802-Persons in low income families- annual. 2013; Available at: <http://www5.statcan.gc.ca/cansim/a47>. Accessed August, 2013.
- (3) Dietitians of Canada. The Cost of Eating in British Columbia- 2011. 2012; Available at: http://www.dietitians.ca/Downloadable-Content/Public/CostofEatingBC2011_FINAL.aspx. Accessed August, 2013.
- (4) Morgan K. Feeding the City: The Challenge of Urban Food Planning. International Planning Studies 2009;14(1):341-348.
- (5) City of Vancouver. Greenest City Action Plan 2020. 2013; Available at: <http://vancouver.ca/green-vancouver/greenest-city-2020-action-plan.aspx>. Accessed August, 2013.
- (6) City of Vancouver. What Feeds Us: Vancouver Food Strategy. 2013; Available at: <http://vancouver.ca/files/cov/vancouver-food-strategy-final.PDF>. Accessed August, 2013.
- (7) City of Vancouver. Parks, Recreation and Culture. 2012; Available at: <http://vancouver.ca/parks-recreation-culture.aspx>. Accessed August, 2013.
- (8) Vancouver Board of Parks and Recreation. Park Board Strategic Framework. 2012; Available at: <http://vancouver.ca/files/cov/park-board-strategic-plan-presentation-20120627.pdf>. Accessed August, 2013.
- (9) City of Vancouver. Park Board Local Food Action Plan integrates local food into Vancouver's parks and recreation system. 2013; Available at: <http://vancouver.ca/news-calendar/park-board-local-food-action-plan-integrates-local-food-into-vancouver-s-parks-and-recreation-system.aspx>. Accessed August, 2013.
- (10) Siemens. Greenest City Index. 2013; Available at: <http://www.siemens.com/entry/cc/en/greencityindex.htm>. Accessed August, 2013.
- (11) Seattle Parks and Recreation. Good Food. 2013; Available at: <http://www.seattle.gov/parks/goodfood/default.htm>. Accessed August, 2013.
- (12) Mack N, Woodsong C, MacQueen K, Guest G, Namey E. Qualitative Research Methods: A Data Collector's Field Guide. 2005.

