A Project SOIL Report

Ontario Public Institutions and On-site Food Production

Visualizing the Future for Health Care

Phil Mount, Linda Varangu, Brendan Wylie-Toal, Irena Knezevic,
Adeline Cohen, Louise Quenneville and Kat Rendek

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Shared Opportunities on Institutional Lands

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Authors
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Report Summary

Project SOIL (Shared Opportunities on Institutional Lands) is a feasibility study that explores the potential of on-site food production for public institutions through arrangements with local producers, particularly where access to land for food production is limited and/or expensive. Funded by the New Directions Research Program of the Ontario Ministry of Agriculture, Food and Rural Affairs, the project builds on emerging production models that can flexibly adapt to institutional resources, as well as land tenure models that could contribute to community food production.

This report includes summaries and links to previous SOIL reports, including *A Brief History of Public Institutional Food Production*, case studies of pre-existing and SOIL pilot institutional food production projects, and surveys and interviews with institutional administrators who were interested in exploring on-site food production arrangements.

Through the course of this project there were many opportunities to share our progress, observations and discoveries. In addition to our website, knowledge translation and transfer (KTT) activities included two scholarly publications, three social media articles, coverage in 14 traditional and sector media, and eight public panels and presentations.

Visioning Sessions

This report summarizes the results of the visioning sessions undertaken in 2016 with five institutions, to further gauge the potential of on-site food growing projects and gain insights to expand this approach. Each case summary includes details on initial interest, identification of possible barriers and responses, development of information on models, building connections with local producers, and sharing resources.

The University Health Network (UHN)

- UHN's Toronto Rehabilitation Institute (TRI) Lyndhurst facility identified the potential of an urban farm to enhance therapeutic impact on patients.
- The reinforced rooftop (20,000 square feet) was considered, but land available (approx. 30,000 square feet) would also allow for a large, commercial-scale greenhouse and full accessibility, attached to the facility at ground level.
- Two governance models considered: greenhouse / food production by UHN staff, or by an external strategic partner—with on-site food consumption an option.

Cornwall Community Hospital

- Hospital administrators favoured a community garden project at the north end of the campus, to benefit the community at large, hospital staff and visitors.
- Diverse community partners at the visioning session—with experience designing and implementing community gardens—favoured a social enterprise model.
- With a new construction project underway, the hospital team declined participation at this time—but community has laid the groundwork.

Hôpital Glengarry Memorial Hospital (HGMH)

- HGMH Therapeutic garden built as an extension of the Stroke Rehabilitation department, with production site expanded 3x through Project SOIL.
- Benefits from physical activity and socialization include: improvements in health, memory and concentration (particularly important for stroke recovery), motor skills, mood, and disposition to the overall program of treatment.
- Partners include Community Living, who shared equipment and expenses in 2016. The program will consider arrangements with farmers but proceed with caution, as previous partner enterprises have been offloaded to the hospital.
- In the first quarter of 2017 the program will focus on fundraising and marketing of the garden. Sustainable farming methods will establish the hospital itself as a fiscally responsible green health care and "buy local" movement leader.

Hanover District Hospital (HDH)

- HDH was interested in a community-farming project on a three-acre field
- Committee with local partners explored a 'sustainable agriculture demonstration and education project' (SADEP) that would not need hospital staff time, budget.
- The HDH Board required the ability to quickly sell the land if needed, and disallowed permanent structures. The hospital Board of Governors identified an exciting opportunity, but did not approve the request to seek funding.
- Possible future collaboration with the Hanover Community Foundation, which has been exploring the development of a community garden for some time.

The Ottawa Hospital (TOH)

- TOH Hospital of the 21st Century project, with a proposed new campus on a 50-60 acre site, includes high potential for significant integration of food production, limited only by characteristics of the final site selection.
- Riverside Campus provides space for in-ground food production pilot in interim.
- TOH vision for state-of-the art incorporates collaboration, partnerships to train health professionals, integrate interdisciplinary, cutting-edge, food systems and services research into practice, and strengthen community engagement.
- Preliminary research from Health: Science, Technology and Policy graduate students will review and assess models, identify partnerships for next steps.

Making the Case for On-site Food Production at Health Care Facilities

Over the course of our project, we have identified a number of potential co-benefits resulting from food grown at institutions, which could be enjoyed by residents, clients, patients, visitors, staff, the institutions, communities, the sector, governments and taxpayers. The new approaches to growing food on institutional lands consider a number of more recently identified co-benefits, each of which may be a winning opportunity to shift how food is viewed at institutions.

Patient Benefits

1. Patients may have an improved stay experience and recover faster where the hospital shows a greater attention to healthy food;
2. Locally grown foods are not transported great distances and keep more of their nutritional value;
3. Freshly made foods may be tastier and more of the food is likely to be eaten by the patients, which is better for patient recovery;
4. Patients can participate in gardening activities, a benefit both to mental and physical rehabilitation patients;
5. The garden area provides a healing space for all patients (as well as staff and visitors). The healing benefits relate to physical, cognitive and mental health, as well as skill building and social relations.

Institutional Benefits

1. Improved patient satisfaction ratings on surveys;
2. Demonstrated leadership and modeling healthy food behaviour in the community;
3. Reduced food waste (if more food is eaten by the patients) which results in reduced disposal costs;
4. Opportunity to develop social enterprises to help support patient care programs. These could include: selling food to staff, visitors, other community programs; providing job creation opportunities; offering skills training for patients returning back into the community;
5. Opportunity to leverage on-site food growing into larger projects or strategic plans (e.g. health care reform, sustainability plans, corporate social responsibility schemes);
6. Opportunity to forge new community partnerships that build on specific community needs (e.g. partnering with not for profits to distribute food to disadvantaged populations, food banks; enable cooking lessons for discharged patients and community members to build health);
7. Provide easy access to healthy foods for staff and visitors (e.g. offer CSAs to staff; provide a farmers market; healthy food in the cafeteria);
8. Improved status in the community leading to possible increased donations to the hospital foundations;

Sector Benefits

1. Opportunity to provide training and education to the medical community (e.g. medical staff and medical students) to promote the value of healthy foods to increase general health and wellbeing;
2. Opportunity for the sector to undertake social enterprises to supplement health care funding;
3. Opportunity for the sector to show leadership for health promotion and sickness prevention using the connection between good health and good nutrition;
4. Opportunity for the sector to show leadership in promoting actions that reduce greenhouse gas emissions and increase resilience to climate change impacts.

Community Benefits

1. Improved community health where healthy foods are eaten by more people, reducing sickness and demands on the health care system;
2. Stimulation of farming businesses and knowledge in the community;
3. Training of new farmers, which is needed to fill the void as farmer retire;
4. Provision of institutional land for growing food helps address one of the barriers to enabling new farmers to practice their skills;
5. Potential to better serve the needs of the community through distribution of food to disadvantaged populations, providing food to food banks, enable cooking lessons for community members to build lasting healthy lifestyles;
6. Generation of new social enterprises that provide community services;
7. Opportunity for community members to visit healing areas which grow food on hospital lands, learn how to grow their own food, and prepare and eat healthier foods.

Government and Taxpayers

1. Local food systems contribute fewer greenhouse gases through shorter transportation routes to the end user, and lower storage energy requirements, contributing to lower national greenhouse emissions, enabling national GHG emission targets to be met.
2. Opportunities to increase health and wellbeing of Canadians, reducing sickness and the need for health care services.

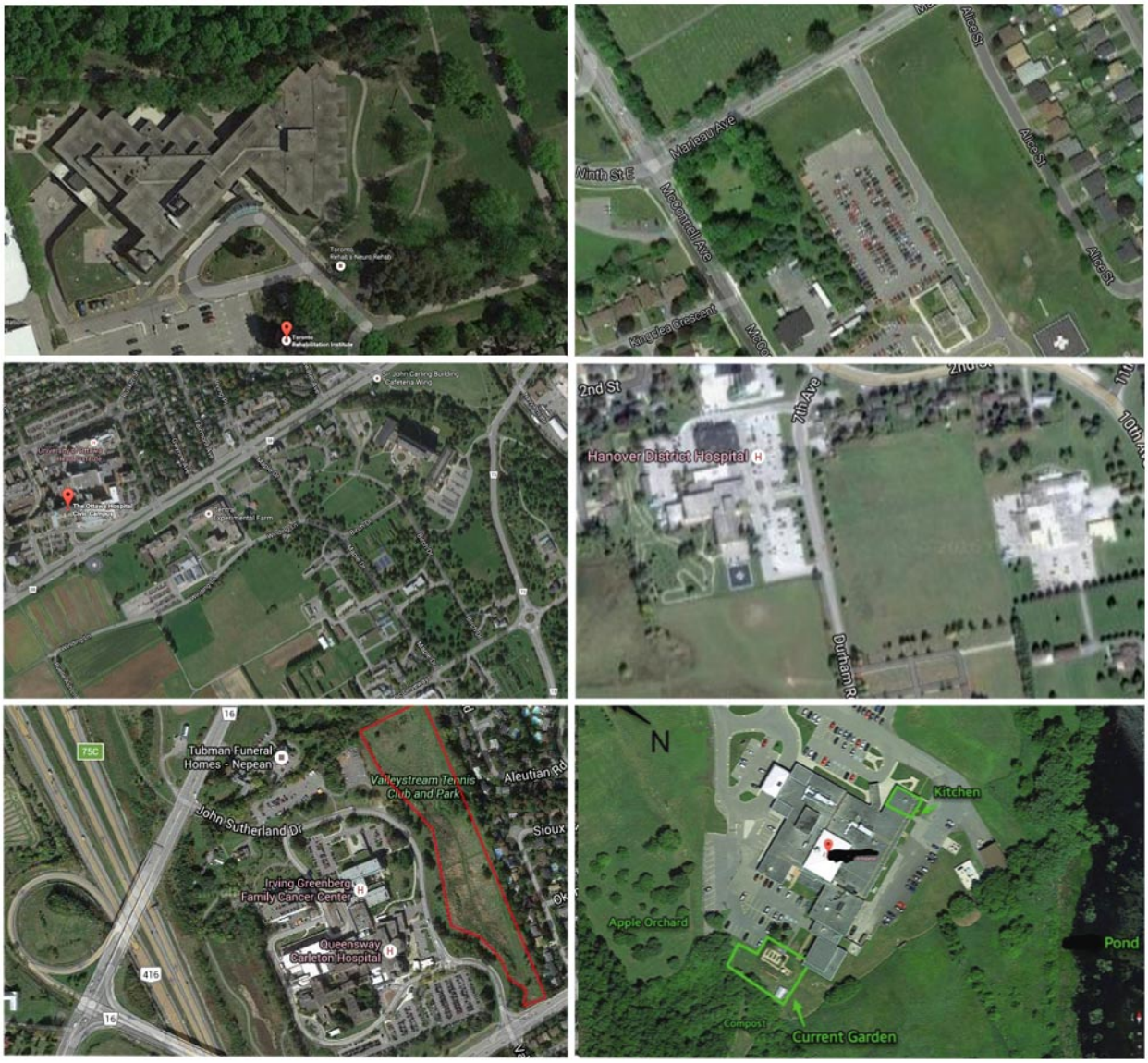
Interest in food production on public land continues to grow, with schools and universities, health care institutions and seniors residences, community food centres and food banks, as well as public agencies—from conservation authorities to crown corporations—making land available for food production.

Having developed strong working partnerships with numerous institutions over the past four years, Project SOIL is now in a position to advocate for, support and champion institutions that explore on-site food production. The partnership team continues to build networks to explore relevant research, and seek venues through which to spread the results.

We also remain committed to exploring institutional production as an avenue for new and young farmers looking for land and experience, where such an arrangement is possible and mutually beneficial.

Finally, we are encouraged to see that so many institutions—both in Ontario and further afield—are committing resources to food production, understanding that this is an opportunity to move their institution into a leadership position, and initiate a conversation that will resonate throughout their communities. Project SOIL has built strong relationships with community and institutional leaders that will continue to innovate and collaborate in the pursuit of the beneficial synergies that spring up when you grow food on public land.

Table of Contents



Project Overview

Project SOIL (Shared Opportunities on Institutional Lands) is a feasibility study that explores the potential of on-site food production for public institutions through arrangements with local producers, particularly where access to farmland is limited and expensive. Funded by the New Directions Research Program of the Ontario Ministry of Agriculture, Food and Rural Affairs, the project builds on emerging production models that can flexibly adapt to institutional resources (including SPIn or Small Plot Intensive farming), as well as land tenure models that could contribute to community food production. Co-benefits identified include community engagement on local food production, health and wellbeing, job creation and training opportunities, patient rehabilitation programs and generation of funds needed to foster these types of programs.

Previously reported SOIL initiatives include the following:

A Brief History of Public Institutional Food Production

This report provided an overview of the history of institutional food production, as well as five cases showing historical examples from across the province.

Available at http://projectsoil.ca/background/history/

GIS Study

In 2014 we undertook a GIS study of 659 Ontario health care facilities, and found that 217 had more than one acre of land, 134 had more than two acres, 54 had more than 5 acres, and 28 had more than 10 acres of arable land on site at their institution.

Case Studies

Four in-depth case studies of existing models with significant annual production are available on our website (http://projectsoil.ca/project-overview/case-studies/) and are as follows:

- FoodShare's School Grown Market Gardens;
- The Ottawa Food Bank's Community Harvest food growing project;
- McGill Feeding McGill; and
- The Kingston Prison Farms.

Surveys and Interviews

Survey and interviews were undertaken with institutional administrators and staff at educational and health care facilities across the province. This process was intended to gauge their interest in on-site food production and capture a broad set of responses to the idea, as well as identify the barriers and limitations within respondents' institutions. Survey results are available on our website at http://projectsoil.ca/project-overview/survey-results/.

Pilot Projects

Five pilot projects were completed in 2014-2015 with a diverse set of partners at health care, social service and educational institutions across the province, and documented the results through Participatory Action Research. Pilot reports are available at (http://projectsoil.ca/project-overview/pilots/). Research projects were undertaken at:

- Homewood Health Centre (Victorian Kitchen Garden project);
- Centre Wellington District High School (Food School Farm);
- Lakehead Psychiatric Hospital (GreenWerks Garden);
- KW Habilitation (Our Farm); and
- Hôpital Glengarry Memorial Hospital, (expansion of the Therapeutic Garden Project).

Knowledge Translation and Transfer (KTT)

Through the course of this project there were many opportunities to share our progress, observations and discoveries. The following is a summary of knowledge translation and transfer activities connected to the project:

SCHOLARLY PUBLICATIONS

Knezevic, I., Mount, P. & Clement, C. (2016). Shared opportunities on institutional land: Improving health care environments through on-site food production. *HERD: Health Environments Research & Design Journal,* published online April 5, DOI: 10.1177/1937586716638101.

Dwyer, Kyle, Mcgivern, Jillian, Flores Pajot, Marie-Claire, Lawlor, Jodie, and Pagotto, Emma. (2016). *Harvesting Health: Therapeutic outcomes of gardens at health care institutions.* M.Sc. Thesis submitted to the Faculty of Graduate and Postdoctoral Affairs, Health: Science, Technology and Policy, Carleton University. Available at: http://projectsoil.ca/wp-content/uploads/2016/04/Harvesting-Health-Investigating-the-Therapeutic-Effects-of-Gardens-Final-April-16.pdf

REPORTS

Mount, P. and Knezevic, I. (2015). *Ontario public institutions and on-site food production: Current capacities and constraints.* Guelph, Ontario: Ontario Ministry of Agriculture, Food and Rural Affairs. Available at http://projectsoil.ca/project-reports/ (29 pages).

