Food Ecosystems Project:

Economic & Business Sustainability Modeling

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Food & Beverage Manitoba | Community Futures Manitoba

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# Introduction

This report highlights food hub kitchen business sustainability models, interspersing information about food hubs with focused examples provided.

In addition to a scan of business and economic sustainability models of food hub-kitchens across North America, a total of 8 interviews were completed, and these include:

- The Hatchery Chicago, Illinois
- Ontario Agri-food Venture Centre Northumberland, Ontario
- Food Innovation & Research Studio Toronto, Ontario
- Y-Space Toronto, Ontario
- The Stir Kitchen Kamloops BC
- Sprout Kitchen Quesnel BC
- Fields Forward Creston BC
- BC Food & Beverage Association BC

Analysis of the operations, budgets, revenue and service offering of the following food hubkitchens are also included in this report:

- VenturePark Labs Toronto, Ontario
- La Cocina San Francisco CA
- HotBread Kitchen New York City NY
- Commonwealth Kitchen Boston MA
- Coho Collective BC
- Plenty & Grace BC
- The Open Kitchen Manitoba
- Leduc Food Processing Development Centre Alberta
- Richardson Centre for Food Research and Technology Manitoba
- Prairie Research Kitchen Manitoba

The objective of this report is to provide the reader with:

- An assessment of the financial feasibility requirements of a food hub-kitchen envisioned by Community Futures Manitoba-Food & Beverage Manitoba that includes awareness of funding, revenue, cashflow and operating budget requirements
- An assessment of the resource and equipment requirements for a facility based on a scan of models operating across North America, and to gain insights from their successes and challenges
- An assessment of the economic impact of a food hub-kitchen on job creation, financial return-on-investment, and overall ecosystem benefit.

# I. Financial Feasibility Assessment of Models

# a. Funding Requirements from Government and Agencies

Several food hub-kitchens develop their model before actual construction takes place via pilot studies, feasibility assessments, and research on competitors, equipment needs for prospective clients and industrial standards for the planned facility. These steps often translate into a better fit for the ecosystem, and in attracting more financing to fill a market gap. For example, the Hatchery conducted a 2-yr test pilot project prior to breaking ground, and the OAFVC completed a Business Retention and Expansion survey of regional businesses to determine what is needed, a farm and rural focused start-up and transition facility for scaling food CPGs.

The more successful food hub-kitchens seem to have well established networks of foundations, partners in industry and academia (research institutes, colleges, and universities), all in the pursuit of funding and to attract prospective clients. Several of the models also leverage federal, regional, provincial, and municipal-local funding to secure their place in the community, region, and ecosystem.

Food Hub-Kitchen	Specifications
The Hatchery	\$34M initial capital project (split btw. city funding land acquisition
(Chicago)	at reduced rate, tax credits, corp. and foundation sponsors, private
	donors, debt financing taken on by parent company, Ind. Council of
	Nearwest Chicago)
Commonwealth	Developed from an extensive network of partnerships from private
Kitchen (Boston)	industry, academia, foundations with an equity and BIPOC focus
OAFVC (ON)	Built between 2014-2016 for \$2.4M with \$1.2M from
	Northumberland County, and \$1.2M matching from the Ontario
	and Canadian government based on a Business Retention and
	Expansion study on what exactly the County needed. Municipally
	owned and operated, with carefully planned location off a major
	highway (401).

Inding is largely from a NSERC grant, and serves as a food-focused
b part of the national TAC network. Facility benefits from the
nancial resources of George Brown College rather than as a stand-
one business.
Space is one part of a 6-program \$3M FedDev investment as a York
niversity initiative, with some provincial support, and a
rtnership with local Black Creek Community Health Centre.
50K seed funding from combination of BC government (\$200K
nding), Northern Development BC, and City of Quesnel. City
ases facility to Sprout Kitchen. Major financial resources went to
novation. Sprout is partnered with many regional and provincial
sociations, colleges, universities.
50K seed funding from BC government (\$250K went to a HACCP
k assessment and audit), along with \$150K from Columbia Basin
ust, and \$50K from Kootenay Central Region District.
00K from BC government, largely for renovations (that were 3X
hat was initially anticipated). Budget included 2 yrs. of contract
ages and admin. Also received support from a local food
frastructure fund, as well as \$300K from the Vancouver
undation (for more renovations and staffing). Initial \$800K not
ough to deal with renovation, rising lumber costs, break-in.
eceived \$1.75M over 5 years from NSERC, with 50-75% funded by
ovincial-federal funding. PRK benefits from operating out of Red
ver College, and location in downtown Winnipeg in the
change District, and a partnership with the Paterson GlobalFoods
stitute.

## b. Revenue, Cashflow, Profit & Loss (Rental-Leasing Arrangements)

Across the different models examined, revenue, cashflow and profit-loss often depend on a critically aware mix of rental and leasing arrangements, satisfied and trained clientele, and a service offering by the food hub-kitchen that is attractive for food entrepreneurs in the region. Rental rates, whether for use of common kitchen areas or for private kitchen spaces varies significantly between non-profit, and for-profit models, from as low as \$10/hr for part-time clientele packing dried goods, up to \$50 for use of specialized equipment. The average rate for the use of common kitchen spaces seems to be between \$20-30/hr. Full day rental of common and specialized kitchen space seems to be around the \$250-300/day. Many models incentivize towards full time membership, and private kitchens where the facilities allow for it, and rates range from \$1,000 to \$5,000/monthly. Storage is an important part of revenue, and cashflow as it relates to energy use and utilities, but also staffing and safety protocols. Storage revenue

ranges across dry-cooler-freezer rates, from as low as \$15 per pallet per week, up to \$300/monthly for frozen space. Different models pursue revenue mixes reliant on rental arrangements, but also a variety of services at the facility with anything from consulting services, to cleaning, distribution-delivery, and marketing-branding. Well established food hub-kitchens also work in a system of reciprocal referrals to other food hubs in the region. For revenue generation, several models emphasize the importance of volume in production lines, to make the most economic use of invested equipment, and this can be a determining factor for preference of clients that can produce in volume, such as juice pressing seasonal fruits.

