



*Feasibility Study of
Small/Medium Farm Product
Distribution System In the
Lower Mainland*

Part 6

**Small/Medium Farm Product
Distribution System Development**

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Acknowledgements

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Executive Summary

The increase in demand for locally produced food in BC is widely acknowledged by industry, non-profit local food advocates, and government. It is also widely acknowledged that the flow of product from supply to demand is significantly hampered by the lack of distribution infrastructure, particularly for small and medium sized farms.

This research reviewed the logistics, administration and governance of small/medium farm distribution systems that can serve small/medium sized farms and particularly rural transportation systems that supply urban centres. Small/medium farm product distribution systems are systems where farmers are selling direct to the buyer e.g. restaurant or retailer. This final report brings all the information together to make recommendations on the key components needed for small/medium farm product distribution services, their financial performances and the co-ordination of 3 pilots in 2014.

There is a gap in the distribution system between how certain small/medium farms would like to supply neighbouring businesses and how these local businesses would like to buy from small/medium farms. This prevents these farmers and buyers from connecting. What is required is small/medium farm product distribution systems that would facilitate an efficient ordering process for both parties, centralized and co-ordinated delivery system, promote credible brand, ensure fair pricing, facilitate the amalgamation of sufficient volumes of products, ensure product quality, develop a marketing tool and a process to share supplier information. All managed by a central and credible coordinating organisation.

A number of examples of small/medium farm product distribution systems from the US were examined as how their services filled these gaps and supported the growth of small/medium farms. Three seem to be particularly promising; Red Tomato, in Massachusetts, touts itself as a virtual local food distribution hub. It relies on highly qualified staff and a central website to co-ordinate qualified suppliers and their product to sell to qualified and supportive wholesale customers. Iowa Food Co-operative uses a central ordering website to consolidate hundreds of orders for around 50 different farms who drop of their product in one location for pick up. New North Florida Co-operative solely works with school boards and specifically prepares product (chopping, freezing and packing) in one central processing facility from numerous neighbouring farms and delivers the product to the different schools.

From the research the following key components were identified as being needed for a successful small/medium farm product distribution service:

- Highly qualified central co-ordinator
- Online ordering and inventory management tool
- Trucking services that deliver from the farm direct to the customers
- Warehousing & processing
- Central branding for credibility
- Willing farmers
- Supportive customer base
- Strong governance

The scope of the feasibility study has increase from Metro Vancouver to BC as whole due to the interest and need of such services in other communities. In BC we have identified three different situations that require a

different scale of small/medium farm product distribution systems: urban, suburban and rural. The scale of operations and the required financial resources varies with the proximity to population centres.

For BC small/medium farm product distribution systems (large and small) there are a number of partnership opportunities available such as funding partners e.g. Vancity, community partners e.g. farmers' markets and government partners e.g. municipal governments and provincial ministries which have goals in place to support local agriculture. There are also over a dozen communities and organisations that are either distributing local food or looking to do so in their communities.

For small/medium farm product distribution systems because the revenues are a lot smaller, the components need to be managed carefully and at the right scale. For example the co-ordinator can be a part time role and transportation can be outsourced as well as storage. It is also recommended that the customers are a lot closer to the service and even sit on the board or even manage the service. For BC small/medium farm product distribution systems (large and small) there are a number of partnership opportunities available such as funding partners e.g. Vancity, community partners e.g. farmers' markets and political partners e.g. municipal governments and provincial ministries which have goals in place to support local agriculture.

Therefore to increase the chances of the success of small/medium farm product distribution systems in BC it is recommended a co-ordinated roll out of pilots be implemented by FarmFolk CityFolk in 2014. Running a pilot project will provide the pilots with resources, possible funding and best practice information. In return the pilots can provide feedback on their learnings, experiences and performance (e.g. revenue impact on farms) to help the project understand the small/medium farm product distribution model better and to support roll outs of further systems in other communities across BC.

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Introduction

The increase in demand for locally produced food is widely acknowledged by industry, non-profit local food advocates, and government. It is also widely acknowledged that the flow of product from supply to demand is significantly hampered by the lack of distribution infrastructure, particularly for small and medium sized farms. This has seen the rise in interest for small/medium farm product distribution projects in BC.