SOCIAL MEDIA ARTICLES

Cohen, Adeline. (June 2, 2016). Let's Grow. *Talkin' Trash with UHN*. Available at https://talkintrashwithuhn.com/2016/06/02/lets-grow/

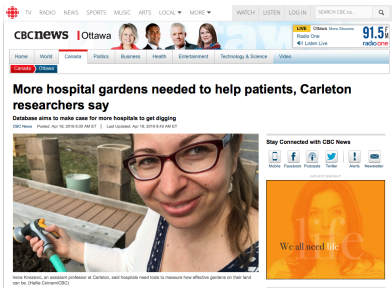
Mount, P. and I. Knezevic. (2016). Project SOIL looks at viability of on-site food production in public institutions. In Exploring the Healing Powers of Food Gardens. *Nutrition Resource Centre* blog, February 2016, with re-print in Local Food on the Public Plate, *Farm to Cafeteria Canada*, March 2016.

Mount, P. and Knezevic, I. (2014). Project SOIL: Want More Local Food In Your Hospital? Try Growing It! *Healthscape.ca,* May 24 issue.

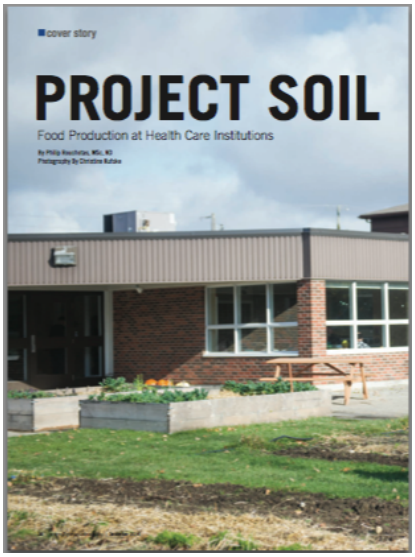
TRADITIONAL MEDIA and SECTOR COVERAGE

Canadian Healthcare Facilities (Summer 2016). *Digging Deep: Project SOIL unearths the fruits of on-site food production*. Available at: https://issuu.com/riccardo11/docs/chf_summer2016

Our Ottawa (April 23, 2016). *Harvesting Health: Investigating the Therapeutic Effects of Gardens*. CBC TV.



Ottawa Morning (April 19, 2016). *More hospital gardens needed to help patients, Carleton researchers say.* CBC Radio. Available at http://www.cbc.ca/news/canada/ottawa/hospital-garden-study-carleton-1.3541892



Rouchotas, P. (Dec 2014) "COVER STORY: Project Soil – Food Production at Health Care Institutions". *Integrated Healthcare Practitioners*, 38-43. Available at: http://ihpmagazine.com/project-soil-food-production-at-health-care-institutions/

Lake Superior News (August 27, 2014). *Green Werks Garden at St. Joseph's Care Group.* Available at http://www.lakesuperiornews.com/Health/GreenWerksGarden.aspx

Net News Ledger (August 26, 2014). *Green Thumbs Enhance Food Services*. Available at http://www.netnewsledger.com/2014/08/26/green-thumbs-enhance-food-services/

The Record (August 14, 2014). *The grow inclusion at urban microfarm.* Available at http://www.therecord.com/news-story/4757773-they-grow-inclusion-at-urban-microfarm/

Glengarry News (August 13, 2014). *SOIL initiative at hospital keeps growing.* Available at http://projectsoil.ca/2014/08/31/soil-initiative-at-hospital-keeps-growing/

Guelph Mercury (July 16, 2014). *Homewood garden part of food production project.* Available at http://www.guelphmercury.com/news-story/4633908-homewood-garden-part-of-food-production-project/

CJOY 1460 Guelph News: Project SOIL at Homewood Health Care, Guelph, July 15-16, 2014.

The Record (June 17, 2014). *Good Things Grow on Micro-farm.* Available at http://www.therecord.com/opinion-story/4582018-good-things-grow-on-micro-farm/

The Record (June 11, 2014). *Micro farm will provide food, activities for KW Habilitation residents.* Available at http://www.therecord.com/news-story/4570113-micro-farm-will-provide-food-activities-for-kw-habilitation-residents/

Exchange Magazine (June 10, 2014). *KW Habilitation Joins Local Food Movement.* Available at http://www.exchangemagazine.com/morningpost/2014/week23/Tuesday/14061007.htm

PUBLIC PANELS and PRESENTATIONS

Irena Knezevic and Phil Mount. Invited panelists: *Food Policy and Health: Shared Opportunities on Institutional Lands.* Visions 2042 conference. Carleton University, Ottawa, ON. March 2-4, 2017.

UHN OpenLab and Healing Garden. Invited display, Healthy Green Promenade, *Health Achieve 2016*. Metro Toronto Convention Centre, November 7-9, 2016.

Irena Knezevic. Invited panelist: *The Canadian diet and the future of health promotion*. Health Promotion Ontario Conference. Ottawa, ON. October 18, 2016.

Irena Knezevic and Chantal Clement. Invited panelists: *From Bureaucracy to Engagement: Research Ethics Approvals and Community-based Research,* Ottawa, ON, Canadian Association of Research Administrators, Ontario. Ottawa, ON. December 2015.

Phil Mount. Participant on panel *From Systems to Strategy in Institutional Procurement: Reflecting on Past Successes and Designing for the Future*. Bring Food Home 2015, Sudbury ON. November 2015.

Shared Opportunities on Institutional Lands: Challenges and opportunities of on-site food production, a Project SOIL webinar, October 22, 2015.

Irena Knezevic. Invited speaker: *Student engagement in food and health research.* Community Engaged Pedagogy roundtable at Carleton University, Ottawa, ON. June 26, 2015.

Phil Mount, Louise Quenneville and Irena Knezevic. *Feeding Policy through Shared Opportunities on Institutional Land: Project SOIL, on-site food production, and policy-relevant research.* C2U Expo 2015. Carleton University, Ottawa, ON. May 28, 2015.

Phil Mount and Irena Knezevic. Invited presentation: *Project SOIL (Shared Opportunities on Institutional Lands).* Earth Week 2015 to the *Environmentally Sustainable Office Practice* (ESOP) *Group*, Ontario Public Service (OPS). April 23, 2015.

Visioning Sessions

Throughout 2015, we developed relationships with six health care facilities where key personnel had indicated an interest in examining the potential of on-site food production. As we had discovered with our project partners, this was a process that required patience and flexibility, in order to incubate ideas and align motivations. All were at different phases of exploration, and with limited time and staff resources to commit to a formal feasibility assessment process. For most, the idea of a visioning session—where some combination of staff, administration, outside advisors, producers and community members discuss future potential—was more attractive than a formal feasibility assessment. In 2016 we conducted visioning sessions with five institutions to further gauge the potential of on-site food growing projects and gain insights to expanding this approach. Issues discussed included identification of possible barriers and responses, development of information on models, building connections with local producers, and sharing resources. These sessions took place in:

- Toronto at the University Health Network;
- Cornwall at the Cornwall Community Hospital;
- Alexandria at Hôpital Glengarry Memorial Hospital;
- Hanover at the Hanover District Hospital
- Ottawa, at The Ottawa Hospital

This report summarizes the results of the visioning sessions undertaken in 2016. We identify the initial interest from each facility, describe the location and proposed project at each site, and anticipate next steps for further development of the SOIL project at each location.

1. University Health Network

1.1 Background

Since 1999, the Energy and Environment department at the University Health Network (UHN) has been working to develop unprecedented progress in environmental sustainability. UHN Energy and Environment began taking on projects in food security in 2014. With a Food Project coordinator funded by the Greenbelt Fund, their goal was to explore UHN's food ecosystem and identify access points to provide more Ontario-produced food to patients and staff. They initiated a conversation—Talkin' Local Food with UHN[1]—to crowdsource fresh ideas about how to do food differently.

In 2015, Greenest City inquired about the availability of the rooftop of the Toronto General Hospital's parking facility for use as an urban farm. Although an ideal location, the site could not be secured for use, alternatives at the Toronto Rehab Institute (TRI) were considered instead, including Bickle Centre—which offers complex continuing care—and Lyndhurst Centre, a brain and spinal cord rehab hospital in Toronto's Leaside neighbourhood.

[1] See https://uhn.crowdicity.com

While exploring the potential for an urban farm at TRI Lyndhurst, the Food Project Coordinator with UHN Energy & Environment approached the team lead at SOIL, who offered to collaborate on a feasibility study, and assist with a four-hour visioning session, to identify the best model to study in more detail within the Executive team's directives. While the executive team was engaged separately to accommodate their schedule, six participants joined the session:

- Phil Mount, Principal Investigator of Project SOIL (Shared Opportunity on Institutional Lands)
- Joel Friedman, Finance and Human Resources Manager at Fresh City Farms
- Jennifer Fischer, Sustainability Lead at Ryerson University
- Ryan Turnbull, President of Eco-Ethonomics Inc., (Innoweave Coach)
- Afra Chowdhury, Volunteer with UHN Energy & Environment
- Adeline Cohen, Food Project Coordinator with UHN Energy & Environment.

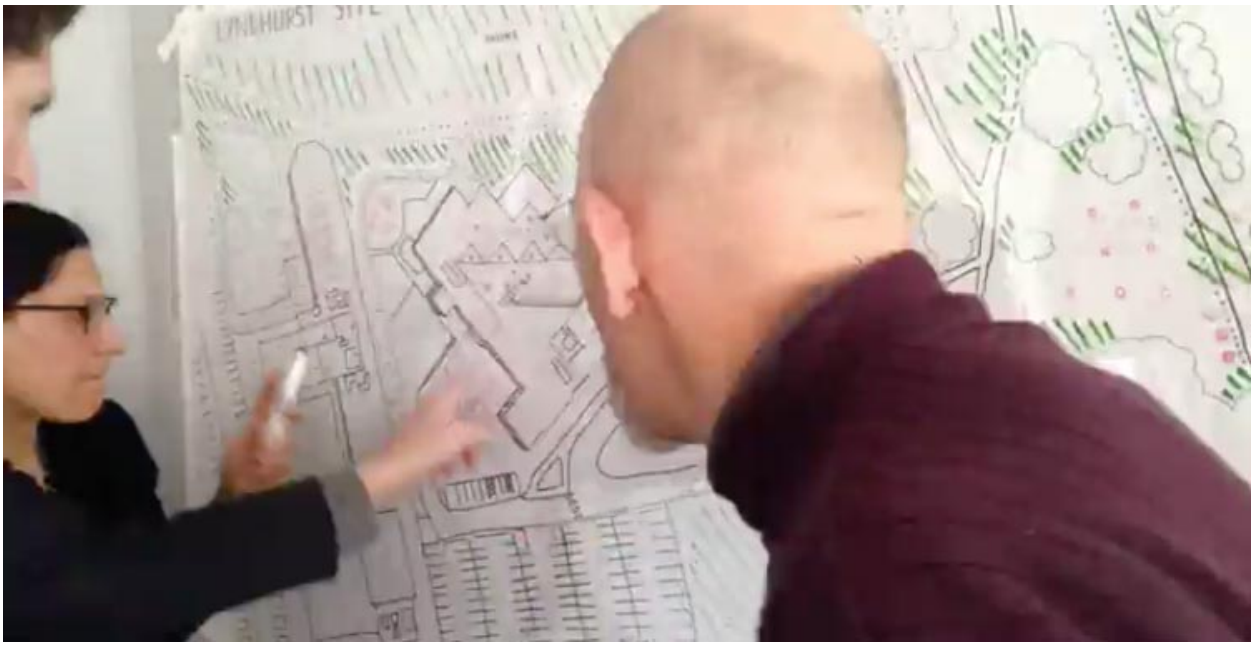


Figure 1: UHN visioning session

1.2 Interest and Incentives

Through the research process, it became clear that TRI has multiple incentives to host an urban farm, including the potential to have strong positive impacts on patients, community and on the facility itself.

1.2.1 Patient impact

As health care facilities reimagine their food environments (Dauner et al. 2011) there is growing evidence that "green" exercise (Rogerson et al. 2015, Kuo 2015) and gardening (Hale et. al 2011; Wakefield et al. 2007) have important physical and mental health benefits (Davies et al. 2014). Therapeutic benefit of green spaces have been well

documented in the areas of both mental and physical health and include improved mood, improved cognitive abilities and memory, stress hormones and immune functioning regulation, and lowered cardiovascular risks (Stavros & Yukht, 2014). As a result, the urban farm provides the opportunity to assist with rehab through the development of accessible, recreational, physical and mental health therapy programming in gardens both outdoors and inside; provide patients with a tool to make their diet richer in fruits and vegetables, and prevent health risks of sedentary conditions; increase patient satisfaction, staff morale, and staff retention; and add to research on the healing impacts of gardens and green environment in the context of spinal, neuro and cardiac rehab.

1.2.2 Community Impact

The Lyndhurst urban farm project also has the potential to increase community cohesion, by providing an opportunity for staff, patients and the neighbourhood at large to engage through volunteering and the farmer's market. A changing climate may also decrease the reliability of food production due to floods, droughts, and other extreme weather events, leading to the rise of food prices. Growing food on site can promote resilience and enhance community food insecurity, while supporting the local food economy.

1.2.3 Facility Impact

Fresh food could also provide a possible cost saving: growing fresh organic food on site, that could be used in the cafeteria, patient programs or in-patient menu, would represent a significant savings on the purchase of organic foods of equivalent nutritional value, and freshness.

1.3 Site Description

TRI Lyndhurst site is in Ward 26—Don Valley West—on the edge of Ward 25. The site is between a large residential area and the ravine immediately north of the buildings. There is space on the ground near convenient walking paths—although with some shade cover, and an existing small set of raised beds in the northwest corner of the site.

1.3.1 Scale

Approximately 30,000 square feet of land is available on uncontaminated clay soil for food growing at the TRI Lyndhurst Site. The 20,000 square feet roof of the Lyndhurst site has been reinforced to allow a third story to be built, which would support the weight of a rooftop farm or a rooftop greenhouse.

1.3.2 Competing organizations/land uses

Very few food assets are present in ward 25 and 26. There is a real opportunity to place a new food asset in the area. The land proposed for the urban farm has no competing uses and is available.

Figure 2: Overhead view of the TRI Lyndhurst facility (source: googlemaps)

1.4 Description of the Proposed Project

The project was intended to develop a set of alternatives that would allow the hospital to explore and choose from options that included outdoor, in-ground food production, various growing styles (e.g. permaculture, fruits / trees, raised beds), and indoor / greenhouse production in different settings (rooftop, ground level).

1.4.1 Purpose of gardens / production

The target of this venture is the community of Toronto Rehabilitation Institute, Lyndhurst site, located at the north of Toronto, Leaside neighbourhood. It is a community composed of clinical and research staff, volunteers, in- and outpatients experiencing spinal cord injuries, neurological injuries or cardiac injuries, as well as their relatives and visitors. The larger community includes two hospitals and residents adjacent to the site. The gardens could potentially supplement patient meals, cafeteria meals, and also be sold to members of the community.