Food Hub-Kitchen	Specifications
The Hatchery (Chicago)	80% of costs covered from rental-leasing income-20% from continual sponsorships-donations. 54 private kitchens for clients. \$10-50 p/hr (\$20-25 avg.) depending on space-equipment needed. Entrepreneurs purchase their own equipment. Monthly maintenance fee for member clients. Private kitchens range from \$2-5K per month depending on size. As clients scale operations, rent rate goes up. Each private kitchen has standard storage space (charges for extra space), and gets one parking space. Consulting services and tours are offered to help shared kitchens and incubators with their strategic development.
Commonwealth Kitchen (Boston)	3 diff. rental rates depending on development stage of food business. <i>Incubator</i> \$150/monthly membership fee +\$35/hr kitchen rental for up to 6 months. <i>Start-up stage</i> \$300/month membership fee (+50 hrs of kitchen time and \$35/hr for additional hrs) up to 3 months, includes monthly networking, shipping-receiving-janitorial. <i>Growth stage</i> \$50/month membership fee with tiered kitchen rental from 1-3 yrs. Storage costs range from dry \$65/month pallet to \$117/month frozen pallet.
OAFVC (ON)	Currently ~ 60 clients per year (80 pre-Covid). Facility has 100 pallet size for dry (\$35/month), 20 pallet size for cold (\$45/month), and 60 pallet size for frozen (\$55/month) storage. Rental of kitchen is full shift (7 hrs - \$288) half shift (4 hrs - \$185). Tax paying Northumberland property owner pays reduced rate with 15% discount. 60% of clients come from broader region, 30% from GTA east, and 10% from other parts of Ontario.
FIRSt (ON)	Operate on fee-for-service under NDA agreements with clients. Receive project referrals from related partners organizations like BioEnterprise, OAFVC, YSpace or VenturePark Labs. Revenue

	approx. \$230K for 2022, in past years it was up to \$700K. Depending
	on client, projects range from \$150 for a nutrition plan sheet, to
	\$1500 for shelf life tests or \$6K for a co-packing assessment. Some
	projects can receive matching grant funding for clients up to \$15K
	for FIRSt. Partnerships support lead generation.
Sprout Kitchen (BC)	Currently seeking more client members. \$80 for 8hr/month up to
	\$1K/month for FT members (and unlimited access to equipment).
	Facility also charges for storage, which ranges from \$20/week for a
	dry storage shelf, to \$175/month for 1 cage with 3 shelves/month.
	Projected revenue for 2022 approx. \$99K (based on FT
	memberships, storage rentals, sales, co-packing). Revenue
	anticipated from a marketing coordinator, labeling service. Planned
	events have not received sufficient interest. New events are planned
	to generate revenue. To date they are \$30K under budget.
Fields Forward (BC)	Facility claims to be cash positive focused rather than profit
	oriented. The facility seeks to be accessible to people and support
	new product development. \$20 per hour for a 2-hour minimum.
	Albeit, operating their pasteurizer requires a minimum 1,000 litres
	to justify the cost, and the 2 staff, and the facility charges \$10 for
	bagging a 3 litre container and boxing for shipment.
Coho Collective (BC)	Revenue for 3-month period ending March 31, 2022 \$546K,
	compared to \$471K for previous 3-month period. Revenue of
	\$2.34M for 15 months ending March 2022. Net operating loss of
	\$3.7M (that included \$6.7M acquisition of Phantom Kitchen).
The Stir Kitchen (BC)	Rates vary: \$20/hr for whole kitchen, \$26/hr if 5hrs per week.
	Storage is rented as shelving, 2x3 ft racks \$20 for dry, \$40 for cool,
	\$50 for frozen storage. 10% discount for multiple shelf rental. \$500
	damage deposit for equipment use. \$100/year membership at sign-
	up of contract. Health permits, \$3M liability insurance, business
	license required. Facility targeting 3-4 businesses operating at any
	one time in the kitchen depending on equipment being used.
Richardson Centre	e.g. Charge \$1,600/day for milling
(MB)	
The Open Kitchen	Clients pay a \$1K refundable damage deposit at start. \$300/day
(MB)	rental rate (includes use of equipment, utilities, staff, kitchen,
	parking, cleaning) Storage \$15 per pallet, \$20 to receive-send
	pallets. Frozen storage off-site.
The Kitchen Sync	\$28/hour – 3hr min. (includes dedicated locker-fridge space, 1
(MB)	parking spot). Extra: \$200/monthly walk-in cooler, \$100/monthly

fridge space, \$75/monthly consultation-training. Clients require
min. \$2M liability insurance, and \$300 damage deposit.

## c. Operating Budgets-Capital Requirements: Breakeven Projections – 3 yrs.

Several of the non-profit models examined are under significant pressure, especially in their first few years to breakeven under the constraints of operating with grants, while seeking to attract and secure regular clfientele. The impact of the Covid pandemic also has increased operating costs for utilities, and supplies, translating into higher than expected renovations, and services. Many food hub-kitchens operate under a language of 'net-zero' and 'cash positive' or breaking even. Larger facilties such as the Hatchery have an approximate budget of \$1M USD annually, that includes up to 15 staff, and where they claim to be at 90% capacity with clientele. OAFVC in Ontario also claim to operate with an approx. \$1M budget, that is supported by their status as a municipally-owned facility, where staff are paid by the county economic development department. Several Canadian food hub-kitchen models receive their seed operating budgets from a major grant, and average annual budgets around the \$150-175K, and have projected breakeven at 3 years to be approx. \$150-175K as well, highly aware of the pressure to secure revenue streams from clientele in their region.

Food Hub-Kitchen	Specifications
The Hatchery	Approx. \$1M (USD) annual operating budget (covered mostly from
(Chicago)	rental fees – currently at about 90% capacity at the facility). Staffing
	includes: front desk, 24/7 security team, property manager, director
	of operations, kitchen supervisor, and 3 kitchen assistants,
	custodian, program manager, membership manager, event coordinator, and general manager.
OAFVC (ON)	Operating towards a net-zero budget as a non-profit, generally
	\$1M/year in operating expenses (staffing, utilities). Facility
	maintains staff with skills in operating equipment. Staff paid by
	Northumberland County Economic Development department.
	Facility is seeking to reduce its reliance on County support
FIRSt-GBC (ON)	NSERC grant of \$350K/year, and overall operating budget is twice
	that. Because of pandemic, some staff were let go. GBC contributes
	\$75K annually to maintain FIRSt operations to support rent,
	utilities, salaries.
Sprout Kitchen (BC)	Breakeven projection is \$156,000/annual based on operating costs.
	\$144/annual in operating costs (rent, staffing, insurance, cleaning
	service). City owns facility equipment, and facility has diversified to
	produce a granola from spent brewers' grain

Fields Forward (BC)	Approx. \$168K/annual operating expenses. \$100K/annual in juice
	processing revenue, projected to double with freeze drying service.
	Year 3 projections are revenues of \$175K/annually that will include
	facility rent, freeze drying, aggregation and distribution service, and
	bottling.
Stir Kitchen (BC)	\$144K/annual operating budget. Utilities are currently un-known.
	Facility provides laundry, cleaning services for client-tenants, in
	addition to that completed by tenants. GM feels pressure to become
	self-sustaining after initial grant.

# II. Resource and Equipment Assessment of Models

# a. Food Sub-sector Focus (and Procurement)

Different food hubs pursue different areas of focus to distinguish their offerings, and align with what is financially feasible. There is a tendency at some hubs across North America to exclude the production of meat, dairy, and beverage alcohol as these categories require additional safety and regulatory approval, and certification by clientele.