This research reviewed the logistics, administration and governance of small food distribution systems that can serve small numbers of farmers, particularly rural transportation systems that supply urban centres. The feasibility study researched;

1. Requirements for food distribution
2. Business Models and Best Practices
3. Bylaws, Regulations, and Funding Sources
4. Farmer's Needs for Distribution system
5. Buyer's needs for Distribution system
6. Model Development and Comparison

Farmers have identified the lack of suitable distribution venues as a barrier to growing their business: selling more and expanding production on their lands. Chefs, grocers, and processors have indicated the gap in distribution is a barrier to buying local food directly from farmers. Each group has voiced their frustration at Meet Your Maker (MYM) events co-organized by the Vancouver Farmers' Markets (VFM) and FarmFolk CityFolk (FFCF) as well as at other discussions, interviews and surveys that were part of research projects centered on improving the local food system, such as New City Market project (Vancouver Farmers' Market Society) and North Fraser Food Hub project (Pitt Meadows Economic Development). The *Regional Food System Strategy* produced in 2011 by Metro Vancouver also indicates a need for improved distribution;

“Smaller farmers need access to venues where they can sell their products directly to consumers and all farmers could benefit from improved storage and distribution facilities within the region.”¹

Presentation Road Show

As part of the research for this project the team presented the findings to over 100 people including BC farmers, farmers' market managers and board members, distributors, retailers and restaurant owners. Presentations were made at 3 Meet Your Maker events hosted by FarmFolk CityFolk in Vancouver, Kelowna and Saanich, as well as at the BC Association of Farmers' Markets conference in Vancouver. Attendees were given an overview of the project and its goals, best practice research, online tools available, recommendations and next steps. Attendees were also asked to give feedback as well as identify whether there is an interest in a service in their community. Feedback from the presentations was very positive with a number of communities expressing an interest. Attendees also gave feedback on how municipalities can support food distribution and what is needed to get services started in their area. Findings are included in this report, including details in the appendix.

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<http://www.metrovancouver.org/planning/development/AgricultureAndFood/Documents/RegionalFoodSystemStrategy.pdf>

One result of the presentations is the feasibility study taking on a wider scope since the research began in September 2013, from Metro Vancouver to BC as a whole. The response from all regions and wider has been very positive, with other communities outside of Metro Vancouver such as Cowichan Valley, Cariboo and the Okanagan expressing a need and desire to have a small/medium farm product distribution service in their region. The study also identified distribution services in regions across BC that are acting similar to a small/medium farm product distribution service in their community, but are missing one or two components e.g. Revolution Transport in Similkameen and Trigo Distribution in Saanich.

This final report is in part a summary of the feasibility study. It identifies factors that lead to the gap in small farm distribution for both the suppliers and buyers in BC and looks at how other small/medium farm product distribution services have addressed these factors. Once best practices have been established the report looks at what the pilots of the models will look like in BC and how they will be launched, while addressing the opportunities, partnerships and challenges specific to BC growers. The report finishes off by recommending next steps in launching pilot schemes in BC and possible funding sources to support them.

Existing Gap for Small/medium farm product distribution in BC for Small and Medium Sized Farms

In bridging the distribution gap between small farmers who want to get more of their product to market and consumers who want local food, the following 12 factors have been identified. The perspective of suppliers have been garnered through conversations with small and medium sized farms in BC while the perspective of buyers have come from conversations with independent restaurants and food retailers in Metro Vancouver.

Table 1: Supply and demand challenges for small/medium farm product distribution

	Suppliers	Buyers	System Needs
Customer base	Accessing enough potential restaurants and independent retailers, in particular ones in the same community as the farms and in close proximity.	Accessing enough eligible small and medium sized farms that are able to supply wholesale product in sufficient volumes.	An easy way to find who needs what and who has what from qualified suppliers (wholesale ready) and buyers (credit checks, volumes, commitments).
Connecting	Farmers either have limited time or skill to make sales calls to potential customers.	Buyers rely mainly on referrals and cold calls to get connected to new suppliers, even though they need more.	Qualified person or organisation that actively brokers and co-ordinates suppliers and buyers.
Marketing	Farmers either have limited time or skill to promote their business and product.	A key unique selling point of local foods is the personal stories, so buyers need information on their suppliers e.g. photos, stories, latest news, to part information on to their customers.	Qualified person or organisation that co-ordinates the marketing information of suppliers on a regular basis and communicates this to the buyers in an engaging and digestible format.
Ordering	Spend time compiling a “fresh sheet” with product availability, detail and price which is e-mailed at the beginning of the week to numerous buyers. Receive orders via e-mail or phone calls through the week.	Spend time receiving fresh sheets from multiple suppliers via e-mail at beginning of the week and placing numerous orders via e-mail or phone calls.	One central website which can be updated easily by multiple farms and where buyers can place their orders at their convenience in one go.
Latest product information	Spend time calling buyers individually on product quality, availability and price changes.	Spend time receiving phone calls from numerous suppliers on changes to product quality, availability and pricing.	Ordering website that updates available inventory, pricing and quality in real time. Also sends out alerts on major changes or updates to buyers.
Delivery	Farmers deliver only once a week in their own truck to numerous customers. High	Receive deliveries from numerous suppliers at various times of the day and week.	Multiple orders on one refrigerated truck that co-ordinates with suppliers to