Garden production is anticipated to include greens (lettuce, chard, bok choy, mustard greens, kale, collards), herbs (basil, cilantro, oregano, fennel, mint, parsley, chives, thyme, lemongrass, nasturtiums, tarragon, chervil), and various fruits and berries suitable for growth in the region (raspberries, strawberries, etc.).

1.4.2 Program model and governance

There are multiple options for model and governance of the program. The visioning session focused on two possible model scenarios:

1. Greenhouse and sales managed by TRI/UHN. This would require a member of staff to become a project champion and management would be internal.
2. An independent urban farmer is allowed to use 3,000 square feet of space in the greenhouse in exchange for farming labour and a percentage of food production. In this case, all farming materials, purchasing of supplies, marketing and client relations would fall to the farmer.

1.4.3 Primary and secondary uses for food

Food would be used primarily to supplement patient meals and for food preparation in the cafeteria. Food would also be sold to area residents. Lyndhurst area residents are wealthier and more educated than the Toronto average. Based on demographic data from Wards 25 and 26, we hypothesized that the affluent economic status of the community surrounding Lyndhurst would enable them to purchase local foods with their disposable income. However, while studies have suspected that increased wealth and education lead to more local food support, this has not necessarily proven to be the case. A University of Guelph study of factors influencing the purchase intentions of Canadian consumers of locally produced foods found that socio-demographic characteristics play only a limited role in shaping local food purchase intentions (Cranfield et al, 2008).

1.4.4 Partners

Interviews with TRI staff showed a broad spectrum of ideas for internal and external partnerships:

- Rehab therapy for spinal cord injuries, neurological and cardiac rehab program;
- Partnerships with neighboring hospitals;
- Involvement of the Leaside Gardening Society volunteers;
- Partnership with farm stand / farmers markets;
- Patient job placement;
- Involvement of caregiver accompanying patient to Rehab centres.

1.4.5 Responsible Staff

The reliance on staff will depend on which model of governance is pursued, ie. Management by UHN staff or by an external strategic partner.

Early support was established in January 2016 with Lyndhurst's executive staff. Authorization was made to contact internal and external stakeholders. Interviews were performed with TRI staff and partners of the Lyndhust site.

In response to a staff survey about the program, nearly all respondents involved in patient care said they would be interested (65%) or might be interested (34%) in getting their patients involved at the urban farm.

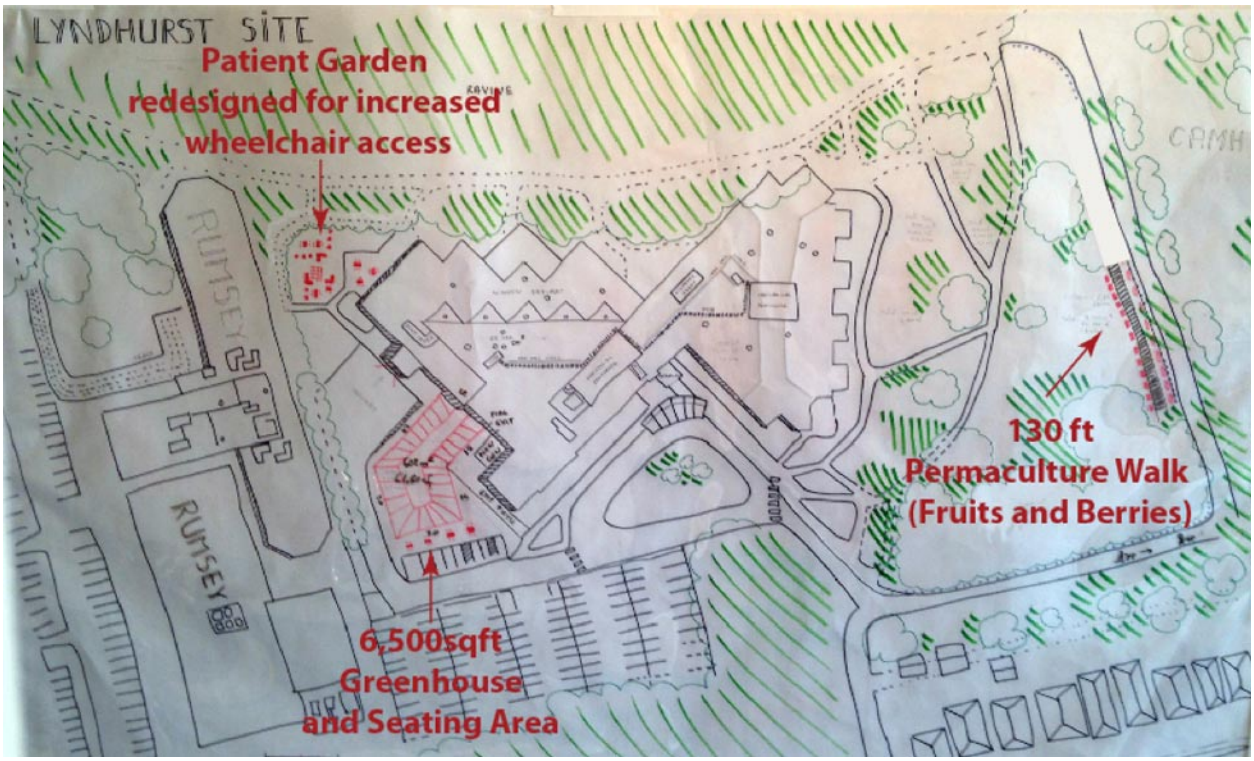


Figure 3: Site map of the TRI Lyndhurst facility

1.5 Moving Forward

Toronto is at an ideal time for the adoption of urban farming projects. New urban agriculture action plans and bylaws have been implemented as recently as 2015 supporting urban farming ventures. As the current market near TRI Lyndhurst site is not saturated, there is ample space for a new local produce vendor to be successful.

UHN has taken a cautious and thorough approach with the project. Given the natural advantages of the site, including an area adjacent to the existing building that could accommodate a large greenhouse, attached to the hospital, the facility is in an enviable position. A four season greenhouse attached to the main building would make TRI/Lyndhurst a leader in hospital/food integration, enabling ground-breaking assessment of the physical and mental therapeutic benefits of food production in a healthcare setting. Either production model—with a farmer on staff to lead rehab / therapy sessions, or with an 'outside' farmer to maximize production—appears viable, providing the hospital with the flexibility to choose the model that best suits their goals.

2. Cornwall Community Hospital

2.1 Background

In both the survey and interview process, representatives from the Cornwall Community Hospital (CCH) expressed keen interest in an on-site project. Further consultation determined that the ideal scenario for the CCH would be a community garden project on a large space available at the north end of the campus. We reached out to All Things Food (ATF) Bouffe 360, an organization working collectively and collaboratively towards food security, food literacy, and economic growth for Cornwall and Stormont-Dundas-Glengarry (SDG). The community garden network of SDG Counties was created in 2015 as a mechanism for sharing experience and resources, supporting new projects, and providing an environment for all local gardeners to flourish. This local community garden network is a working group of ATF. Network membership has reached over 25 individuals and agencies representing gardens, programs, and events across the region.

Figure 4: Cornwall visioning session

While internal commitments precluded the involvement of hospital representatives, on May 20, 2016, members of the Community Garden Network of SDG and Cornwall were invited to inform the development of a community garden at the Cornwall Community Hospital in partnership with SOIL. Those members who attended the SOIL 'Blue Sky' visioning session in May represented many of Cornwall's key garden efforts, with only a few individuals from SDG.

Representatives were able to offer considerable insight and feedback on the proposed SOIL garden project, and it is worth recognizing their individual efforts and the potential to collaborate with them in the future. For context, a summary of the network members (both those who attended the meeting and those who did not)—as well as their garden projects, objectives and activities, and links to videos and info—has been provided in Appendix 1.

Network members in attendance included:

- Corrie D'Alessio – Seaway Valley Community Health Centre Community Health Worker and lead on the Hamilton Crescent and Lemay Community Garden Projects
- Lee Theodore – Mustard Seed Community Garden at Knox St. Paul Church
- Brenda Norman – Kozroots Community Empowerment Projects
- Julie Walker – Community gardener and retired RCMP officer who has supported Transition Cornwall and Kozroots Community Empowerment Projects
- Kathleen Rawnsley – Transition Cornwall Food Action Group Chair
- Kendra Smith –The Agape Centre Soup Kitchen and Food Bank
- Clement Gwanyama – Intensive Case Manager, Canadian Mental Health Association
- Kat Rendek – All Things Food Network Coordinator
- Sarah Good – Community member, present as note-taker

Members not in attendance included:

- Kim Cameron – Seaway Valley Community Health Centre, Volunteer Gardener and children's program coordinator
- Rachelle Doth – Glengarry Inter Agency Group - Early Years Centre, Children's programs
- Alain D'Aoust – Canadian Organic Growers Growing Up Organic, SDG Coordinator
- Sandy Casselman – Linking Hands Dundas County
- Susan and John Towndrow – Founders, Transition Cornwall
- Ivan Labelle – Centre De Santé Communautaire De L'Estrie, Community Health Worker
- Alex de Wit – Social Development Council of Cornwall and Area, Director; All Things Food, Chair
- Lesley Johansen – Gardening for Groceries, founder
- Karen Carriere – Transition Cornwall
- Carolyn Manenger – Augusta Gardens
- Mallory and Andrew Hagen – Mustard Seed Garden
- Juliette Labossiere – Centre De Santé Communautaire De L'Estrie, Community Health Worker
- Loretta Landmesser – Co-Founder of Friends of King George Park, Maxville

2.2 Interest and Incentives

Cornwall Community Hospital expressed interest in a potential project from the moment of first contact with SOIL in 2014. While the potential for therapeutic benefits to recovering patients held great interest, it was decided that the most appropriate site would lend itself better to a community garden space.

Figure 5: Site map, Cornwall Community Hospital

2.2.1 Patient impact

As a result, patient impact is expected to be minimal—with the community garden space at the north end of campus, and the distance from the buildings presenting a barrier to regular visits. It is anticipated that the largest impact will be for the community at large, as well as hospital staff and visiting family and friends.

2.2.2 Community Impact

One of the central interests of the hospital is to increase community engagement. An issue in the past for many gardens is that most lack any form of insurance coverage and receive no form of training for how to use tools properly. Educated growers thus face safety barriers to employing individuals to care for land. Pairing the gardens with a

public institution could be a solution for this. The potential mental health benefits of a community garden have also been discussed. Statistics and evidence of such benefits should be compiled for presentation to funders.

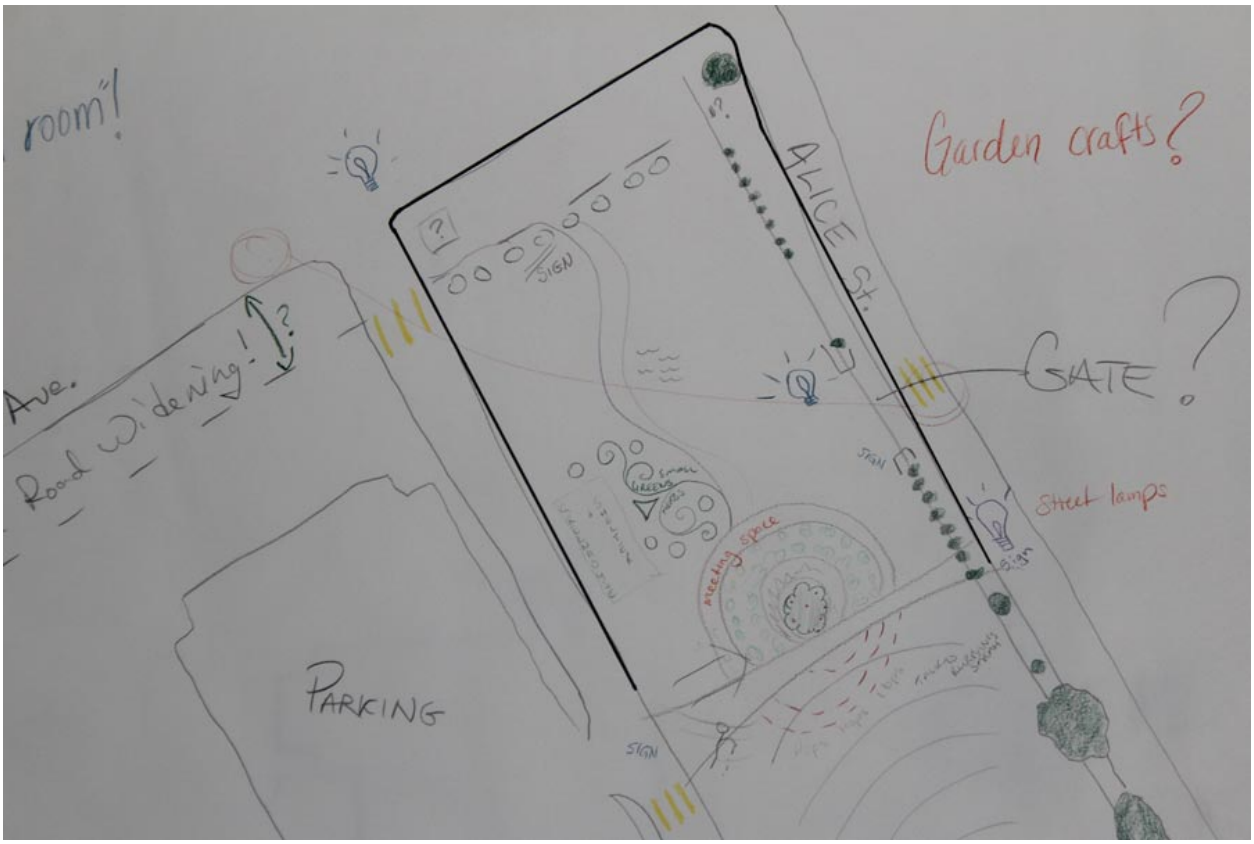


Figure 6: Detail, CCH site map

2.2.3 Facility Impact

Construction on Marleau Avenue, on the north edge of the hospital campus, is scheduled to begin in the near future. The suggested creation of community orchard could provide a sound barrier to the wider, busier Marleau Avenue, as well as the existing helipad, giving patients a more tranquil environment in which to recover. Fruit and nut trees could be planted on the hill as a general windbreak, to provide shade, to decrease erosion of soil, and to protect the space from the helipad noise and wind.

2.2.4 Brand Impact

The Cornwall Communications Director has informed ATF that several people approached them this year for approval to start a community garden in public parks around the city, which shows a need for a more accessible garden space in the city. With a large concentration of population in the immediate neighbourhood and limited community garden space, a commitment of this type by the hospital would be particularly well-received. The investment in a community garden would demonstrate Cornwall Community Hospital's commitment to sustainability and the wellbeing of its

patients and community.

2.3 Site Description

The proposed site is a flat grassy field adjacent to the hospital parking lot, bordered by Alice and Marleau Streets. It is approximately 500x200 feet and has a helipad at the southern end.

2.3.1 Scale

While the community garden could, in time, include a shed for storing tools and eventually a greenhouse for seedlings, it was agreed that the best course of action is to start with a small in-ground garden and progress through multiple phases over several years, growing slowly while attracting new gardeners.

2.3.2 Competing land uses

No competing land uses currently exist for the proposed garden space.

2.4 Description of the Proposed Project

The proposed project is a community-run garden with a social enterprise model that provides a space for community members of all ages to experience the opportunity to grow their own food.