For example, since its inception, OAFVC has been farm-product focused in their region to bring value-added opportunities to entrepreneurs, and are particularly adept at handling glass containers. Specialty facilities such as FIRSt coordinate with other food hub-kitchens in the region to share referrals and benefit from a focus on what is not being offered in the ecosystem, and what FIRSt can leverage from affiliation with GBC chef school. The Stir Kitchen has built its model from a core capacity in dehydration and canning of local produce and beef, while also offering a local food database for clientele. Plenty & Grace focus on supporting value-added, plant-based BC produce with operations scale-up strategy, branding and delivery services. Specialist facilities like the Leduc Centre in Alberta, and the Richardson Centre in Manitoba offer highly technical equipment for food entrepreneurs scalin - g to large production, and with specific functionality requirements.

Food Hub-Kitchen	Specifications
The Hatchery	Clientele are generally able to produce all types of food and
(Chicago)	beverage products and services from catering, to baked goods and
	CPG. A new partnership facilitates ability to manage innovative
	dairy products, and partnership with MakeCity (another incubator),
	gives capacity for small-scale beverage alcohol production.
	Procurement arrangements exist with US Foods and Sysco, which
	translates into bulk purchasing discounts for member-tenant
	entrepreneurs.

OAFVC (ON)	Initial focus has been to serve as a processor of local-regional
	produce from surrounding farmlands. They do not process dairy or
	meat, and provide support for everything from CPG beverages, to
	condiments and ready-to-eat meals. The facility also is especially
	adept at handling glass packaging, which others may avoid for safety
	risks. The facility does not have any procurement policy, and
	encourages clients to lead their sourcing needs, which is especially
	complex given the 60+ clientele, and the close to 150 different
	products made at the facility. As a service, the facility can support
	supply chain matchmaking, and specialists.
FIRSt – GBC (ON)	Facility operates as a highly specialized service centre, focused
	predominantly on food product development for the client seeking
	to grow beyond a farmers' market or small kitchen operation. They
	do not provide service for fermented beverages, confectionary,
	meat, dairy, or cannabis-infused products, as related facilities in the
	province are better suited to this. Specifically, FIRSt is able to
	'procure' equipment when GBC makes purchases for its chef school.
The Stir Kitchen (BC)	From a Kamloops Innovation Centre feasibility study, sub-sector
	focus with the greatest demand was determined to be dehydration
	and canning focus, including for beef jerky, fruits and vegetables
	from the region. The facility is also finding a broad range of clientele
	food product interests, including catering, bakery, and shelf-stable
	product development. Local students have developed a local food
	database which is a listing service, but not required for clientele to
	use. Clients have access to a Kamloops region produce buying club,
	and the facility is currently completing a local food sourcing
	feasibility study for aggregating supply for clientele.
Sprout Kitchen (BC)	Facility is a 'relative newcomer' to the provincial food hub
	ecosystem, currently with 2 full time clienteles. The facility remains
	focused on canning, storage, refrigeration, and delivery of value-
	added local produce from the region.
Plenty & Grace (BC)	The facility is part of the Vista D'Oro Farm and Winery to support
	BC grown value-added products, primarily fruits, vegetables, nuts,
	and herbs, and does not process meat, dairy, fish, or wheat in its
	HACCP-certified building. Utilizing lean manufacturing there is
	capacity for up to 36 clients, and offers R&D lab services, branding-
	labeling design, marketing-social media, distribution and home
	delivery, and consolidated shipping to retail.
	activery, and consolidated simpling to retail.

Leduc AB Food	As a government supported facility, Leduc provides technical,
Processing Centre	conceptual, prototype, package design and technology, regulation-
(AB)	labeling compliance, and quality control assurance for food
	entrepreneurs in western Canada.
Richardson Centre	The recently rebranded centre, affiliated with the UofM operates an
(MB)	advanced food testing facility capable of; wet extraction assessment,
	nutritional function and efficacy, safety of health-focused foods and
	health claims-taste. Clients can conduct lab tests to ensure processes
	are scalable for commercial activity. The centre is especially strong
	on grains, and dairy innovation.

## b. Subject Matter Experts, Technicians, Network Support

Well established food hub-kitchens are able to offer a range of services, and network support in addition to the use of kitchen-commercial space, and storage. Especially in more competitive populated ecosystems, the range of offerings is quite extensive. There might be food scientists, and food technicians to help entrepreneurs refine their products, and processes. In addition, helping clientele to know about, and navigate regulatory, food safety, operations, licensing, shipping challenges is an additional bonus. Partnerships with industry, research centres, and colleges benefits to the attractiveness of a facility.

Food Hub-Kitchen	Specifications
The Hatchery	As part of member clients' \$500 annual fee, a culinologist from
(Chicago)	Ingredion works on-site to support ideation to enhance food
	products, test formulations-shelf life or texture. Clients are involved
	in training sessions to learn operations planning, food safety. EcoLab
	is a partner in training-certification in proper use of cleaning
	protocols
Commonwealth	Clients gain access to one-on-one assistance for permits,
Kitchen (Boston)	compliance, recipe development, workshops, and Ready-to-Launch
	program.
OAFVC (ON)	On-site, PT food technologist to help with scale-up assessment.
	Clients can hire up to 3 food technicians on-site to help improve
	efficiencies, problem solve product development and design.
VenturePark (ON)	Clients gain access to: District Venture Capital (fund for investing
	and building food brands); VenturePark Labs (innovation hub for
	product exploration, support and growth mentorship); and growth
	strategist and marketers.
FIRSt (ON)	Clients have access to 4 food technicians, including GBC chefs and
	food scientists, such as tea sommelier, or consumer research lab.

YSpace (ON)	Since 2017, worked with approx. 40 food entrepreneurs in 'scale mode' with business development support in everything from regulatory, food science, safety, IP protection, pricing, product market fit, retailer analysis, peer circles, a demo day and mentorship in a 5-month program that accepts a cohort of 8-10 companies annually from about 35 applications. Those accepted to the program are generally required to have 10 points of existing sales, and \$50-100K in annual revenue.
Fields Forward (BC)	Clients are required to provide expressions-of-interest for vetting, and there is an onboarding process to learn about equipment and amenities. Facility has an innovation lead, and product development expert with experience in the wine industry, along with a PT equipment technician. The board provides significant experience in food processing, safety, and entrepreneurship to bring quality to client business development.
The Stir Kitchen (BC)	Facility has a working relationship with Thompson River University food science department. Clients are provided water, and pH testing, and coaching programs. GM has food product development experience.
Sprout Kitchen (BC)	GM recognizes support services are lacking. One anchor client produces crackers in the facility.
Open Kitchen (BC)	GM-Owner helps with compliance, regulation and health standard approvals.
Prairie Research Kitchen (MB)	Facility offers perspective of a chef (as compared to a researcher) for clients, and helps companies of all sizes to bring ideation to life. A staff of 8 mix culinary, food science, and ingredient optimization, with expertise in food trends, consumer demands, cooking styles, and methods, along with knowledge of food systems, scientific methods and food safety. The facility can conduct clinical trials, and help clients with food sampling at presentations, trade shows, and events on a fee-for-service basis.