	Suppliers	Buyers	System Needs
	cost of distribution.	Some suppliers don't have suitable vehicles e.g. refrigerated trucks. High number of shorts which are only identified when receiving deliveries.	pick up from the farms or a central location convenient for the farmers. Possibility to deliver more than once per week. Opportunity to use current distributors such as Yen Bros, Sysco and GFS to bring local food orders with other products.
Volume	Sometimes lack of ability to supply enough volume to customers. Crop planning without knowing what customers want, leading to not enough product or too much.	Finding local suppliers that meet volume needs.	Forward commitments between co-ordinated multiple farms to meet the volume needs of customers.
Invoicing	Numerous small invoices to administer.	Numerous small invoices to administer.	Central organisation to administer the individual orders so farmers get one payment and restaurants one invoice. Organisation could also make sure payments are made on time.
Quality	Maintaining quality and integrity of the farmers' products.	Consistent quality through the season from delivery to delivery.	Central co-ordinator who maintains high standards of quality through the supply chain. Trains farmers on being wholesale ready. Educates buyers on product quality from local farms.
Credibility	Ability to reassure new buyers of the credibility of the farm, farming practices and product quality. In some cases unable to afford 3 rd party certification, such as organic certification.	Reassurance of the credibility of farms and their product on a consistent basis.	Recognised organisation or brand e.g. Red Tomato, that vets suppliers to meet certain growing standards and being wholesale ready. In some cases using 3 rd party certifications such as organic, Local Food Plus and CanadaGAP.
Pricing & agreements	Not always being able to get fair prices for their products to sustain their businesses for the long term. Guaranteed agreements.	Competitive pricing to justify the purchase of local food to maintain strong sales.	Broker who negotiates a fair price for farmer and buyer and facilitates agreements for long term commitments.
Relationships	Ability to connect with end buyer at key times e.g. start of season, but not too frequent to eat in to time farming. Working with other farmers.	Maintaining strong relationship with suppliers.	Central organisation that's governance and practice facilitates the relationship between farmers and also between farmers and buyers.

Comparison of Small/medium Farm Product Distribution Services in North America

Our research identified three small farm distribution systems that seem to be relevant to the distribution system needs identified by BC small and medium sized farms and local food buyers. Details of each of these 3 distribution systems can be seen in report 2 and are summarized below.

Table 2: Comparison of Small/medium Farm Product Distribution Services

	Red Tomato	Iowa Food Co-op	New North Florida Co-op
Customer base	Works with 35 partnering farms and over 200 retail outlets. Website is a key component of connecting producers and customers.	The IFC website is central to operations. Food producers list their products on the website and set their own prices.	There are 50-60 farmers in any given year who sell to the co-op. NNFC sells their products to 15 school districts in 5 states which represents 600-700 schools.
Connecting	Have a staff network who represent the farmers and liaise with the customers.	Staff for the co-op include half-time manager, an accountant and a communications coordinator (social media promotion). At times the co-op has also had a part-time “Producer Oversight” Coordinator who reviewed product postings for honesty and clarity. As well as volunteers who sort, distribute, and process payments.	The founder, Glyen Holmes, is a champion and leader in local food. The co-op is operated from his farm.
Marketing	The Red Tomato website strengthens the brand with recipes, information on the importance of regional food sheds, farmer profiles, and buyer locations.	Product is sold under the banner of the IFC.	Focus on sales to schools and on crops with a high economic impact that could be produced in volumes on small acreages To add value and increase marketability and profitability the raw products are prepared.
Ordering	Customers place one order through Red Tomato.	Virtual store for online ordering. Consumers order online during a nine-day window and they can pick up their order four days later. Consumers can search and order online by product and by producer.	Schools place order with the co-op.