2.4.1 Purpose of gardens / production

The garden could have many different purposes, opening food-growing space for e.g. households with low income, new Canadians, rehabilitating veterans, youth at risk, or for the community at large. The garden could also be an area for nearby seniors, particularly those moving into the new condos at Cotton Mills that lack a garden space. “Blue zones” have been suggested where seniors can enjoy the space and even contribute labour.

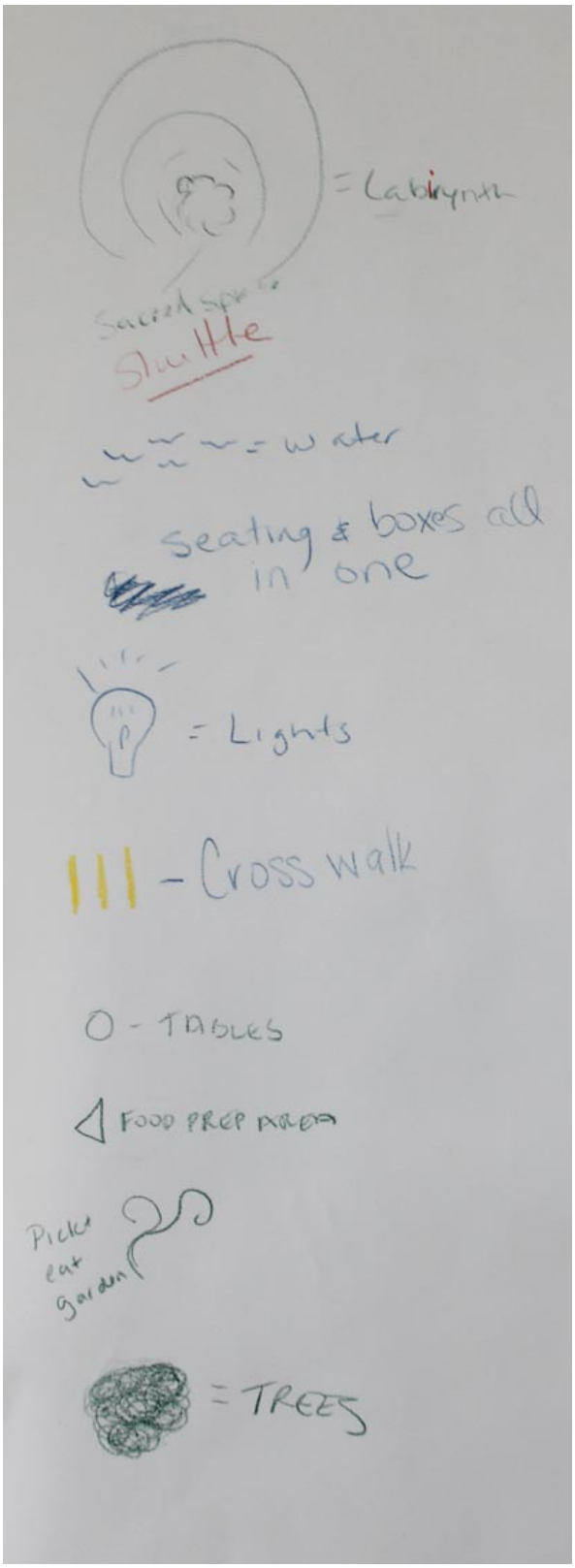


Figure 7: Detail CCH site map

2.4.2 Program model and governance

Session participants decided that this garden should have a social enterprise model – not-for-profit, but with sales to support programming, and donations to the hospital to support or develop ongoing viability. In order to establish a community garden that is viable over the long term, the merits of employing farmers independently has been considered. One idea is to create a shared land-use model where a farmer could be responsible for half of the space and the community responsible for the other half. Whether or not this is feasible needs to be investigated further.

Two different models for the site have been proposed: plot-based (territorialism) and open-scale model—the latter involving variations on shared land, donated food and collective governance. A mix of both may offer more flexibility to accommodate all types of gardeners.

Community members expressed that the open space model would only be feasible if there was a minimum of one employed/assigned farmer/garden coordinator at the site that could shepherd volunteers, provide training, perform group workshops, lead a mentors' garden and children's garden, and establish a list of tasks. The task list would reduce barriers to participation by guiding the garden efforts throughout the week. This way anyone could join in the garden activities by simply looking at the top of the list to see what needs to be done.

The ATF Network is planning to develop a toolkit for prospective community gardens: a hand-off package with funding that would include tools to help communities set up gardens (e.g. Soil testing kit and instructions, etc.). ATF has limited resources and continues to look for funding to hire a Community Garden Network coordinator. There is also the possibility of the farmer/community members being allowed a space on hospital grounds to sell the produce to the general public and families visiting patients.

2.4.3. Primary and secondary uses for food

The hospital gift store may serve as a market space as it touches a wide base of volunteers. Selling the garden produce would help to subsidize the costs associated with running the garden, whether through a farm stand outside or a fridge and boxes in the gift shop.

There are also many community health centers that will use the produce for classes or meals, and the Green Food Box (~200 boxes per month).

2.4.4 Partners

The community garden could work with the three food banks in Cornwall: Agape Centre, The Salvation Army, and Saint Vincent de Paul. Both the Salvation Army and Saint Vincent food banks have recently moved to new locations, and are planning to offer more food skill programing in the new year.

The Agape Centre Soup Kitchen and Food Bank is the largest of the three and open five days per week. Agape offers a garden program, cooking classes, and children's programing, as well as a fruit tree forest.

The community health centers that will use the produce for classes, meals, and the Green Food Box program could act as an avenue for distributing and covering some cost for the garden.

Within a ten-block radius, there are three vocational high schools with culinary and hospitality programs. Fostered relationships with these schools could have the students using the garden produce in their kitchens.

The community garden could apply to the Trees Canada Edible Trees Grant—available every February—to access funds to pay for fruiting trees and bushes. All Things Food and the Agape Centre have been successful securing funding for their three fruit tree projects in the past.

A community investment idea that has already been proposed by the Social Development Council of Cornwall and Area involves commercial and residential development companies being required to reinvest 1-2% of the building value back into a community foundation, which would be used to fund projects like this garden.

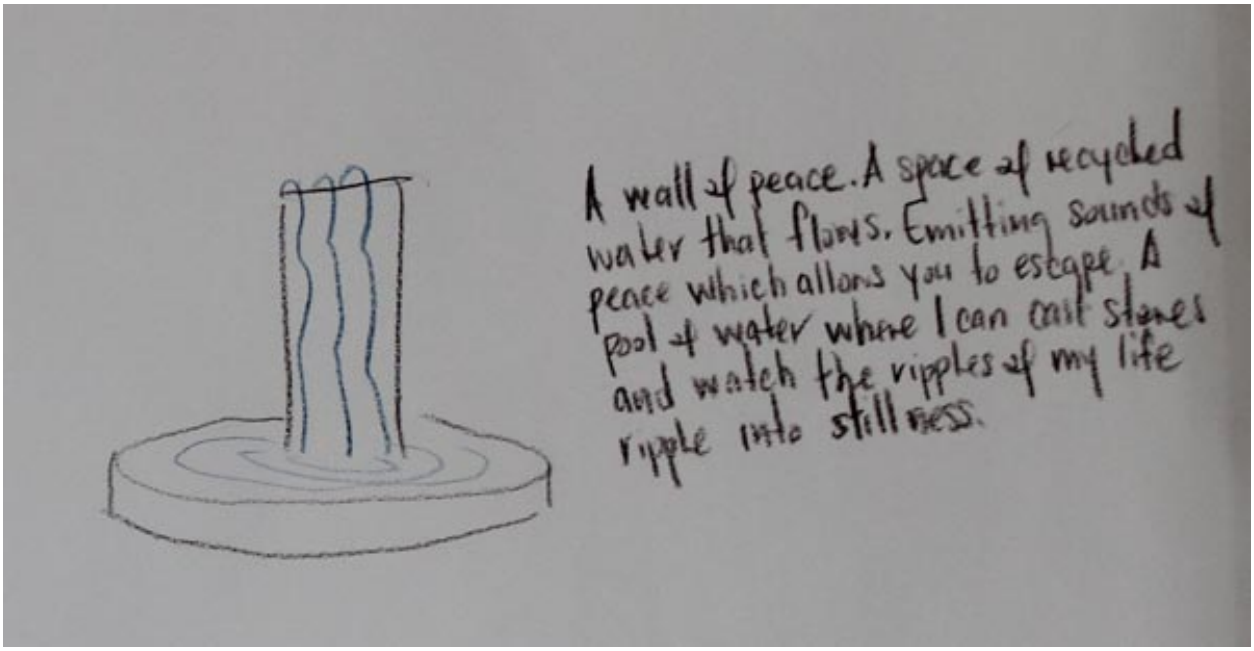


Figure 8: Detail CCH site map

2.4.5 Resource sharing

The participants felt strongly that the hospital should be planning spaces that utilize shade and multiple seating for therapeutic use. Rona home improvement store and local lumberyards have been suggested for construction of seating, a pergola, etc. As

a preliminary step, it may be important to observe current public interaction with the existing space to determine how it is being used, the foot traffic on certain paths, how the space is accessed (doors, ramps, cross-walks) and how many dog-walkers use the space.

The City will be widening Marleau Avenue in the near future. This will affect the space on the north side of the proposed community garden, but will also mean new waterworks construction, which could make it easier to bring water to the garden. Since water siting and access are critical to the success of the community garden, it will be important to find out what the City plans to do with water mains during the widening of Marleau Avenue and ask for purpose-built installation water access.

2.4.6 Responsible Staff

Whether staff will be responsible for maintenance is still undetermined and needs to be decided by hospital management.

2.5 Moving Forward

The visioning session in Cornwall was attended by an incredibly motivated and engaged selection of community partners, with a wide diversity of experience in designing and implementing community gardens. While the hospital team decided that—with new hospital construction underway—the timing was not appropriate for their participation, the groundwork has been laid for a future date, when the potential for project success may be greater.

Figure 9: The HGMH Horticultural Therapy Garden

3. Hôpital Glengarry Memorial Hospital

3.1 Background

Hôpital Glengarry Memorial Hospital (HGMH) is situated on a 23-acre property in the heart of eastern Ontario. The garden was established as an extension of the Stroke Rehabilitation department, and is open for use by anyone who visits the hospital.

HGMG has been involved with Project SOIL since 2013. Through its pilot phase it has grown from a small therapeutic garden to a production site three times its original size (see http://projectsoil.ca/project-overview/pilots/hopital-glengarry-memorial-hospital/). Over the three-year project, HGMH has developed a business plan for the garden at the request of hospital administration. The administration has warmed to the project, which has generated positive press and provided tangible results that can be shared with other hospital administrators including a case study and a report on the health benefits of gardens (http://projectsoil.ca/project-partners/harvesting-health-investigating-the-therapeutic-effects-of-gardens/), along with tools to measure these benefits (http://projectsoil.ca/harvesting-health/). The latter, produced by students in Carleton University's Health: Science, Technology and Policy program, provided the backdrop for the visioning session held at HGMH on April 18, 2016.

The core visioning team included members of staff and the hospital board, the HGMH CEO, and the pilot project's lead gardener, as well as the head of physio /rehab.

Members at the visioning session on April 16 2016 were:

- Jaquline Fraser – Past chair, HGMH Board
- Frank Wettering – HGMH Board
- Louise Quenneville Emergency Preparedness Coordinator & Project Management, HGMH
- Chantal Mageau Pinard – HGMH Physical therapy and rehab
- Linda Morrow – CEO, HGMH
- Sarah Good – Past gardener/researcher at HGMH
- Phil Mount – Project SOIL lead
- Sue Aitken – Carleton University
- Irena Knezevic – Project SOIL co-lead, Carleton University

3.2 Interest and Incentives

Glengarry Memorial Hospital has many incentives for a hospital garden and the idea received positive feedback from many staff members.

3.2.1 Patient impact

The therapeutic garden offers a variety of benefits to the hospital and community, including incorporating fresh food into patient and staff meals and improving patient experience. While there has been no systematic evaluation of the garden's outcomes, patient surveys and staff observations suggest that the garden has contributed health improvements from physical activity and socialization, to memory and concentration (particularly important for stroke recovery), motor skills, mood, and disposition to the overall program of treatment.

3.2.2 Community Impact

The garden may provide a place for high school students completing community service hours to volunteer. The garden aims to encourage the development of local healthy eating and physical activity policies within the community.

3.2.3 Brand Impact

By using sustainable farming methods, the hospital will establish itself as a leader in green health care while maintaining fiscal responsibility and becoming a key player in the "buy local" movement.

3.3 Site Description

HGMH is located on an expansive 23 acre piece of property with large areas of mowed lawn, forest, long grassy bog, and water access from the adjacent pond.

3.3.1 Scale

There is room for an expansion to the south side of the existing garden which could likely double or triple the amount of growing space. The area is mostly in full sun, and although there are some weeds and gravel-filled soil, the land is quite well-suited to growing. There is some wiring that runs underground through that area of the garden, so caution must be exercised when digging any new beds. The water used to irrigate the garden comes from a well located on site, and is complemented by the use of rain barrels next to the shed. At the visioning session, team members expressed that they are not ready to expand the garden further at this time because they feel the need to ensure sustainability of the current endeavour. They would prefer to first enlarge the team and secure funding for the next few years.

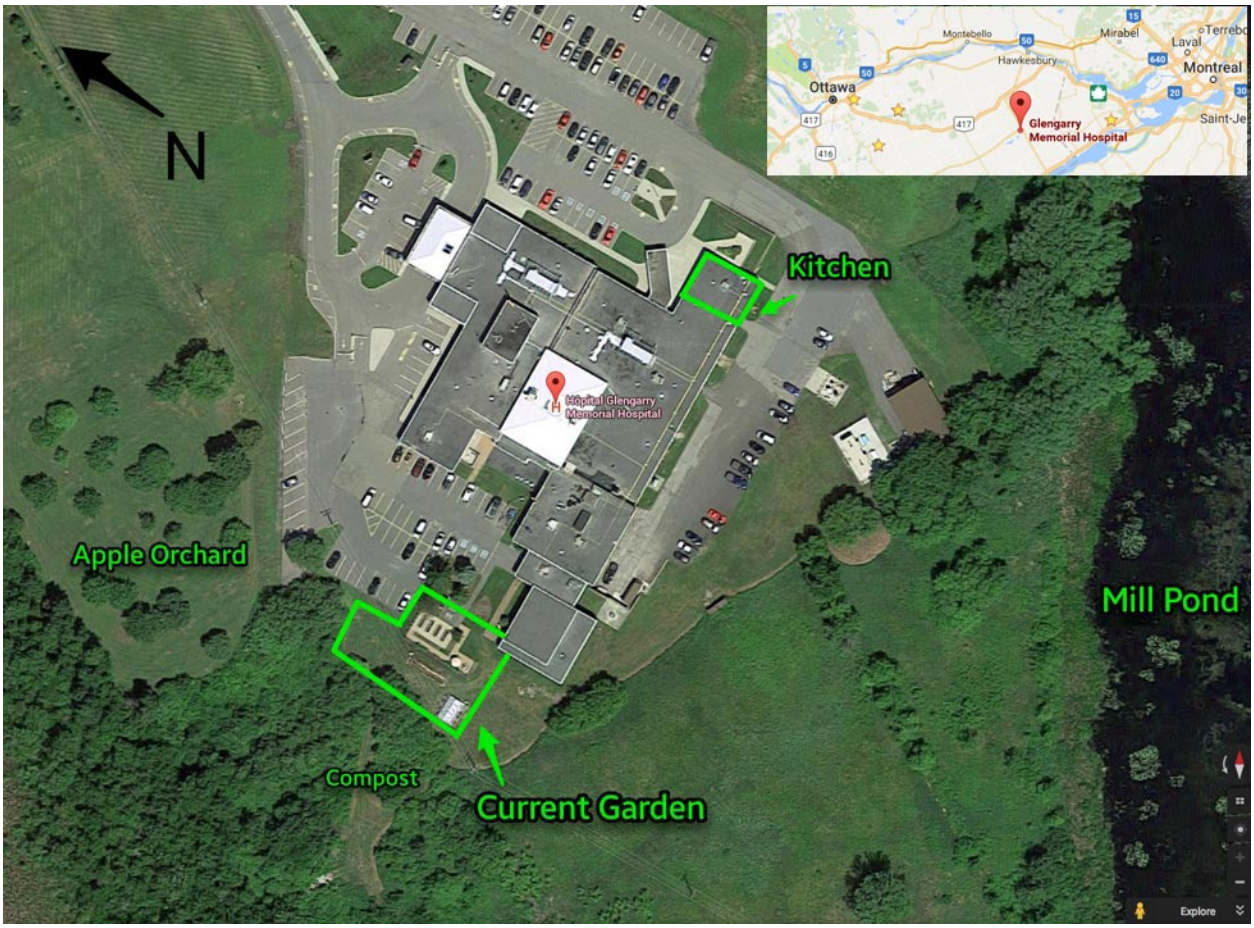


Figure 10: Overhead view, HGMH site (source: googlemaps)

See Appendix 2 for annual growth of total growing area at this site.