## c. Equipment Needs and Mix, Floor Space

There is a broad range of food hub-kitchen sizes of the models examined, from as small as 400 sq. ft egg processing room, up to 65,000 sq. ft for the Leduc Food Processing Centre in Alberta, or the 67,000 sq. ft Hatchery facilities. Most of the start-up-incubator-accelerator models in Canada are in the 3,000 to 10,000 sq. ft range. Different models also offer a broad range of equipment from their common kitchen spaces for general food processing across a spectrum of applications towards more specialized functions. Models such as FIRSt and Fields Forward for

example, offer specific tools and equipment for food entrepreneurs. These offerings, in the best scenarios have been determined from well-organized studies and assessments of need in the region, and which justify the investment financially, and to up-take by existing and potential clientele. Some models, enhance their offering by having active partnerships with laboratories off-site, or having standardized equipment-facility cleaning services.

Food Hub-Kitchen	Specifications
Commonwealth	12,000 sq. ft (50+ food companies - 3,000 sq. ft dry; 2,000 sq. ft
Kitchen (Boston MA)	walk-in cold; 1,300 sq. ft frozen storage)
The Hatchery	A 67,000 sq. ft section of a larger set of buildings, make up 30% of
(Chicago)	clientele of Industrial Council of Nearwest Chicago (ICNC) with a
	massive 416,000 sq. ft, and over 110+ tenants. Client-members
	responsible for equipment in their private kitchen space, some
	shared equipment offered in common areas. The facility works
	with a broker to get discounted rates on purchases. Some
	equipment donated by culinary schools, closing restaurants. Many
	products offered to clients. There is pressure from member-clients
	to buy larger capacity equipment, and there might be expansion of
	Hatchery floor space to accommodate this.
OAFVC (ON)	15,000 sq. ft facility, with equipment technicians. There are 4
	production rooms with an organized schedule operating in 2 shifts,
	booked in blocks a month in advance (no farther out). Clients book
	the rooms, and equipment based on their production needs.
	County conducts cleaning post shifts to ensure standard food
	safety, and cleaning protocols, and for equipment maintenance,
	and quality assurance. County Business Retention and Expansion
	survey was super important to determining best fit for (potential)
	clientele purpose and equipment need. GM and staff maintain a
	weighted wish list of new equipment for clientele. Decisions based
	on most utility for broadest span of clientele.
FIRSt-GBC (ON)	Facility supports technical food testing, including carbonators,
	homogenizers for creams and sauces, along with GBC related
	kitchen ovens, combi, salamanders, dehydrators, freeze dryers,
	water and pH activity and kettles. Equipment purchases based on
	consistent client demand. Equipment is from benchtop scale, to
	mid-scale, as most clients are small-to-medium. Capacity for
	consumer sensory testing (including demographic segmentation).
	Current demand is for healthy confectionary, so this will
	determine new purchases.

Fields Forward (BC)	Building is energy efficient, with 8,000 sq. ft dry storage, 2,800 sq. ft cooler, and flash freezer. 600 sq. ft wet processing room, and 400 sq. ft egg processing and grading area with CFIA regulation and licensing. Large scale freeze dryer can handle over 100lbs of product and cost \$35K. Facility also has a \$26K flash pasteurizer for juice bottling line, that manages 1,000 litres of raw juice from totes. Volume is necessary to have runs, so clients required to have 1K min runs. There is also a \$20K juice press, and multi-purpose filling line. Facility requires volume runs for sauces, jellies, salsas, juices. Current cold storage capacity is lacking, and a priority, especially for clients needing to store produce prior to value-added processing. Rather than new equipment per se, facility is seeking to increase production on existing inventory.
Coho Collective (BC))	Different site kitchens range in size from 3,600 sq. ft (with 10 shared kitchen spaces and 15 members) to nearly 20,000 sq. ft with 40 shared kitchen spaces and 30 members.
Stir Kitchen (BC)	4500 sq. ft, at the 2000 sq. ft for offices, and a store front, with different staff. The middle is the kitchen 1,800 sq. ft, and a warehouse in the back. Facility renovations impacted equipment purchasing budget. Purchase of a double convection oven, originally valued at \$13,000, was acquired for \$400 from a closing restaurant. Some equipment purchased has been smaller than initially intended given budget constraints. Facility suffered from break-in and somethings were stolen. Local food association gave a grant to purchase in-demand dehydrator. An 8X10 cooker and freezer cost \$55K. Facility is leasing with EcoLab \$200/monthly for a sanitation and cleaning service
Plenty & Grace (BC)	Facility is 4,750 sq. ft of shared use space for prep-production, cleaning, packaging and labeling, dry-cold storage, staff lockers, anchor client stations. Equipment includes vertical mixers, kettles, filler, chuck capper, vacpack machine, top labeler, commercial dishwasher
The Sprout Kitchen (BC)	2,000 sq. ft facility with dry storage only. 5 work stations. GM recognizes limitations without cold-freeze storage, nor food lab testing.
Leduc Centre (AB)	65,000 sq. ft pilot plant and lab with 7 incubation suites and \$20M of equipment to support food innovation. In 2020, \$2.6M in new equipment for plant-based products. \$500/hour for pilot plant development.

Edmonton Organic	17,000 sq. ft facility
Food Hub (AB)	
Sask Food Ind. Dev	2 locations over 10,000 sq. ft of pilot plants, and 55,200 sq. ft Agri-
Centre (SK)	food Innovation Centre in Saskatoon.
The Open Kitchen	1,800 sq. ft. food production and storage facility (gov't certified-
(MB)	provincially inspected-approved food production-storage facility.
	Clients can bring specialized equipment.
Prairie Research	Facility has a broad range of standard to highly specialized; such
Kitchen	as centrifuge, extruders, colloid mill, vacuum sealer, dehydrator,
	media mill, and diafiltration.

# III. Economic Impact Assessment of Models

#### a. Reasonable Financial ROI (Annual Revenue-Profit-Cash Positive) Job Creation and Impact

The financial return-on-investment fluctuates significantly between the various for-profit and non-profit models examined across North America. A perspective on this is provided below. Critically important to the tangible and non-tangible benefit and impact of food hub-kitchens is the prospects for job creation, education, important skills development and training. Many of the models reviewed have made explicit effort to focus on inclusiveness of BIPOC, women, and traditionally marginalized people into their clientele attraction. Facilities set benchmarks for their projected job creation #s, and it is impressive to see when they reach those targets.