	Red Tomato	Iowa Food Co-op	New North Florida Co-op
Latest product information	Website contains updated information and is key to the transparency of their business.	Consumer members expect transparency and want details about the products they are buying. It is up to the producers to provide these details: when crops were sprayed, if they are organic, as well as information on product availability.	Unknown.
Delivery	Initially had trucks and storage. Now co-ordinates their supply chain with 3 rd party distributors. Farmers pool their product in one location to be picked up.	Once ordering closes, individual orders are consolidated using the website's software into invoices/packing lists for each of the producers. Producers then drop off the product at five retail outlets/pick up locations. 90% of them are within 50 miles of Des Moines.	The co-op uses its own trucks to pick up product from the farm. Delivery of value added product to schools and school districts from the processing plant and from their rented frozen storage facility by a trucking company is arranged for by NNFC.
Volume	Agreements are made between farmers and customers.	Customers order in advance so farmers know what to harvest. All product is sold on the day.	There are no contracts; if the farmers are reliable and produce a quality product the co-op will buy it.
Invoicing	Red Tomato manages the invoicing centrally so customers have one point of contact.	No payments are made on the website. Consumer invoices list each product and the producer. Consumers pay with one cheque and producers receive a consolidated payment on one cheque.	NNFC manages the invoicing central so customers have one point of contact.
Quality	Farmers are supported on the website with farm practices, research and grower guides outlining the Eco standards. Staff manage quality issues which are addressed quickly.	Because of the model's closed membership and integrated tracking of producers and buyers, each item can be readily traced to who produced it and who bought it should there ever be a recall.	There are no contracts; if the farmers are reliable and produce a quality product the co-op will buy it.
Credibility	Uses Red Tomato branding on all of its products it brokers. Sees it as a differentiator. Also has sub brands such as Born and Raised Here, Eco Apple totes and Eco Peach baskets. Growers can voluntary get	Iowa Food Co-op is the main brand which all the food is sold under.	NNFC is the main brand which all the food is sold under.

	Red Tomato	Iowa Food Co-op	New North Florida Co-op
	GAP certified with financial help from Red Tomato.		
Pricing & agreements	Pricing philosophy called the Dignity Deal. Each farmer negotiates pricing in the winter based on three tiers: last year's average price, the coming year's ideal price, the lowest acceptable price. Deals with buyers cannot go below tier three without negotiation with involved farmers.	Direct to consumer model to obtain higher margins and farmer control over pricing.	The co-op buys farmers' crops at a fair predetermined price based on the market. All farmers are given the same price, there is no haggling or pitting of one farmer against another to lower the price. In cases where there is a product shortage, the co-op buys from a large-scale farmer to cover the short-fall.
Relationships	Non profit virtual distributor. Board of Trustees which includes one farmer. Collaboration is at the heart of their operation. New farmers are screened carefully by Red Tomato staff, and are selected on a number of criteria.	Food producer and consumer retail co-op. The Board consists of four consumers and four producers.	Service co-operative. Vertically integrated system. The NNFC has five board members, the minimum needed to form a cooperative in Iowa. They are individually selected based on their willingness to contribute to the community and create opportunity for small scale farmers. None of the board members are farmers.

All three examples above are set up to provide a central co-ordination role that supports the farmers with marketing, promotions, farm development and distribution. In each case the organisation is still very careful to make transparency core to their business so the identity of the farms is clear to the end customer. In some cases e.g. Red Tomato this is overtly promoted. Fair pricing for the farmers is central to all 3 organisations. Both Red Tomato and Iowa Food Co-op use their website as a tool to promote the farmers who supply the products. In all 3 cases a central brand is also used to give credibility to the farms and the product. Finally governance structures are setup so both farmers and customers (or the community) are well represented.

Recommended Key Components for Small Farm Distribution Systems in BC

Based on our analysis, we believe these are the characteristics of small food distribution systems that are needed in BC. The size of these systems will vary depending on the potential market for local food.