3.3.2 Competing land uses

HGMH is situated on a 23-acre property that contains a significant amount of unused land. The potential of the idle land held great interest to the SOIL team from the outset.

However, hospital administration has made it clear that some of this land is slated for future building sites, and that they did not want the garden project to expand beyond the project's capacities and resources.

3.4 Description of the Proposed Project

The proposed project uses Small Plot Intensive (SPIn) farming methods to provide hospital-grown produce for staff and patients.

3.4.1 Purpose of gardens / production

By incorporating SPIn farming methods, the long term goal for the garden is to provide sustainable produce to the hospital kitchen and establish itself a leader in green health care, while maintaining fiscal responsibility and becoming a key player in the "buy local" movement. In 2015, the garden produced over fifty varieties of fruits, vegetables, herbs and edible flowers.

3.4.2 Program model and governance

The program will consider arrangements with farmers and will but need to proceed cautiously; previous programs have been developed as a separate enterprise but then offloaded to the hospital. Union rules regarding who is employed and how will also need to be observed.

3.4.3 Cost of Production

Funding required is projected to be around $15,000 a year. The project's start-up funds came from Ontario's Healthy Communities Fund, which aims to encourage the development of "local healthy eating and physical activity policies."

The amount of funding the foundation can commit needs to be evaluated. Grant programs such as summer student employment, Trillium, or Ontario Ministry of Agriculture Food and Rural Affairs (OMAFRA) could potentially match partial funding.

3.4.4 Primary and secondary uses for food

The produce harvested from the garden is used primarily in the hospital kitchen, but is also used in the rehabilitation activity room, and some is sold in small markets on the property, as well as to a local cafe, The Quirky Carrot.

3.4.5 Partners

Suggested partners from the community include

- Martintown and Maxville (have a horticulture association)
- Cornwall culinary program (though it is probably too far)
- High-school students completing community service hours
- Dietetic interns
- Local green food box program

As well, it was recognized that there may be people who have not joined the auxiliary because they do not want to spend time in hospitals, but if they could volunteer in the garden this may grow auxiliary membership. Auxiliary could commit to providing guidance to student assistants. Materials will be circulated at an upcoming volunteer appreciation event to investigate this.

3.4.6 Resource sharing

Community Living has committed to share equipment expenses (see detail at 3.5).

3.4.7 Responsible Staff

With the support of the Senior Management team at HGMH and collaboration with the Auxiliary, the Project Manager has led a team of volunteers in planting and garden maintenance from 2011 until 2013, when a summer student was secured for a Garden Coordinator position. The Auxiliary volunteers continue to participate in the startup and teardown of the garden as well as assisting patients to the garden, as the rehab schedule and weather permits. According to the 2014 HGMH Garden Business Plan, the intention was to have ten hours per week time-commitment from the auxiliary volunteers. The garden is working towards securing that commitment, but as is often the case with organizations that offer multiple services, the garden is not the only area of HGMH's work in need of volunteer support.

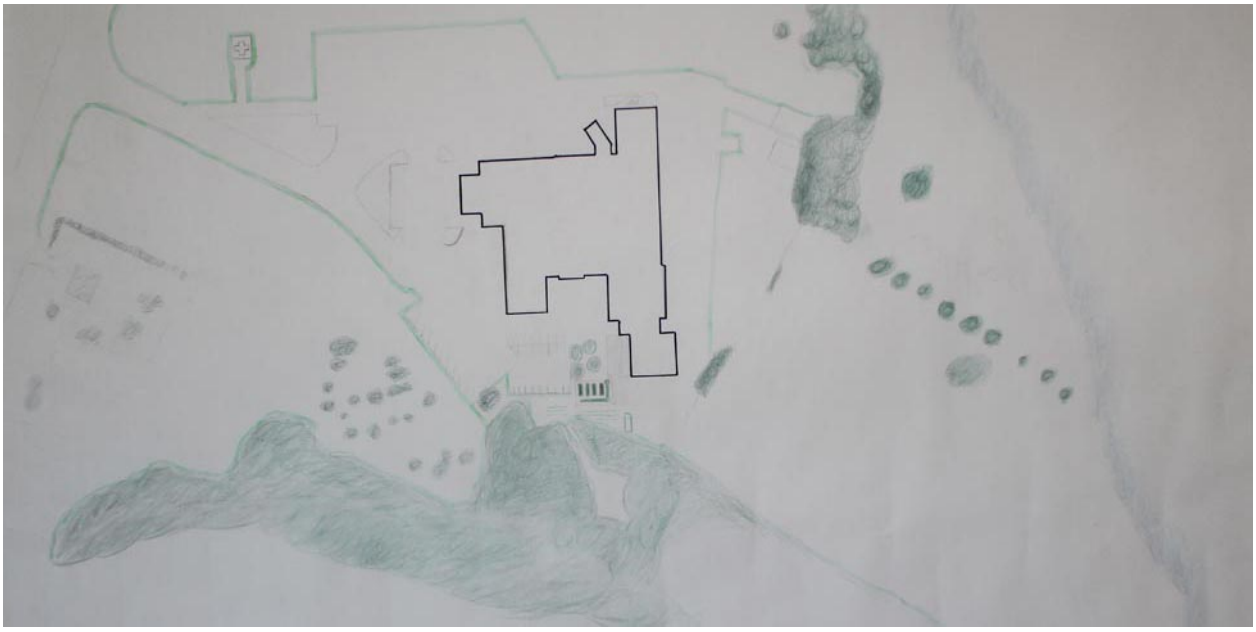


Figure 11: Site Map, HGMH

The position of Garden Coordinator, which has been subsidized through Service Canada, increased from 120 hours in 2013, to approximately 200 hours for the following two years. University or college students working from May through August have filled this position. In 2015, through Project SOIL, a research student was provided to plan and maintain the garden and create the case study for the project.

This increased the amount of labour by 300 hours, including time allowed for planning, research, and writing. The addition of an extra person made the management of a larger area much more feasible and allowed for work to continue into October.

Maintenance staff were a critical support for the 2015 expansion, and the occupational therapist has also been crucial in engaging the patients with the garden and finding tasks that both contribute to the garden and assist with the patient rehabilitation. The kitchen staff have overall been very receptive to the introduction garden produce to their repertoire.

3.5 Moving Forward

In 2016, despite a late start and extreme heat, the garden had a stellar year for produce. Students, a critical piece of the HGMH gardens, started work on June 23rd—one month after prime planting season. Reasons attributing to the late start included delay in confirmation of funding from Service Canada, and the internal date for general orientation.

In 2016, HGMH initiated a collaboration with Community Living. Community Living clients participated in the garden—along with HGMH patients—with great success. The partnership will continue in 2017. This year's collaboration benefited hospital patients and Community Living clients, and allowed both organizations to share the expenses needed to run and maintain the garden, with an additional two weeks added to students' original eight weeks.

Figure 12: HGMH garden expansion

The area of the garden that had been increased in 2015 was managed by two individuals new to gardening, but who produced the most food in one year since the onset of the garden. With the extreme heat in the summer of 2016, soaker hoses were well worth the expense. In late October, tomatoes were still being included in cooking, with the remainder boiled and skinned and frozen in the last week of October: the kitchen could not keep up with the tomatoes!

At the garden wrap up meeting, eyes were on next year to have an April start. An additional focus on fundraising and marketing of the garden will commence in the first quarter of 2017. With positive feedback and support from a dedicated team of volunteers, HGMH is endeavouring to more forward, connecting food to health and being sustainable while doing so.

Figure 13: Experiencing the sensory garden

4. Hanover District Hospital

4.1 Background

The Hanover District Hospital (HDH) is situated on a large land parcel, and only a portion of it is used for hospital infrastructure. The rest is a combination of lawns and country lowlands. The HDH was interested in looking at ways to use a three acre lawn across the street from the facility for a community-farming project.

Figure 14: Overhead view Hanover District Hospital (source: googlemaps)

In 2015, the SOIL team reached out to the HDH to inquire about their interest in exploring options for the unused land. In early 2016, the HDH took the SOIL team up on the offer. On May 16 2016, a group of stakeholders in Grey-Bruce County convened for an inaugural meeting to discuss the feasibility of establishing a community farm project. Brendan Wylie-Toal, a researcher on the project from the organization My Sustainable Canada, took the lead on initiating stakeholder meetings to explore how HDH could use the 3-acre plot of land for growing food.

The meeting included a diverse group with participants recruited by the SOIL team and senior hospital staff. The group included representatives from the SOIL project, senior

leadership from HDH, City of Hanover officials, an environmental non-profit, and farmers.

Meeting attendees were:

- Brendan Wylie-Toal – Program Manager, My Sustainable Canada
- Marnyie Ferguson – VP of Finance and Operations, HDH
- Brandon Koebel – Board of Governers Member, HDH
- Sue Paterson – Mayor, City of Hanover
- Barry Randall – Manager, Grey-Bruce Sustainability Network
- Gary Kenny – Farmer, River Croft Farm
- Rosemary Crick – Farmer, Crickhollow Farms

4.2 Interest and Incentives

Hanover's has many incentives for pursuing the development of a hospital garden, including a positive experience for patients and families and the development of more sustainable hospital food services.

4.2.1 Community Impact

The project will create opportunities for youth, job seekers, homeowners, local farmers, seniors and special needs community members to connect with the land, how our food grows and to experience physical activity in a community setting.

4.2.2 Brand Impact

Utilizing the 3 acres of institutional land in productive community project will reflect a strong positive image on the Hospital and its desire to encourage and demonstrate the contribution our food makes to health living and community resilience.

4.3 Site Description

The proposed land at Hanover is a 3-acre field adjacent to the hospital grounds. The land was previously used as a hay field, but has been unused for two years. In the winter the northwest corner of the land is used to dump snow from the parking lots; the ground may have a high level of salinity for this reason.

4.3.1 Competing land uses

The HDH Board of Governors will only approve a lease arrangement to support a farming project if there is a clause that allows them to break the agreement on short notice (no more than three months). The HDH has made several unsuccessful attempts in the past to sell the plot of land. However, they wish to retain the flexibility to do so in the future, should a buyer emerge. The City of Hanover is particularly interested in having a hotel and conference centre built at the land being considered for farming.

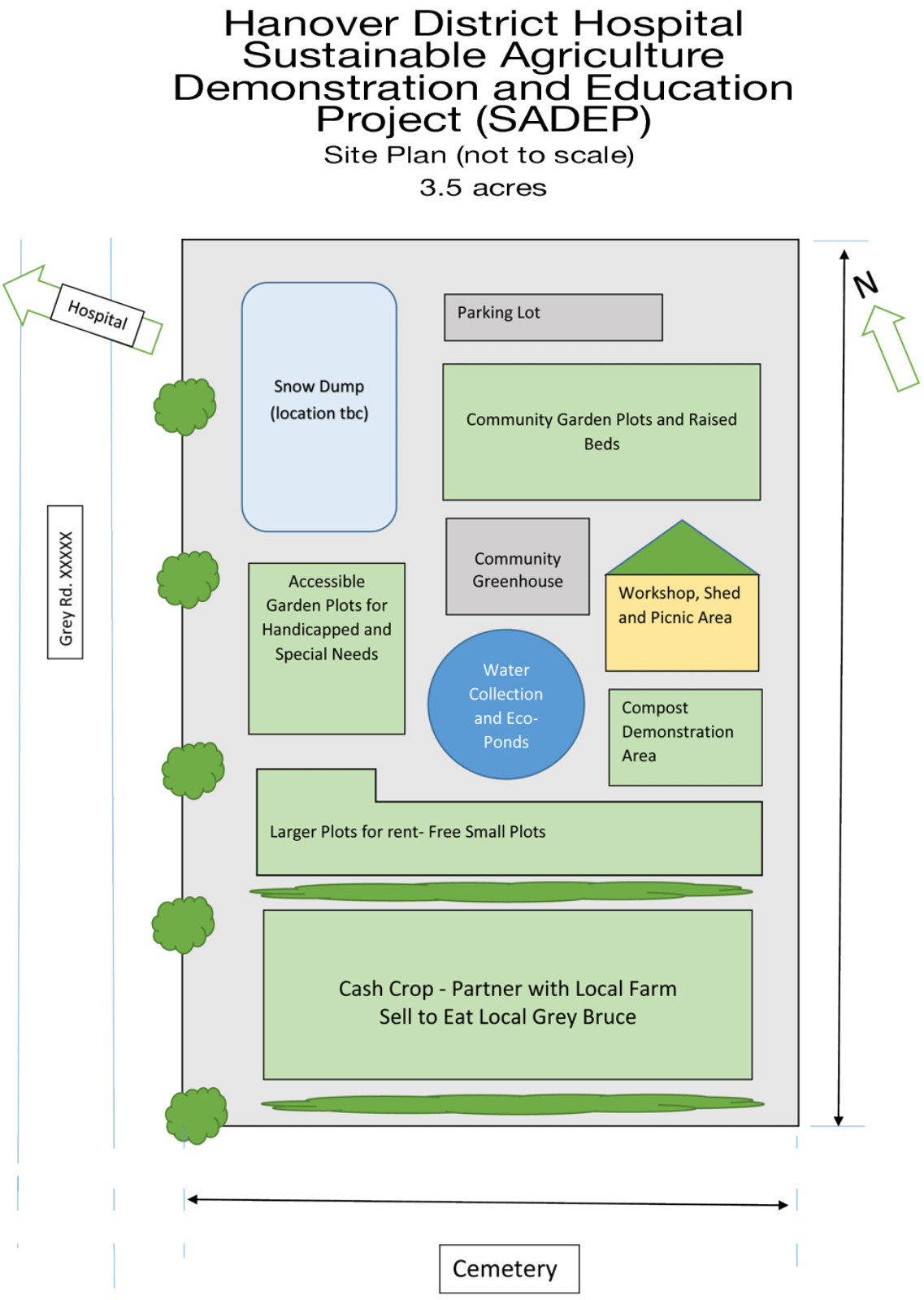


Figure 15: HDH site plan

4.4 Description of the Proposed Project

The land would be used to create a Sustainable Agriculture Demonstration and Education Project (SADEP). This would include a large, one-acre plot of land to grow high-value produce and several smaller garden beds for residents to rent on an annual basis. Stakeholders expressed that the land should be used to grow food in a way that provides opportunities for community engagement and food literacy programs.