Food Hub-Kitchen	Specifications
The HotBread	\$345K+ in earned revenue by HotBread client businesses. 48
Kitchen (New York	individuals received business advisory, tech support. In 2021, \$5M
City)	in revenue, and \$3.7M in total expenses. Extensive funding
	partnerships, board of director collaboration, distribution partners,
	40+ funders from foundations, banks, private companies
Commonwealth	75%-member businesses BIPOC-owned, 70%-member businesses
Kitchen (Boston)	women-owned. 250+ companies launched, 65% still operating, 6+
	companies on shelves at Whole Foods, 1.5M invested in local food
	businesses, 600+ new jobs created, \$55M in combined annual
	revenue.
La Cocina (San	\$6.2M in secured support to food entrepreneurs, close to \$1M raised
Francisco)	in relief fund to entrepreneurs, close to 4,000hrs of technical
	assistance provided, 10# of learning circles conducted with
	entrepreneurs, 5,000+ total donations from foundations,
	government, corporations, 1,700+ donors, \$5.1M in revenue for La

	Cocina antropropours 190, modia storios 30 virtual town hall
	Cocina entrepreneurs, 480+ media stories, 30 virtual town hall
	gatherings, 84K total social media followers
The Hatchery	Chicago not planning to expand the brand outside of the city.
(Chicago)	Impact includes on-track to creation of 900+ sustainable FT jobs
	within 5 years of opening. Offers 34 hrs of free community kitchen
	time per week to local residents to promote diversity, equity and
	inclusion. Non-profit, mission-focused model far exceeds for-profit,
	where you would need to charge 3X to start-up entrepreneurs. They
	receive tax credits as a non-profit, and can seek external funding.
	The organization provide coaching to set up entrepreneurs for
	success, with financial acumen, and a full understanding to get to
	market. A 6-month program with rental plans and entrepreneurs
	shouldn't stay more than 4 years. If clients are not moving forward,
	they have to leave the facility. With their support and scaling 'stress
	test', they are ready to pay market rates at exit and build their own
	facilities. With current demand, the Hatchery can also be selective
	with admissions of new clients. Impact of the organization on the
	ecosystem, is also power of partnerships with major CPG companies
	in Chicago (Mondelez, Pepsi, Kellogg's, ConAgra. To make a facility
	work, you need to understand your local community, and the
	resources available to leverage growth for the food hub-kitchen.
OAFVC (ON)	10 shifts per week available in specialized equipment rooms, booked
	up to a month in advance. Facility GM emphasizes operating on
	trust with clients. This relates to food safety, equipment uses,
	cleanliness. Facility GM see themselves as a stepping stone and
	anchor in the region for further growth, and have the capacity to
	help test in the marketplace. They maintain a clientele of 60+. They
	serve an important education and learning environment, even for
	'failed' businesses.
VenturePark (ON)	Between 2015-2021, supported 12 cohorts and 100+ businesses, 41
	users of the kitchen facility in 2021, 53 businesses supported
	through food program. In this 7-yr period, approx. \$1.6B in total
	output, and total GDO of approx. \$577M, with total government
	revenue of \$139M. Direct employment supported grew from 25 jobs
	in 2015 to 1,050 in 2021. Each job also supports 1.6 additional
	indirect and induced jobs. VenturePark companies are across
	Canada, in CPG and Health and Wellness. Recognized brand names
	include Love Good Fats and Chickapea Pasta.
FIRSt-GBC (ON)	Impact should be measured with clear and tangible support services
	to entrepreneurs, who themselves are on timeline of performance,
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	and goals to achieve with support from facilities, food hubs and test kitchens. There is significant competition for test kitchens, especially in southern Ontario, hence to focus at FIRSt, and partnership with other TACs, and related organizations such as YSpace, and VenturePark. GM has clients from across Ontario, but across Canada as well.
YSpace (ON)	74 jobs created since inception, over \$9M in related company revenues, one graduate of the 5-month program now a \$1M+ company on track towards \$5M. 7 portfolio companies per year. The accelerator supports the food innovation ecosystem, since 2019. YSpace created Ontario's first F&B accelerator to help scale high growth CPG ventures. They help foster opportunity for women founders and those from underrepresented communities.
Sprout Kitchen (BC)	Impact for the future is to help local entrepreneurs get past challenges of paperwork and regulatory knowledge about health insurance, business licensing, and approvals required to start operations. With a marketing coordinator, and distribution services, they expect to broaden their reach and influence in the area.
Fields Forward (BC)	GM sees their facility as a hub for the rich produce from the region to find a broader market of value-added juices, and unique products from the Kootenay area.

# IV. Recommendations

## 1. Funding

From a scan of the models above, related to their business-economic sustainability, a general range was between \$750K to \$2M to establish a quality facility, with equipment, that is ready to accept clientele, with the resources, staffing, and contingency plans for surprise expenses.

Important to mentioned about initial fund raises, from the experience of food hubs-kitchen across North America is the relevance of studies, assessments to pinpoint product development demand in the ecosystem, where is interest from prospective clientele, and what type of functionality (i.e. equipment) should the facility invest in. These initial assessments will have significant variations between urban, peri-urban and rural locations, and importantly, the desired food hub-kitchen needs to know there is a critical mass of interest in the offering being designed.

## 2. Revenue, Cashflow, Operations Budgeting

When design food hub-models for revenue generation, cashflow, and operations budgeting, there are examples of success in both the non-profit (The Hatchery, OAFVC), and the forprofit model (Coho Collective), however they need to be understood clearly from the inception how financing and revenue generation will be managed. The importance of the 'offering' was a common theme mentioned in the interviews. What is the vetting process by which a facility accepts new clientele. What is the training and skills development on offer? How accessible are subject matter experts, skilled technicians, culinologists, chefs, food scientists for example? What services are offered to clientele in terms of knowing about the competitive landscape, market competition, retailer negotiations, business insurance, food safety? What cleaning standards are in place? What degree of specialization, and its related equipment is on offer? What digital software systems are in place? These factors all influence revenue flow by making the food hub-kitchen's brand a source of attraction that leads to some models having waiting lists, while others struggle to bring in new clientele.

In terms of a breakeven projection to 3 years, this depends on the size and range of offerings of a facility. From the models explored, a 3-year projection ranged from \$175K per year, up to \$1M. Models also range in staff sizing, but an average might be around 7-8, and an operating budget of about \$750K/annually.

#### 3. Resources and Equipment

By way of an example of a food hub-kitchen branding successfully in its resource offerings to clientele is the Coho Collective, operating in BC. As member food entrepreneurs, Coho claims to help 'supercharge businesses, to give them access to commercial grade kitchens, and the resources to jumpstart their growth with lowered risk. This is done by training clientele in the whole food product development journey with advanced applications and exposure of their products to a network, e-commerce platforms, and advanced digital management platforms as part of its attractive value proposition. Coho is led by a management team with decades of collective experience in operations, financing, strategy, business development, marketing, and sales (Coho Collective, Investor Presentation, March 31, 2022).

Several successful models have a team mindset of resourcefulness, seeking opportunities to build partnerships, and to find the best value in the equipment and services on offer at their facility. Some GM would find perfectly functioning equipment at a fraction of the cost from a closing restaurant for example. Affiliations with off-site testing labs, branding and labeling designers, and suppliers adds to the professionalism and attractiveness of a food hub-kitchen for interested entrepreneurs. Teams benefit the development of their facility by conducting feasibility assessments of their region, speaking with industry, and knowing the leading product categories that will help to refine what equipment and services are most in demand.