1. **Co-ordinator:** Farmers have identified that the biggest support a small/medium farm product distribution service can give them is to co-ordinate the service on a number of levels. In most instances this coordination saves them time and fulfills the role better than what they currently can. Their first priority is brokering and marketing their farm and product to potential new customers, in particular negotiating a fair price for the farm product. This is followed by dealing with the customers on a regular basis and also communicating between them and other farmers. The co-ordinator is also seen as someone who will set and maintain the product standards on behalf of the service. This could mean writing policies, training farmers on being wholesale ready and performing regular quality checks. Finally, the co-ordinator is key to planning future demand and working with farmers and customers to meet that. This person needs to be a strong leader and has good knowledge of both farming and the food service and/or food retail industry. In all case studies looked at a highly qualified central co-ordinator was at the core of the business. In some cases the co-ordinator is a staff member of a not-for profit.
2. **Online ordering and inventory management tool:** Wholesale buyers, in particular chefs, stated that being able to order through one central website from multiple farms would save them lots of time. An online ordering tool will also help manage inventory and shorts for farmers, and centralize invoicing and purchasing orders. An online tool also has the benefit of being a marketing tool, as buyers will be able to see new vetted farms or products available to them in one website. Of the online ordering tools looked at Local Food Marketplace and Local Orbit seem to be the leaders and widely used by food hubs (see below). Both Red Tomato and Iowa Food Co-op use a central online ordering tool. A full list of online ordering tools can be seen in the appendix.

 <ul style="list-style-type: none"> • Founded 2008 • Eugene Local Foods, Oregon • 70 users inc.; Idaho's Bounty & Harvest Moon (MB) • \$1,000 setup • 1.5 to 3% of revenues ongoing • PC and mobile compatible (inc. App) 	 <ul style="list-style-type: none"> • Founded 2011 • Ann Arbor, MI • Dozens of users including Detroit Eastern Market & Kitchen Tables, Vancouver • \$0 setup • \$19/month and 2% of revenues (basic)
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Some hubs use additional software to help them manage crop planning e.g. [Seed to Harvest](http://code.google.com/p/cropplanning/)² and logistics e.g. [Deliverybiz Pro](http://www.deliverybizpro.com/)³.

² <http://code.google.com/p/cropplanning/>

³ <http://www.deliverybizpro.com/>

3. **Trucking:** Either the distribution service employs a driver and owns a truck or contracts 3rd party distributors to deliver on behalf of the farmers. This will help save time and resources and could even improve quality by using refrigerated trucks. Red Tomato started off owning its own trucks, but due to the high expense and convenience of working with 3rd party distributors switched.
4. **Warehousing:** Central storage, either in a separate warehouse or on a neighbouring farm, allows orders to be aggregated together to be shipped together. A warehouse facility is also good for quality control and longer term storage, if needed. Waste management such as composting, can also be managed better at a warehouse facility. The facility could be rented or owned.
5. **Processing:** One case study that was looked at had a wholesale customer (i.e. New North Florida Co-op delivering to schools) which needed product to be prepped e.g. cleaned, chopped and frozen. This service may add to costs, but could also help the service work with specific customers or sell specific products for their customers' needs. Processing can range from cleaning, cutting, cooking, canning to butchery.
6. **Branding:** Some food hubs showed success by selling their product under one brand, especially if this brand had strong policies or conditions attached to it e.g. sustainable farming practices. The brand helped strengthen the marketability of the distribution service and product sold underneath it by increasing visibility and recognition. However it is key that a small/medium farm product distribution brand is transparent and farms are still identified all along the chain. A good example is the Red Tomato brand.
7. **Farms and farmers** – A small/medium farm product distribution service is not suitable for all farms and will need long term committed farms to make it a success. The USDA report on small/medium farm product distribution services showed that they became financially independent, on average, after 4 years. In most cases farms need to be able to produce sufficient volume to supply buyers such as restaurants and retailers, which is a jump up in volume from sales at a farmers' market. Farms and farmers also need to be wholesale ready which ranges from certifications such as CanadaGAP, understanding wholesale pricing, consistent supply and quality and understanding the business of their wholesale customer. In most cases food distribution revenues were additional to other revenue channels such as farmers' markets and gate sales, so farms were not solely reliant on the success of the distribution service, especially in the early days. Lastly, collaboration and co-operation is the corner stone of farms within a small/medium farm product distribution service. The governance structure and leadership will help manage this, but farmers have a role to play in the success too.
8. **Supportive customer base** – in most of the cases looked at, small/medium farm product distribution services worked with supportive customers. Customers who were willing to deal with small farms, smaller quantities, pay a fair price, contract or agree on crop volumes and promote the farmers to their customers. From the research high end restaurants, natural food retailers and public institutions e.g. schools were the most supportive customers.
9. **Governance** – there are numerous governance structures that make up successful food distribution hubs from grower co-ops, not for profits and private businesses. However, most successful food distribution hubs have non-farmers as part of their governance structure, especially if there is a retail component to their sales e.g. CSA or farmers' market channels. Distribution hubs which are solely

governed by farms are where sales are only wholesale sales for a narrow selection of product e.g. Hudson Valley Dairy.