4.4.1 Purpose of gardens / production

Discussions to date have ranged from the establishment of a "community garden" with plots that would be rented by community members to a more significant "sustainable agriculture demonstration and education project" (SADEP).

4.4.2 Program model and governance

Several "best practice" models exist for the establishment of a local community garden. For instance, Walkerton hosts a community garden on municipal property where 20-25 people maintain 10x10 plots and pay a $25 per year fee to the municipality. The SADEP approach includes a wider range of activities that would engage the local and regional community in demonstration workshops and educational opportunities in support of a range of sustainable agricultural practices.

Potential projects include:

- Community Garden Plots (10 x 10) or raised beds 4' wide varying lengths
- Accessible raised beds for seniors and handicapped
- Cash Crop area in partnership with local farm
- Rainwater collection demonstration with eco-ponds
- Workshop and Picnic Shelter – host gatherings, workshops.
- Community Greenhouse in partnership with local experts
- Organic Compost Demonstration Area
- Sustainable Agriculture Demonstration areas – windrows, cover crops, companion planting

4.4.3 Partners

Partnerships with groups like the Saugeen Conservation Authority and others would be used to provide a range of educational programing to educate youth about food, farming, and sustainable farming practices.

4.4.4 Responsible Staff

The HDH stipulated that no staff time or hospital budget could be used to support operations of a farm project.

4.5 Moving Forward

The proposal was presented to the Board of Governors in June 2016. While the Board of Governors did not approve the request to seek funding and continue developing the proposal during this meeting, they did decide at a later date that the project was an exciting opportunity for HDH. However, because of the Board's desire to keep the option of selling the land as viable as possible, they suggested that no permanent structures should be erected on the plot of land. As a compromise they suggested that such structures could be constructed across the street on their Fit Trail, which runs through the country lowlands beside the hospital.

To advance the project, the Board created a second ad-hoc committee of several members of the Board to work with the existing committee. The two groups met in July to discuss options for the project, but talks about next steps quickly broke down. The Board members were clear in their need to reserve the right to sell the three-acre property. While establishing structures on the other site were considered, after a tour of this site the two groups came to consensus that there was no potential to engage in any of the activities which had been described in the accepted proposal.

While this outcome was disappointing, an update was shared at this final meeting that the Hanover Community Foundation had been working on establishing a community garden in the area for some time. While it looks unlikely that the HDH will be supporting a farming project, it is possible the project's action committee could collaborate with the Community Foundation to bring the vision of the project to life.

The discussions summarized in this report were initiated by the SOIL research team. While establishing a community farm project on hospital land aligns directly with the priorities of this research group, it was never a strong fit for the other stakeholders that were mobilized to be involved. For SOIL, the research team only had the capacity to support the initiation of the project, and to provide guidance throughout the planning.

The Hanover District Hospital, and all acute care facilities, have very clear missions and mandates. Supporting agriculture is tangential to those directives at best. Although the case can be made that supporting food and education about farming could align with the values of a health care facility, the project was mostly only appealing to HDH staff for public relations reasons. This poor alignment with their priorities and their fiduciary responsibility to act in the best financial interest of the organization are likely the main reasons for why the hospital was not more flexible on lease terms for the project.

The project aligned more strongly with the priorities of the other stakeholders, but it still was not a strong connection. For the farmer stakeholders, their primary focus was maintaining their own farm operations. One of the more involved farmers had just launched a new market program and was balancing a number of priorities at the time these discussions were taking place.

It is likely that this project would have been more viable if the local community had initiated it. Instead, the project was led from the top-down by a research team and then senior health care personnel. A committee of local and non-local stakeholders was assembled, but this was done quickly and they were tasked on the fly to bring the vision to life. The problem with this approach is that projects like a Sustainable Agriculture Demonstration and Education Project often require substantial sweat equity and time to get off the ground and be maintained. The time of senior institutional staff is often stretched thin to begin with, making taking on the tasks necessary for launching a project like this a difficult proposition. If instead the project was grass-root in nature, there may be a community of people interested and willing to put in the necessary time. It is our experience that strong projects are the result of clear commitment from the stakeholders. We can provide the forum, but what develops from there is up to the various partners involved.

Barnes and Schmitz (2016) expand on this point in an essay in the Stanford Social Innovation Review called *Community Engagement Matters (Now More Than Ever).* They point out that *how* a social initiative is pursued is often one of most important predictors of success, and that when such efforts are pursued in a top-down manner they are more likely to fail. They make the case that top-down approaches tend to mobilize community groups, meaning that stakeholders are recruited to support someone else's vision. The other approach is to organize stakeholders and let them cultivate their own leadership, interests, and vision. The latter type of community engagement is less fragile and more likely to succeed. In this instance, however, stakeholders were quickly mobilized to another group's vision and the buy-in that was necessary to work through adversity never formed.

5. The Ottawa Hospital

5.1 Background

Ottawa's Hospital of the 21st Century project stemmed from talks of constructing an entirely new hospital campus to replace the aging Civic campus in Ottawa. As stated on their website devoted to the new campus and its construction:

> *The Ottawa Hospital's vision is to build a new Civic Campus – a 21st century hospital – in the heart of the nation's capital that will meet the health-care needs of the communities it serves for the next 100 years.*

The proximity of the Central Experimental Farm lands has led to revaluation of the potential sites for this new campus and also opened conversation on the potential to take advantage of the process to include space for food production in the new campus design.

> *We will provide access to green spaces, gardens, walking and cycling paths, and quiet areas for reflection to promote and even hasten recovery. We will study healthy foods in partnership with experts from the food systems sector and other community organizations. We will emphasize with our patients the importance of nutrition and healthy eating, and how they promote wellness.*[2]

In June 2016, the CEO and Director of Food and Logistics of The Ottawa Hospital (TOH) met with the principal investigators of Project SOIL along with students selected from Carleton University's Health: Science, Technology and Policy graduate program and the head of Algonquin College's Horticulture program to discuss The Hospital of the 21st Century project. Visioning session members:

- Phil Mount (Principal Investigator of Project SOIL (Shared Opportunity on Institutional Lands)
- Edana Cassol (Health Sciences, Carleton University)
- Vanessa Handley (Health: Science, Technology, Policy, Carleton University)
- Dania Koudieh (Health: Science, Technology, Policy, Carleton University)
- Alex Marshall (Health: Science, Technology, Policy, Carleton University)
- Fatimah Mirza (Health: Science, Technology, Policy, Carleton University)
- Charles Ozzoude (Health: Science, Technology, Policy, Carleton University)
- Irena Knezevic (Co-Investigator, Project SOIL / School of Journalism and Communication, Carleton University)
- Cameron Love (COO, TOH)
- Kevin Peters (Director of Food Services, TOH)
- Joanne Read (Vice President of Planning and Support Services, TOH)
- Tommy Wingreen (Coordinator, Horticultural Industries, Algonquin College)

[2] https://www.ottawahospital.on.ca/newciviccampus/development-principles_en.html

5.2 Interest and Incentives

Ottawa is a vibrant community with many young farmers, researchers, and sustainability initiatives. As the Capital of Canada and a leader in health care and health research, the Ottawa Hospital has many incentives for the development of a productive hospital garden.

5.2.1 Patient impact

In July of 2016, mounting complaints led TOH CEO Jack Kitts and other TOH managers to try a diet solely consisting of hospital food for seven consecutive days. The results: a consensus that the hospital needs to revamp its patient menus. Starting an on-site garden would provide fresher, more nutritious ingredients to patient meals that would increase patient satisfaction and quality of care.

5.2.2 Facility Impact

TOH feeds 1000 patients daily and some 1 million visitors every year, spending approximately $6 million per year. Developing a food strategy could help offset costs of patient and cafeteria meals.

Figure 16: Potential site of the new Ottawa Hospital Civic Campus (Source: https://www.ottawahospital.on.ca/newciviccampus/)

5.2.3 Brand Impact

Investing in on-site food production shows the community that TOH has heard their concerns about food quality, and is responding to them. It would show TOH's

commitment to bettering the patient experience as well as making progressive efforts towards a more sustainable hospital.

5.3 Site Description

With a proposed new campus, and plans for a 50-60 acre site, there is a high potential for significant integration of food production, limited only by setting and soil characteristics of the final site selection. While the project is focused on designs for a potential future site (yet to be selected) for the Civic Campus, TOH is interested in a smaller pilot at their Riverside Campus, which has space for in-ground food production.

5.3.1 Competing land uses

Given that the proposed site for the new Civic campus is intended to serve the downtown core, there will almost certainly be competing uses for the land. The types of food production that will be possible on the site will be determined by existing uses, and the commitment of the hospital to integrating food production into the design of the Hospital of the 21st Century.

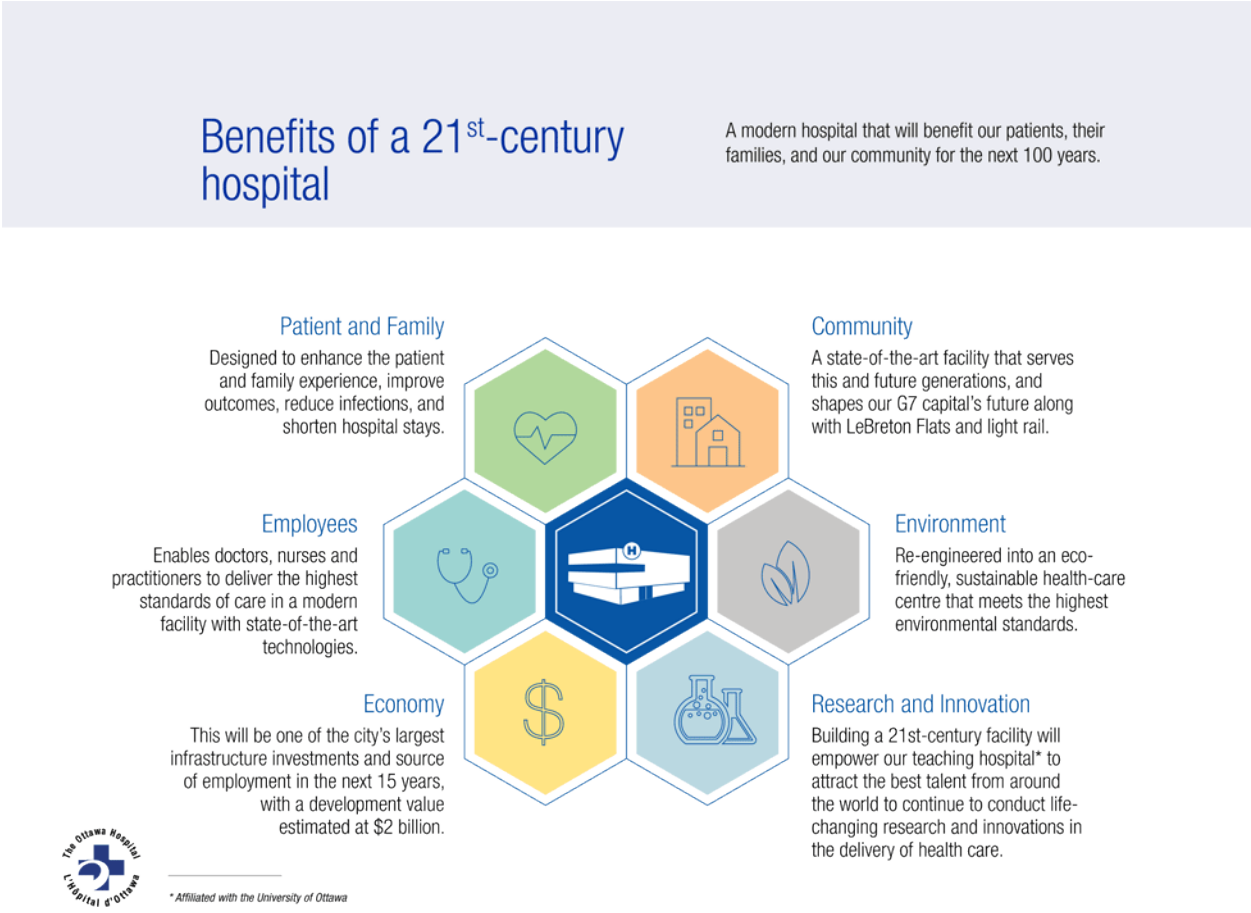


Figure 17: Future Benefits (source: https://www.ottawahospital.on.ca/newciviccampus/21-century-hospital_en.html)

5.4 Description of the Proposed Project

The proposed project is part of the plan for a 'Hospital of the 21st Century' - a modern, sustainable, progressive campus in the heart of Ottawa with top-of-the line facilities and cutting edge research.

5.4.1 Purpose of gardens / production

The larger goal of the proposed project—initiated by the Health: Science, Technology and Policy students—is to design the model for an integrated, holistic *food production and nutrition services department* for Ottawa's 21st Century hospital—a department that includes research, community engagement, outreach and innovation at every component of the chain:

- Food production, on-site—in collaboration with Agriculture and Agri-food Canada (Experimental Farm), Algonquin College (horticulture department students), Lufa Farms (rooftop greenhouses)
- Identifies, tests and develops a toolkit for food production systems, practices and minimum standards that meet food safety requirements and allow for sale directly to the institution
- Food processing, on-site—in collaboration with Algonquin College (food service/hospitality students)
- Identifies, tests and develops a toolkit for institutional food processing systems, practices and minimum standards that meet food safety requirements and allow for institutional use of food produced on-site
- Fresh food utilization across hospital services, but concentrating primarily on increased patient satisfaction, nutrient uptake, etc.

This model was the basis of the call that attracted students to the project. The conversation that took place in the visioning session included an assessment of what was viable to take on at the initial stages.

5.4.2 Program model and governance

Over the course of the visioning session discussion, it was clear that, from the perspective of TOH, the goal of developing a state-of-the art hospital expansion should incorporate not just the hospital services but also partnerships to train health professionals. TOH sees this collaboration as an opportunity to integrate cutting-edge research into their practice, open or create an environment for more interdisciplinary research, and strengthen community engagement (through e.g. participatory research opportunities and direct involvement of volunteers). At this time they want to do some preliminary research to determine more precisely what will be done on the site.

5.4.3 Primary and secondary uses for food

In the short term, demonstration food gardens will serve therapeutic purposes for rehabilitation programs (e.g. spinal cord injury, head injury, stroke, amputations). In the

long term, expanded food production will serve to integrate food that is sustainably produced on-site into their food services (perhaps similar to the UHN). The hospital's multiple campuses (including a major new facility in development) will provide several sites to utilize gardens for health promotion and therapy for patients, staff, volunteers, and community members.