#### 4. Impact

From a summary of the models of food hub-kitchens reviewed, some distinct recommendations for the greatest impact suggest four important elements:

- 1. Team members need to be aware of budgetary goals and constraints with initial grant funding vis-à-vis short, medium- and long-term revenue generation
- 2. Team mission clarity is enhanced by clear awareness of food hub-kitchen gaps in an area of food entrepreneurship, and this clarity is achieved by extensive engagement with industry, partners, and prospective clientele
- 3. Built into the model should be a screening, and vetting system for bringing new clientele into the facility as part-time, and full-time members. Distinguishing between hobbyists, and those entrepreneurs with a growth mindset who are seeking to take their product and services to a new level will have real implications for revenue generation. Articulating these expectations (and potential time limits) to prospective clientele from the start makes for a more productive workplace.
- 4. Once the facility focus is determined, and clientele assessment is understood, the food hubkitchen builds the network, partnerships, support infrastructure, service offerings to attract clientele who will gain real and practical skills that will be in demand, and support brand development.

# Appendix A: *Budgetary models based on performance in key criteria* / *Location of Food Hubs*

The following modeling scenarios are provided with three budgets: a. \$500,000 annually; b. \$750,000 annually, and; c. \$1,000,000 annually, and in turn top 2-3 food hubs for each budgetary category.

# Budget A: \$500,000 annually

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Funding	Amongst the models examined in the Budget A category, the best funding models to
	consider include:
	• <i>Food Innovation and Research Studio</i> (George Brown College - GBC): FIRSt is
	significantly reliant on continual funding from an ongoing federal NSERC grant
	(similar to the Prairie Research Kitchen affiliation with Red River College). FIRSt is
	highly networked with similar partner food hubs in the GTA region, and highly
	specialized in its clientele service offering for food product testing. FIRST receives
	\$350K annually, and some additional funding through it GBC affiliation.
	• <i>The Sprout Kitchen in Quesnel BC</i> is largely dependent, to date, on the government
	grants they have received. While they have not become financially sustainable,
	important value can be taken from challenges and opportunities for a rural and
	relatively remote food hub facility as Sprout Kitchen.
	• <i>The Stir Kitchen in Kamloops BC</i> operates with an annual budget that could be
	feasible with about \$500K in financing, as they facility is quite small, and highly
	focused on serving the needs of the region. Stir has been effective, through its
	management to obtain funding from federal, provincial, regional, and municipal
	sources of funding.
Revenue,	Amongst the models examined in the Budget A category, the best revenue models to
Cashflow,	consider include:
Operations	• <i>The Hatchery in Chicago</i> is able to obtain 80% of its revenue from client-member
operations	rentals and leases of private kitchens (ranging from \$2-5K/monthly), with 20% from
	continual sponsorships-donations and some consulting services. On a smaller scale,
	within a \$500K budget, private kitchen rentals (higher revenue generating even at a
	smaller operation) could be mixed with shared kitchen options for prospective
	clientele.
	• Food Hub kitchens in BC (Stir, Sprout, and Fields Forward) all seem to operate with
	revenue-cashflow under \$200K/yearly through a shared kitchen space regionally
	oriented to clientele needs (whether catering services, local region foods whether
	meats, fresh produce, etc.) and some degree of specialization (juice pressing)
	<ul> <li>OAFVC in Northumberland Ontario has significant model variability, including</li> </ul>
	feasibility at the \$500K low-end range by offering clientele-members accessibility
	via low cost storage and kitchen rentals for ½ days, at \$185. OAFVC is highly
	oriented and targeted towards regional-local needs and services.
Resources &	Amongst the models examined in the Budget A category, the best resource & equipment
Equipment	models to consider include:
	• FIRSt (GBC) is testament, that on a smaller budget, a highly focused food service
	provider exists in the competitive Toronto regional ecosystem that is at once
	specialized in testing, product development, quality assurance, packaging, and shelf-
	life, among others, for the small to medium food manufacturer. The equipment on-
	hand, and the network of partner resources are highly targeted to what is financially
	feasible for start-up food companies.
	• YSpace (Toronto) is also another example of a specialized and focused food
	ecosystem service provider operating without significant expenses. YSpace also do
	not have equipment, but realized the gap in the market for resources related to food
	CPG start-ups, including knowledge of regulations, licensing, business
	documentation, marketing, retailer networks. YSpace operate with less than
	\$500K/annually.

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	• Fields Forward is another example of a highly targeted food hub in the BC interior that has made important decisions about the scope of their offerings, and rather than having too much equipment, are particularly focused on being to affordable go-to in the region, especially for the abundant tender fruit producers in the region who are seeking value-added processing. Fields Forward operate with a budget under \$500K/annually.
Facility Size	<ul> <li>While there is significant variability in the facility size of the different food hubs examined across North America, operating with an annual budget of \$500K may lend well to focused smaller facility sizes that are highly catered and focused to clientele in a region. In this regard,</li> <li>FIRSt (at George Brown College);</li> <li>Stir Kitchen in Kamloops BC; and</li> <li>Sprout Kitchen in Quesnel BC all operate with a relatively modest facility size of &lt;</li> </ul>
	3,000 sq. ft.
Impact	<ul> <li>Amongst the models examined in the Budget A category, the best impact models to consider include:</li> <li>YSpace is particularly skilled by its focus on building the relevant business management skills for food entrepreneurs within the greater Toronto area food manufacturing ecosystem. Rather than investing in equipment, or significant workspace, YSpace is able to channel its resources and impact towards bringing in skilled trainers, educators, and guest speakers, while also establishing a highly tuned network of support for growing food entrepreneurs</li> <li>Stir Kitchen is worthy of consideration for its impact because of the niche anchoring it has established in the Kamloops area as a resource for local aspiring food entrepreneurs, particularly in certain categories, namely produce, and artisan meat processing (dehydration, jerky, etc.). Stir also is associated with other food organizations, and Thompson River University to increase its impact and reach.</li> <li>Fields Forward in the Kootenay region of BC has a significant impact given its relatively small budget because of its continued focus on working with fruit producers in the region. Fields Forward have invested in serving this sub-sector, given its unique advantage in the region.</li> </ul>

# Budget B: \$750,000 annually

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Funding	Amongst the models examined in the Budget B category, the best funding models to
	consider include:
	• Plenty & Grace – Which operates with a slightly premium focus on branding BC
	food entrepreneurs, and the associated quality and marketing attributes, especially
	in fruits, vegetables and vegetarian products. This garners a slightly niche emphasis,
	and requires a funding capacity that has a larger budget, in and around the \$750K
	annual operating rate.
	• Fields Forward in the Kootnenay BC region (while also eligible for consideration
	with a smaller funding budget) can be considered in this \$750K category, because of
	their investments in specialized equipment, which also requires higher funding
	rates, and support (whether from government or other lending-granting agencies)
	• Elements of The Feast Detroit funding model, while operating with a large facility,
	can be considered in the Budget B category as it is smaller in operation than the
	Hatchery for example, while still working with local entrepreneurs and partners in
	processing quality products.