5.4.4 Partners

The administration saw the potential to expand research partnerships with local universities and colleges, to include areas of interdisciplinary investigation that would (for example) capture the interactions of fresh food, food services and nutrition; or food production, green spaces, therapy and rehabilitation.

5.5 Moving Forward

The current student project will cover a review and assessment of existing models and what makes them work, a partnership plan of whom TOH would work with and how, and business risk management plans with a staged proposal of what the TOH can do with references to potential pitfalls and institutional policy barriers.

The students have selected models to review, prepared research instruments and an ethics application, and will soon meet with the key staff members, interview key informants outside of the TOH, and look at institutional and other relevant policies.

The Queensway Carleton Hospital and the National Capital Greenbelt

On the west edge of Ottawa, the Queensway Carleton Hospital (QCH) sits on 50 acres of Greenbelt land controlled by the National Capital Commission (NCC)—a crown corporation. QCH has one field of approximately 20 acres that runs along the east side of their property, isolated from the campus by access roads. For years they have simply mowed this field. In 2014, through consultations with the NCC, they determined that the field would never be developed, and NCC requested that it be returned to 'wild' conditions. By the end of the summer of 2015, QCH was getting comments on the state of the field—unkempt, tall weeds—and it just so happened that at that time, we approached them with the idea of growing food on hospital land.

The field runs beside a large residential area, with an active community association. This timing was fortuitous in a number of other ways: the NCC is looking for flagship projects for its 2067 vision; the NCC is looking to increase the number of community gardens and promote the visibility of their sustainable agriculture mandate on Greenbelt land; and Just Food, which runs a large, city-wide community gardening program and recently signed a long-term lease on the Just Food Farm (on NCC Greenbelt land) is well-positioned to partner on such a project.

Figure 18: Overhead view, Queensway Carleton Hospital (source: googlemaps)

Making the Case for On-site Food Production at Health Care Facilities

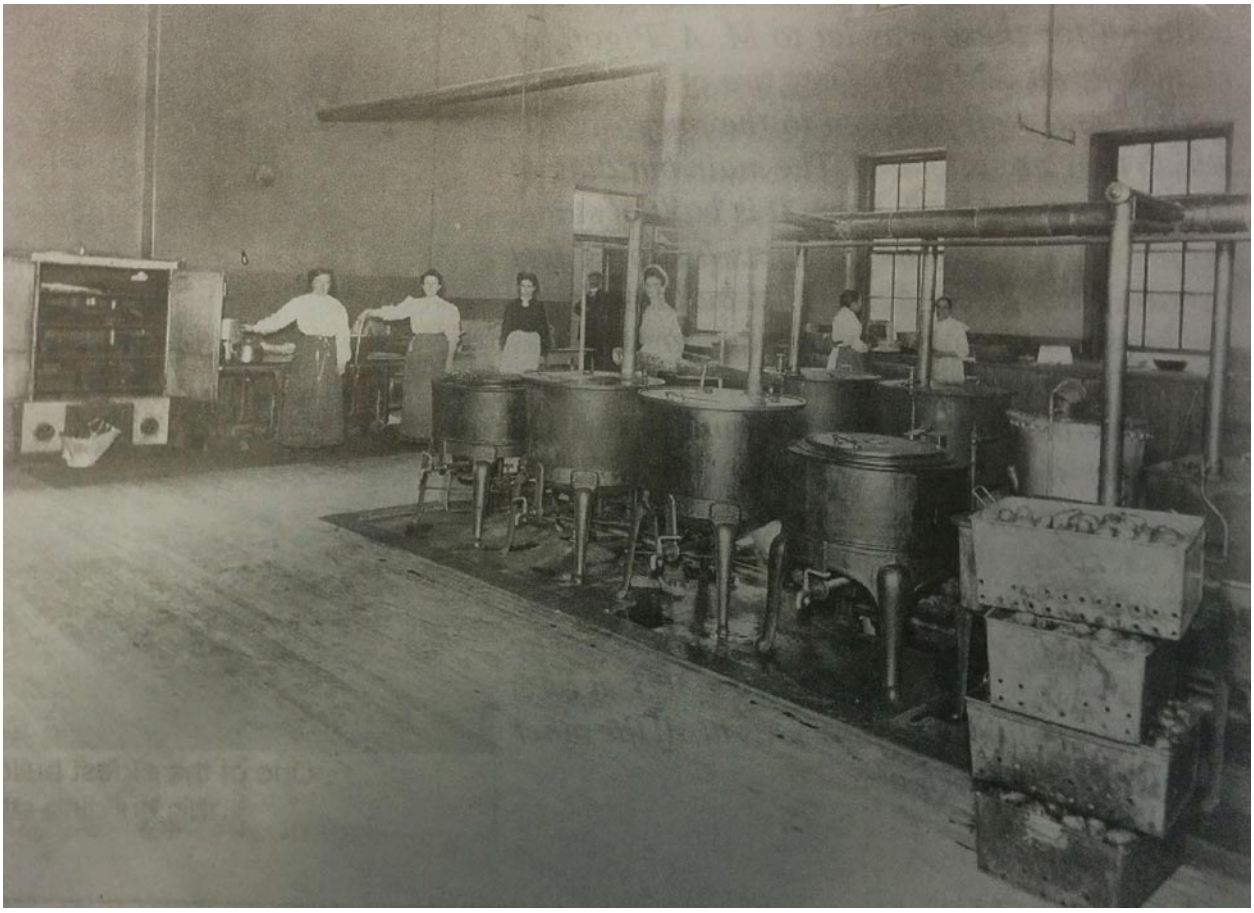


Figure 19: State-of-the-art Kitchen, Brockville Psychiatric Hospital, 1943 (source: Brockville Psychiatric Hospital Book of Memories 1884-2000)

Historically many hospitals and prison systems grew food on their own land to feed their patients, staff and prisoners. While most of these on-site food growing systems have been dismantled, a measured resurgence of this approach is taking place across North America. But not out of necessity, as was the case in the past. The new approaches to growing food on institutional lands consider a number of more recently identified co-benefits, each of which may be a winning opportunity to shift how food is viewed at institutions.

St. Luke's University Health Network, Pennsylvania USA

St Luke's University Health Network has an 11.5 acre organic farm located at the Anderson Campus which is a joint initiative with the Rodale Institute. This partnership is in its third year and has enabled St. Luke's to provide organic produce to patients, staff and visitors at its six campuses. This fresh organic produce is distributed every week in season to all six hospital cafeterias. The patient menu has been re-designed to incorporate fresh, organic produce from the farm and to increase awareness for patients choosing menu options. By providing patients and employees with local grown organic produce, St. Luke's is showing a commitment to the environment and promoting the health of its patients and the community.

Community partners include the Kellyn Foundation and its mobile farmer's market, "Eat Real Food Mobile Market." Kellyn's new truck, trailer and an industrial-sized cooler is stocked with produce from the organic farm and travels to low income areas in Northampton County where people don't have access to fresh produce.

There have been numerous studies proving that organic fruits and vegetables offer many advantages over conventionally-grown foods, including increased amounts of vitamins, minerals, essential fatty acids and antioxidants according to Bonnie Colyle, MD, MS, Director of Community Health, St. Luke's University Health Network.

"From a health perspective, this translates into a reduced incidence of heart disease and some cancers and a lowered risk of common conditions such as cancer, heart disease, allergies and hyperactivity in children," Dr. Coyle says. "That's why we feel it is so important to find a way to get our organic produce into the hands of these underprivileged communities."

Another community partner is the Children's' Home of Easton where two work study students have participated as "farmers-in-training" during the summer. The hospital and its farmer see this as an opportunity to expose the next generation to organic farming practices and the many benefits of eating organic fruits and vegetables as well as ensure that the farm continues to flourish well into the future.

See: http://rodaleinstitute.org/third-year-plans-for-st-lukes-rodale-institute-organic-farm/

Over the course of our project, we have identified a number of potential co-benefits resulting from food grown at institutions, which could be enjoyed by residents, clients, patients, visitors, staff, the institutions, communities, the sector, governments and taxpayers.

The Lankenau Medical Center, Pennsylvania, USA:

Just outside of Philadelphia, a local farmer has partnered with the Lankenau Medical Center on a year-round organic garden on the campus of the hospital. The farm area features educational areas, a greenhouse, compost area, vertical gardens and space for herbs, seeds, flowers and fruits as well as a tasting station. The farm will be a hands-on classroom for more than 10,000 students who come to Lankenau for health education. In addition, medical students will tour the farm and take courses related to the role of fresh vegetables and healthy eating in preventive care.

The students collect more than 2,000 pounds of organic produce per year, which goes to Lankenau's farmers market for patients, visitors and employees, to food banks, and to cooking demonstration classes at the hospital. The garden is a relaxing retreat from the hospital, open to patients, employees and visitors.

See http://greenerpartners.org/project/wellness-garden-at-lankenau-hospital/ …and http://www.yesmagazine.org/planet/in-one-of-the-nations-unhealthiest-places-this-hospital-prescribes-fresh-food-from-its-own-farm-20161215

While these benefits have been identified across sectors, it has to be said that the health care sector has been both intrigued by and deeply implicated in this project. While we started with strong health care partners on our team, interest in the potential therapeutic benefits of food production from all sectors pushed the project toward increased collaboration with new health care partners.

The Fresh City / Baka Collaboration Model

In 2015 Baka Communications Inc. donated the use of the land outside its corporate head office to urban agriculture and grocery delivery business Fresh City. The land will house a 3,000 square foot greenhouse, designed to utilize solar power generation and rainwater capture.

In this unique partnership, produce grown in the greenhouse will be available to the kitchen at the Baka Gallery Cafe (located in the heart of Bloor West Village, Toronto), as well as to Fresh City customers. For Fresh City, this is an excellent opportunity to access growing space, which is exceedingly expensive in Toronto's real estate market. For the Baka Group of Companies, the partnership is a way to demonstrate commitment to sustainable business practices and contribute to healthy communities, as part of their "Return On Doing Good" guiding principle.

As a result, all of our 'visioning' partners were hospitals who identified and were interested to explore the benefits of on-site food production. The following are possible co-benefits when health care institutions choose to grow food on their own lands:

Patient Benefits

1. Patients may have an improved stay experience and recover faster where the hospital shows a greater attention to healthy food;
2. Locally grown foods are not transported great distances and keep more of their nutritional value, which is better for the patient;
3. Freshly made foods may be tastier and more of the food is likely to be eaten by the patients, which is better for patient recovery;
4. Patients can participate in gardening activities, which has been seen as a benefit particularly to mental health patients;
5. The garden area provides a healing space for all patients (as well as staff and visitors). The healing benefits relate to physical, cognitive and mental health, as well as skill building and social relations.

Institutional Benefits

1. Improved patient satisfaction ratings on surveys;
2. Demonstrated leadership and modeling healthy food behaviour in the community;
3. Reduced food waste (if more food is eaten by the patients) which results in reduced disposal costs;
4. Small farming practices that do not use high inputs generally have a lower environmental impact (i.e. lower water usage, less water and air pollution and reduced use of pesticides, antibiotics and synthetic fertilizers);
5. Opportunity to develop social enterprises to help support patient care programs. These could include: selling food to staff, visitors, other community programs; providing job creation opportunities; offering skills training for patients returning back into the community;
6. Use of food waste on-site as compost or amendment for food growing areas;
7. Opportunity to leverage on-site food growing into larger projects or strategic plans (i.e. health care reform, sustainability plans and corporate social responsibility schemes);
8. Opportunity to forge new community partnerships that build on specific community needs (i.e. partnering with not for profits to distribute food to disadvantaged populations, food banks; enable cooking lessons for discharged patients and community members to build health);
9. Provide easy access to healthy foods for staff and visitors (i.e. offer CSAs to staff; provide a farmers market; healthy food in the cafeteria);
10. Improves the resilience of the facility, where food sources are diversified and not totally reliant on importing food long distances;
11. Improved status in the community leading to possible increased donations to the hospital foundations;

12. Reduced heat island effect where more trees (such as fruit or nut trees) are planted for food provision;
13. Possibility of year-round access to fresh foods through on-site greenhouses.

Sector Benefits

1. Opportunity to provide training and education to the medical community (i.e. medical staff and medical students) to promote the value of healthy foods to increase general health and wellbeing;
2. Opportunity for the sector to undertake social enterprises to supplement health care funding;
3. Opportunity for the sector to show leadership for health promotion and sickness prevention using the connection between good health and good nutrition;
4. Opportunity for the sector to show leadership in promoting actions that reduce greenhouse gas emissions, while increasing resiliency to climate change impacts such as access to food.

Community Benefits

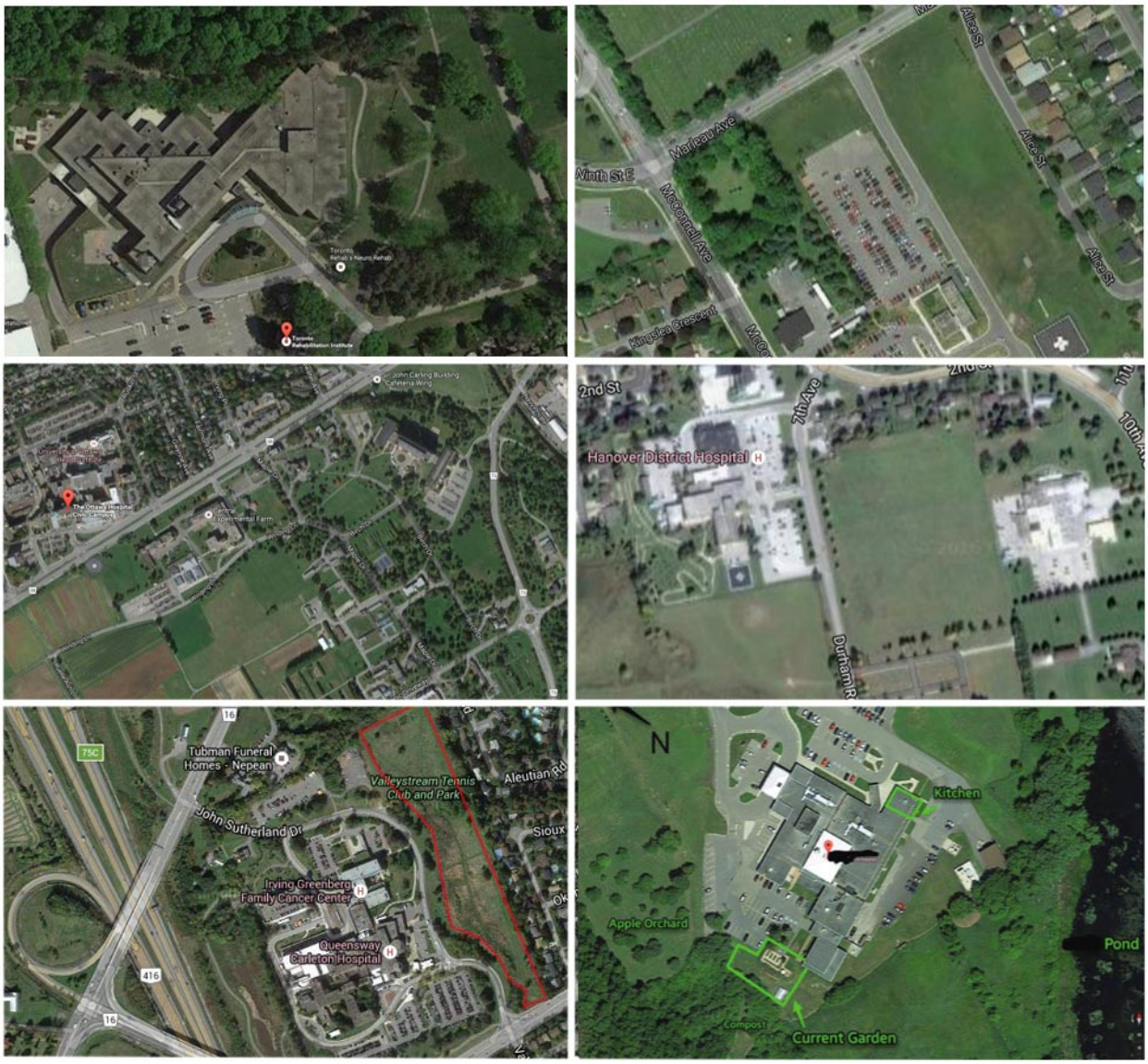
1. Improved community health where healthy foods are eaten by more people, reducing sickness and demands on the health care system;
2. Improved community environmental health through reduced use of pesticides, antibiotics and transportation emissions;
3. Stimulation of farming businesses and knowledge in the community;
4. Training of new farmers, which is needed to fill the void as farmer retire;
5. Provision of institutional land for growing food helps address one of the barriers to enabling new farmers to practice their skills;
6. Potential to better serve the needs of the community through distribution of food to disadvantaged populations, providing food to food banks, enable cooking lessons for community members to build lasting healthy lifestyles;
7. Generation of new social enterprises that provide community services;
8. Opportunity for increased biodiversity in permaculture areas;
9. Opportunity for community members to visit healing areas which grow food on hospital lands, learn how to grow their own food, and prepare and eat healthier foods.
10. By encouraging local farming there are increased opportunities for the community to increase its resiliency to climate change impacts by reducing the risks in access to food.

Government and Taxpayers

1. Local food systems contribute fewer greenhouse gases through shorter transportation routes to the end user, and lower storage energy requirements, contributing to lower national greenhouse emissions, enabling national GHG emission targets to be met.
2. Opportunities to increase health and wellbeing of Canadians, reducing sickness and the need for health care services.

Final Reflections

Interest in food production on public land continues to grow, with schools and universities, health care institutions and seniors residences, community food centres and food banks, as well as public agencies—from conservation authorities to crown corporations—making land available for food production.



Having developed strong working partnerships with numerous institutions over the past four years, Project SOIL is now in a position to advocate for, support and champion institutions and leaders that explore the synergies that spring up through on-site food production. The partnership team continues to build networks to explore relevant research, and seek venues through which to spread the results.

We also remain committed to exploring institutional production as an avenue of collaboration with new and young farmers looking for land and experience, where such an arrangement is possible and mutually beneficial. Our pilot partner projects alone have supported and supplied such connections for community-based groups (Our Farm and Young City Growers at KW Hab), and provided formative experiences for eight students that will continue to shape their lives and community engagement.

Finally, we are encouraged to see that so many institutions—both in Ontario and further afield—are committing resources to food production, understanding that this is an opportunity to move their institution into a leadership position, and initiate a conversation that will resonate throughout their communities.

Appendix 1: Stormont-Dundas-Glengarry Community Garden Network

In attendance:

Affiliation, Role	Garden Project Name and Location	Objectives and Key Activities	(N) Gardeners
Corrie D'Alessio - https://www.youtube.com/watch?v=2EdAVJW4Kd8			
Seaway Valley Community Health Centre, Cornwall Volunteer Coordinator and Community Health Worker	- Hamilton Cres. Community Housing Garden, Cornwall - Lemay St. Community Housing Garden, Cornwall	- provide 12x12 garden plot or raise bed to social housing residents - free vegetable plants are provided to residents - bi-weekly children's activities and garden workshops offered by CGN partners	50 available garden spaces/boxes ~40 gardeners, with 6 appointed garden leaders ~60 associated children
Lee Theodore - https://www.facebook.com/Mustard-Seed-Community-Garden-674039896068934/?fref=ts			
Community facilitator Caribbean by Cornwall, catering	- Mustard Seed Community Garden and urban Farm (in planning stages)	- 1.2acre garden project planned empty green space at Knox St. Paul Church located in north end of Cornwall Non-plot, collective garden model for mixed production - gardeners/farmers to keep 1/3, donate 1/3, and sell 1/3 as a social enterprise	- 7 gardeners involved to date

Affiliation, Role	Garden Project Name and Location	Objectives and Key Activities	(N) Gardeners
Brenda Norman - https://www.youtube.com/watch?v=7PcpUQxrxuA http://www.kozroots.com/kozroots-community-empowerment-projects/			
Kozroots Community Empowerment Projects, Chair Kozroots Farm, garlic farmer in Monkland, North Stormont	- Green Thumbs Project, Monkland - Grow A Row and Be the Boss high school farm / garden - Free garlic planning/harvesting workshops for other community gardens and at events	- provide garden plots on farm to community groups for pay-it-forward initiatives - disadvantaged youth are brought to farm to plant garlic and vegetables as part of the Grow a Row program, produce is donated to local food bank (Agape Centre, Cornwall)	170 students have visited the farm to date ~20 other youth (not associated with a high school trip) have visited farm for volunteer experience
Julie Walker			
Kozroots Community Empowerment Projects, Garden program facilitator Monkland, North Stormont	- Green Thumbs Project, Monkland - Grow A Row and Be the Boss high school farm and garden -Monkland Community Centre Garden	- Supports garden and farm initiatives by Kozroots Community Empowerment Projects. - leader of Monkland Community Centre Community Garden	Same as above 10 gardeners at Monkland Community Garden
Kathleen Rawnsley - http://goo.gl/KwBSc8 | http://goo.gl/KBKkru			
Transition Cornwall + Food Action Group, Interim Chair	From Seeds to Gardens (Seedy Sunday event) (2nd) Incredible Edible Plant Festival, Cornwall (4th), includes 3 community gardens at city hall, downtown fire station and police station	- Seed vendors, seed swap, free vegetable plant give-aways, film events, and workshops to promote gardening in the city - downtown community gardens are open to anyone to harvest from, increase accessibility of fresh produce, maintained by TC+ and firemen	- 400+ participants for each annual event - ½ are children and youth - engage 50+ volunteers for festival

Affiliation, Role	Garden Project Name and Location	Objectives and Key Activities	(N) Gardeners
Kendra Smith - http://www.standard-freeholder.com/2016/06/07/garden-fever-at-agape-centre			
Agape Centre Food Bank and Soup Kitchen, Community Relations	Weeding Out Hunger Garden, Cornwall Edible Fruit Forest,	- community garden at food bank and soup kitchen building, managed by summer student and volunteers; food used in kitchen / for children's summer camp program - Tree Canada Edible tree Grant enabled the planting of 40+ trees and bushes off site which will be harvested for the food bank in years to come	- 10 volunteer gardeners -25 summer camp children
Clement Gwanyama			
Canadian Mental Health Association	Echo Gardens, Cornwall - managed in partnership with Centre De Santé Communautaire De L'Estrie	- 26 plot based gardens near in municipal park space aimed at providing space for those living in apartments or long-term care residences - $15 fee to cover general maintenance costs	- 26 gardens
Kat Rendek - Listserve: growsdgc(at)gmail.com			
All Things Food Transition Cornwall +, Steering Comm. Members Kozroots Community Empowerment Projects, Officer	n/a	Lends support to all garden projects and events Coordinates Community Garden Network communication Event volunteer Coordinator	n/a

Not in attendance:

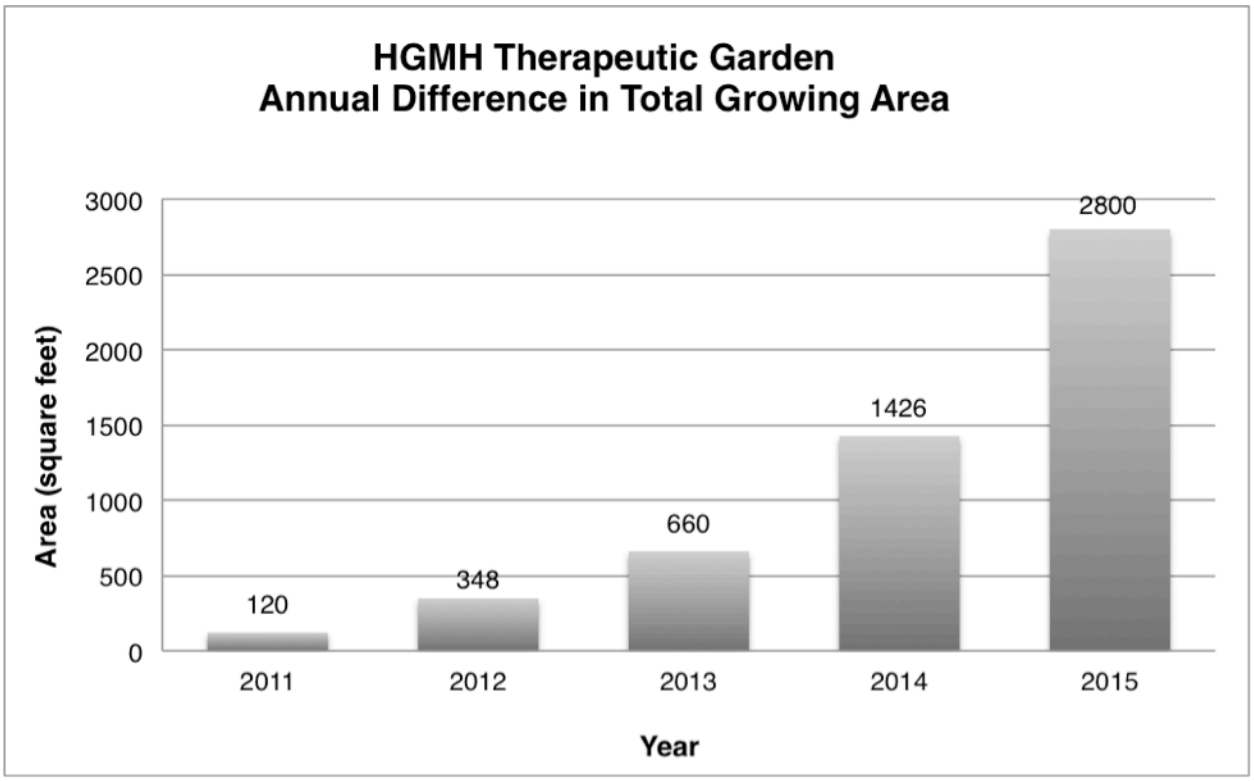
Affiliation	Garden Project and Location	Objectives	Number of Gardeners
Kim Cameron			
Seaway Valley Community Health Centre, Volunteer Gardener and children's program coordinator	*same as "Corrie D'Allessio"	*same as "Corrie D'Alessio" -coordinates garden art program for children	Estimated 60 children
Rachelle Doth			
Glengarry Inter Agency Group - Early Years Centre, Children's programs	Hamilton Cres., Cornwall Incredible Edible Plant Festival	Offer educational yet fun children's garden programs at social housing garden and for select events	200+ children annually
Alain D'Aoust - https://cog.ca/ottawa/growing-up-organic/			
Canadian Organic Growers Growing Up Organic, SDG Coordinator	School garden programs (17) in Cornwall / SDG Coordinates Boys and Girls Club afterschool gardens	-offer curriculum-based experiential learning for youth using gardens and farm visits -promote organic food production mechanisms	500+ children engaged
Sandy Casselman - http://www.linkinghandsdundas.ca/			
Linking Hands Dundas County	Giving Garden and Garden Guides Program Located at House of Lazarus Mission Community Garden, South Mountain, Dundas Co.	- community garden at the side of the food bank building, managed by staff - food is provided to clients (260 families—390 adults and 260 children) and volunteers - garden is also used for summer "Lunch and Learn" Workshop program	30 +1 staffed ~30 monthly workshop participants

Affiliation, Role	Garden Project Name and Location	Objectives and Key Activities	(N) Gardeners
Susan and John Towndrow			
Founders of Transition Cornwall + Susan - retired landscape architect and horticulturalist John – retired conservation manager and planner with Parks Canada	Support Transition Cornwall + Incredible Edible Plant Festival Advisors for Mustard Seed Community Garden	- inspire and promote community development and resiliency - strengthen food skills and innovation in the City of Cornwall	n/a
Ivan Labelle			
Centre De Santé Communautaire De L'Estrie, Community Health Worker	Echo Gardens, Cornwall - managed in partnership with Canadian Mental Health Association	- 26 plot based gardens near in municipal park space aimed at providing space for those living in apartments or long-term care residences - $15 fee to cover general maintenance costs	26 gardens
Alex de Wit			
Social Development Council of Cornwall and Area, Director All Things Food, Chair	Many of the above	Offers financial and administrative/ insurance support for new garden projects (start-up)	n/a
Lesley Johansen - http://www.morrisburgleader.ca/news/2015/05/20/gardening-for-groceries/			
Gardening for Groceries, founder	Giving Garden and Garden Guides Program	-support food bank garden initiatives -started Gardening for Groceries in South Dundas in 2015 to help provide fresh food for two local food banks	~30 gardeners and 1 staffed garden coordinator

Affiliation, Role	Garden Project Name and Location	Objectives and Key Activities	(N) Gardeners
Karen Carriere			
Transition Cornwall + Retired horticulturist and perennial farm business owner	Seedy Sunday and Incredible Edible Plant Festival Downtown Cornwall community gardens (City hall, fire station and police station)	-grows and donates over 300 vegetable plants for festival -provides all seedlings for downtown community garden -offers workshops and homestead tours of her farm/gardens	Supports 400+ gardeners through events annually
Carolyn Manenger - https://www.facebook.com/augustusgardens/ http://augustusgardens.ca/			
Augusta Gardens, Urban farmer in Cornwall	Augusta Gardens, Urban farmer in Cornwall	Establishing large urban farm in North Cornwall; facilitate group workshops, community farming.	Family operation
Mallory and Andrew Hagen - https://www.facebook.com/Mustard-Seed-Community-Garden-674039896068934/?fref=ts			
Horticulturalists and co-founders of Mustard Seed Garden	Mustard Seed Community Garden and urban Farm (in planning stages)	1.2acre garden project planned empty green space at Knox St. Paul Church located in north end of Cornwall Non-plot, collective garden model for mixed production Gardeners / farmers to keep 1/3, donate 1/3, and sell 1/3 as a social enterprise	- 7 gardeners involved to date

Affiliation, Role	Garden Project Name and Location	Objectives and Key Activities	(N) Gardeners
Juliette Labossiere			
Centre De Santé Communautaire De L'Estrie, Community Health Worker	Summer camp coordinator in Crysler, North Stormont	-Meet the needs of francophone population -provide educational and bilingual summer programming for North Stormont Community	15-20 children per week throughout the summer
Loretta Landmesser			
Co-Founder of Friends of King George Park, Maxville All Things Food (ATF) Website and Social Media Coordinator	King George Park, Community Garden and Edible landscaping (under development) Key leader and supporter of CGN through ATF	- create shared and multi-use community garden space in the new King George Park in Maxville -plant fruit trees and berries to support future harvesting - promote other garden initiatives in region and abroad	n/a

Appendix 2: Annual Growth of HGMH Therapeutic Garden



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