Revenue,	Interesting at the Commonwealth Kitchen (Boston) different 'membership' rates
Cashflow &	whether: i. incubator, ii. start-up, or growth from \$150-300 monthly + variable storage
Operations	costs, and networking services.
	<ul> <li>Plenty and Grace have distinguished themselves in BC with a high-quality service offering that combines kitchen facilities, in addition to marketing-strategic product development and enhancement with a focus on quality BC-branding. Investments in a uniquely designed building aid in the ability for Plenty &amp; Grace to generate revenue from its targeted marketing to specific clientele.</li> <li>Commonwealth Kitchen (Boston) have different 'membership' rates, whether the client is in early start-up or growth stages, ranging from \$150-300/monthly, with variable storage costs, and networking services provided at cost for the clientele.</li> </ul>
Resources &	Amongst the models examined in the Budget B category, the best resources & equipment
Equipment	models to consider include:
	<ul> <li>The Stir Kitchen has built a core equipment capacity in dehydration and canning of local produce and beef – even while Stir remains open to catering-bakery-shelf stable product development. Stir is also developing a local food database for sourcing and aggregation for clientele</li> <li>Plenty &amp; Grace are focused their resources and equipment on supporting value-added, plant-based BC produce with operations scale-up strategy-branding-delivery</li> </ul>
	services in the Fraser Valley.
Facility Size	<ul> <li>Amongst the models examined in the Budget B category, the best facility size models to consider include:</li> <li>Fields Forward (FF) (BC) offers 8,000 sq. ft of dry storage, a 2,800 sq. ft cooler; along with a 600 sq. ft wet processing room. FF invested in an specific freeze dryers and flash pasteurizer for juice bottling and facilities is good for produce processors in the region.</li> </ul>
	• Plenty & Grace is 4,750 sq. ft with prep production, cleaning, packaging and
Turnerat	labeling, dry to cold storage.
Impact	<ul> <li>Amongst the models examined in the Budget B category, the best impact models to consider in this 'medium budget' include:</li> <li>Feast Detroit seems to have struck the right balance of providing specialty food manufacturing services that include network connections, and co-packing facilities, while also support skills development at their facility.</li> <li>Plenty &amp; Grace is a uniquely positioned food hub incubator focused as a mid-size operator strategically positioned and aware of the uniquely BC, and Fraser Valley advantages for the plant- and vegetarian focused market, along with associated branding.</li> </ul>

# Budget C: \$1,000,000 annually

Funding	Amongst the models examined in the Budget C category, the best funding models to
	consider in this 'higher budget' include:
	• The Hatchery likely has a sizable operating budget (exact number unknown),
	however was accomplished with an ambitious campaign that involved a major fund-
	raising effort, and garnered nearly \$34M in financing. Only to mention this as a case
	study example, of how in one of the largest cities in the USA, the extent of
	coordination that was implemented to establish the Hatchery.
	• OAFVC is worth examining from a fund-raising model because of its deeply rooted
	financing catered to the needs and aspiration of its regional economic development

	office in Northumberland County, Ontario. Funding came after extensive research		
	and consultation to the needs of producers and aspirational processors in the county,		
	and surrounding regions.		
	<ul> <li>VenturePark Labs is uniquely interesting to consider for its ongoing evolution and</li> </ul>		
	impact in the higher end of funding budgets. Given its location in Toronto (and the		
	associated higher costs of operation, and competition from competing food hubs in		
	the region), VenturePark Labs has had to distinguish its offering, and in turn how it		
	raises funds, from a combination of public and private capital.		
Revenue,	Amongst the models examined in the Budget C category, the best revenue models to		
Cashflow &	consider in this 'higher budget' include:		
Operations	<ul> <li>Coho Collective is uniquely positioned as a for-profit food hub facility with several</li> </ul>		
Operations	locations across the province of BC, with a range of sizes. Coho is on an ambitious		
	expansion plan and has invested significant resources to increase its operational		
	capacity. Coho brands itself as especially catered to the development of leading food		
	entrepreneurs, primarily in the more populated centres of the province.		
	<ul> <li>The Hatchery is distinct in its brand reputation, especially in the largest food</li> </ul>		
	manufacturing region of the USA. Revenue is through a combination of: a steady		
	flow of clientele/members, storage space, and additional consulting and product		
	development services. The Hatchery also benefits from its partnerships that create		
	additional revenue streams from, for example, beverage alcohol and dairy		
	processing.		
	<ul> <li>OAFVC is worthy of consideration for its well-established clientele (60+) who come</li> </ul>		
	largely from the immediate and neighbouring region(s). OAFVC is controlled in part		
	by the economic development office of the regional county government, and is		
	increasingly careful in the revenue streams generated from existing, and new paying		
	clientele, whether from storage and/ or equipment rentals.		
Resources &	Amongst the models examined in the Budget C category, the best resources & equipment		
Equipment	models to consider in this 'higher budget' include:		
	<ul> <li>OAFVC maintains staff with operating skills for clientele, and are paid by the</li> </ul>		
	county, the food hub is regionally and farm-product focused for a rural community,		
	and the facility is especially adept at handling glass containers as a strength. The		
	OAFVC does not have a procurement policy esp. because of the diversity of clientele		
	and products being made. A PT food technologist and 3 food technicians service the		
	facility, and cleaning protocols for equipment, along with continual assessment of		
	equipment mix help adapt to clientele fit.		
	• The Leduc Centre in Alberta is notable for its specialized focus on assisting food		
	entrepreneurs with resources and equipment that is often not found in general		
	commercial kitchen food hubs. Leduc helps with prototyping, product design,		
	applied testing of ingredients and formulations, regulatory compliance, and quality		
	control.		
	• The Hatchery can handle advanced dairy, small-scale beverage alcohol, and bulk		
	purchasing discounts for member-tenants. A culinologist on-site supports ideation		
	and product testing. FT tenant-clients bring their own equipment into their		
	privately rented kitchen spaces, and some general equipment can be shared by all.		
	The Hatchery brings additional value to clients with business strategy planning and		
	network development.		
Facility Size	Amongst the models examined in the Budget C category, the best facility size models to		
	consider in this 'higher budget' include:		
	• The Hatchery is an example of a large food hub facility at 67,000 sq. ft		
NOVEMBER 2022	23 FOOD ECOSYSTEMS PROJECT		
NOVENIDER 2022	FOOD ECOSISTEMS PROJECT		

	• Coho Collective has kitchens ranging in size from just under 4,000 sq. ft up to a		
	facility with nearly 20,000 sq. ft with multiple shared kitchen spaces		
	• The Leduc Centre (federally financed) also large facility space in excess of 60,000 sq.		
	ft.		
Impact	Amongst the models examined in the Budget C category, the best impact models to consider in this 'higher budget' include:		
	• The Hatchery is and remains primarily focused on clientele in the city of Chicago,		
	and is on track to creating 900+ FT jobs in the 5 years since its opening. The food		
	hub seeks to build the skills of entrepreneurs through a graduated program where		
	clients are 'stress tested' to prepare them for departure within 4 years. The Hatchery		
	has partnerships with major CPGs in the area.		
	• OAFVC sees itself as an impact anchor in the county with 60+ clientele, and as a		
	testing ground for the marketplace, while serving critical educational and learning		
	environment, even for 'failed' businesses.		
	• VenturePark Labs has supported 100+ businesses, with \$1.6B in total output, and		
	total revenues of \$139M, and created employment to over 1,000 by 2021, and 1.6		
	additional indirect and induced jobs, along with fostering recognized brands.		
	VenturePark also focuses on supporting traditionally marginalized clientele.		
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#### Final – Overall operating model and high-level summary

In the context of the food hub models examined across North America, and given the aspirations for Community Futures Manitoba (CFM) and Food & Beverage Manitoba (FBM) to establish a leading food hub incubator kitchen in Winnipeg, the following critical observations and recommendations are outlined.

**Funding**: The best-established food hubs come about for well conducted studies of the existing facilities and needs in a location. These help to determine market fit, potential markets for new clientele, and capacity gaps. Studies also help to determine with equipment should be in the facility, and how to build partnerships to increase likelihood for receiving funding. Important observations also included the need for long-term planning, from 5 to 10 years, to establish the capacity for operating a facility past initial seed funding of \$500K to \$1M. Funds that can be obtained from federal grants, need to be matched with clear revenue streams that are supported by paying clientele, and partners who support the sustainability of the food hub. Top considerations for CFM-FBM include the OAFVC and VenturePark Labs in Ontario, and Plenty & Grace, and the Stir Kitchen in BC. The more remote location of Sprout Kitchen in rural northern BC, is an important observation as to its current dependence on government grants, without a clear plan for financial sustainability if a sufficient amount of clientele in the region are secured.

**Revenue, Cashflow & Operations**: A range of for-profit and non-profit food hub models have been examined. Many interviews frankly stated that without the subsidies provided to start-up food entrepreneurs in food hub kitchens, they simply would not be able to begin operations.

Shared kitchen spaces provide a vital link in terms of learning production, sourcing, productmarket fit, business development and market strategy. Food hubs also need to be aware of their operating costs, finite resources, service offerings, and relationships with (potential) and existing clientele. Revenue and cashflow from rentals, storage, and additional services are essential factors in the success (or failure) of a food hub. Rates for kitchen equipment and facility use, including storage rates vary extensively including the access to private kitchens. Non-profit models are under pressure to balance accessibility for clientele, with the need to not maintain dependence on continual funding grants. Well-established food hubs work with their partnerships to generate additional revenue via referrals. The OAFVC benefits from being owned by a regional government. Models such as the Hatchery in Chicago make explicit the need for existing clientele to have a limited time of operation at the food hub (less than 4 yrs.), with the intention of providing the training to 'graduate' to operating outside of the facility. Non-profit food hubs need to conduct important strategic assessments as to how revenue will be generated in relation to any accessibility principles.

**Resources & Equipment**: In addition to the benefits of a particular food hub facility, in a particular location (whether that is urban, suburban, or in a rural community), the 'make or break' factors will also include what equipment mix is on offer for clientele, and the additional resources that the food hub offers. For example, for-profit Coho Collective seek to 'supercharge businesses', while food hubs like Plenty & Grace help clients focus on locally branding, and targeted products from vegetarian sources, and in a well-designed facility. Leading models cultivate important partnerships and networks within their regional ecosystem to expose clientele to buyers, suppliers, and markets. The OAFVC is especially important to consider for its highly targeted service offering in a rural region of eastern Ontario. The Hatchery is a leader in the range of resources offered to member clientele. YSpace is adept in its focus on business skills training. The Prairie Research Kitchen benefits from its partnership with Red River College. CFM-FBM should consider the combination of the targeted service offerings of Plenty & Grace, with the locational strategy of OAFVC in its region.

**Facility Size**: From the review of many different models, a lot can be accomplished with a smaller footprint. For example, Fields Forward obtain a significant amount of their revenue from a 400 sq. ft egg processing room and two small rooms that process local fruits and vegetables. As long as space is optimally utilized, allows for a range of equipment to be introduced or removed with time, has the flexibility of shared and private kitchen facilities, and has the appropriate mix of dry-cooled-frozen storage spaces, much can be accomplished with the 3,000-10,000 sq. ft space.

**Impact**: The impact of a food hub, including its vision, mission and focus, will carry its brand message, and translate into motivation for its leaders, staff, partners, and clientele. Interviews emphasized the importance of making clear distinctions between what was termed 'food hobbyists' from those committed to starting and growing a food company at your facility.

Important skills can be developed for participants, even those who ultimately close down, or do not continue their business operations. Food hubs can serve as both anchor in their communities, and as a bridge for new partnerships. Bringing timely service offerings to clientele is an important impact offering, as well as conscious awareness of the traditionally marginalized population where a facility operates. Well-articulated service and resource offerings for the facility, whether the limited time that clients can use the facility, to the types of food sub-sectors ideally set to succeed at a facility can add value and clarity for the food hub, and those considering to operate there. Important attention is drawn again to the OAFVC in Northumberland Ontario, VenturePark Labs in Toronto, Coho Collective in the lower mainland of BC, Plenty and Grace in BC, and the Hatchery in Chicago as examples of food hubs with well-articulated impact messaging.

Kitchen-FoodHub	Location	Urban-Suburban-Rural
Ontario Agri-food Venture	Northumberland	Rural
Centre		
The Sprout Kitchen	Quesnel BC	Rural
The Open Kitchen	Northwest of Winnipeg	Rural – small town
Leduc Food Centre	Leduc AB	Small town rural
Commonwealth Kitchen	Boston, MA	Urban
The HotBread Kitchen	NYC	Urban
The Hatchery	Chicago	Urban
La Cocina	San Francisco	Urban
FIRSt (George Brown	Toronto	Urban
College)		
YSpace (York University)	Toronto	Urban-Suburban
Venturepark Labs	Toronto	Urban
The Stir Kitchen	Kamloops BC	Small city urban
Fields Forward	Creston BC	Small city urban
Coho Collective	Several locations in the	Urban, to suburban
(Commissary)	metro Vancouver area and	
	Victoria	
Plenty & Grace	Surrey BC	Suburban
Kitchen24	Toronto	Urban
Richardson Centre – UofM	Winnipeg	Urban
Prairie Research Kitchen	Winnipeg	Urban

Fig. 1 – Locations of Food Hub-Kitchens Examined