Like any business, before a small/medium farm product distribution service can be started in a community, the potential for sales and the needs for a small/medium farm product distribution service need to be understood. Tools like [Local Food MarketSizer](#)⁴, help to identify potential sales of local food in an area. Once the feasibility of a distribution service has been identified, to help guarantee success the service needs to clearly define its needs and objectives for the farmers and the community⁵. This can be done in a strategic plan or business plan, laying the foundation of the service. The next chapter looks at the scale and cost of the components needed for different sizes of small/medium farm product distribution services.

⁴ <http://newventureadvisors.net/marketsizer.php>

⁵ <http://www.ngfn.org/resources/ngfn-cluster-calls/assessing-food-hub-businesses/Wholesome%20Wave%20Toolkit%20frame%20slides.pdf>

Financial Comparison of Small/Medium Farm Product Distribution Services for BC

Below is a comparison of 3 different pro-forma models in BC reflecting the size of the revenues processed through the distribution services. The models are based on the needs of small/medium farm product distribution services and research on best practice farm distribution services as well as local projects, including New City Market, North Fraser Food Hub and DTES Kitchen Tables. Detailed Pro formas can be found in the Appendix.

1. Urban - distribution service with a maximum of 16 farms and maximum weekly revenues of \$2,750 per farm. Typically they would more than likely be located in a food hub in the downtown core. A food hub is a building that comprises of more than one component that supports the sales of locally produced food such as an indoor farmers' market or commercial kitchens.
2. Suburban - distribution service with maximum of 10 farms and maximum weekly revenues of \$1,500 per farm. Typically they would be more than likely be located in a central warehouse that may have other components such as processing and/or cold storage.
3. Rural - distribution service with maximum of 8 farms and maximum weekly revenues of \$1,200 per farm. Typically they would be more than likely be located on a farm that is central to other farms part of the service and accessible for delivery trucks and in some cases with shared storage.

Model 1: Urban Distribution System

Urban aggregation service located in or servicing wholesale customers in a large population area such as Vancouver, BC. The following assumptions have been made:

- 75% of revenues for the farmers
- 25% revenues for the distribution service
- Maximum of 10 produce farms with maximum weekly orders of \$2,500
- Maximum of 2 protein farms with maximum weekly orders of \$2,750
- Maximum of 2 specialty (e.g. cheese) farms with maximum weekly orders of \$1,500
- Seasonality, with higher sales between April to December
- 40 customers ordering on average twice per week
- 4,000 square foot warehouse with cooler, freezer space & office at \$9/sq.ft.
- \$50,000 equipment costs amortised over 10 years
- \$3/sq.ft. utility costs
- \$2/sq.ft. maintenance costs
- \$2/sq.ft. permits, licenses, taxes and insurance costs
- \$417/month truck lease
- \$2,500/annum truck insurance
- \$1,000/annum professional fees
- \$60,000/annum co-ordinator wages
- \$3,333/month warehouse wages (seasonal)
- \$3,333/month truck driver wages (seasonal)
- 2.5% of revenues for marketing costs
- 2% of revenues for inventory management software (plus \$1,000 set up fee in first year)
- 0.2% of revenues for truck gas
- All distribution is done by the aggregation service.
- Growth of 15% year on year.

Table 3: Proforma of an Urban Small/medium farm product distribution System

Urban	2015	2016	2017
TOTAL PRODUCT REVENUES	\$985,833	\$1,133,708	\$1,303,765
<i>FARM REVENUES</i>	\$739,375	\$850,281	\$977,823
<i>AGGREGATION SERVICE REVENUES</i>	\$246,458	\$283,427	\$325,941
<i>DISTRIBUTOR(S) REVENUES</i>	\$0	\$0	\$0
TOTAL AGGREGATOR COSTS	\$ 256,103	\$ 276,524	\$ 295,017
<i>FIXED COSTS</i>	\$ 75,500	\$ 76,975	\$ 78,524
<i>LABOUR (inc benefits)</i>	\$ 131,421	\$ 145,135	\$ 160,605
<i>VARIABLE COSTS</i>	\$ 49,182	\$ 54,414	\$ 55,888
AGGREGATOR SURPLUS/DEFICIT	(\$9,645)	\$6,903	\$30,924

With annual revenues of over \$1 million the urban local small/medium farm product distribution service can be a standalone business with its own truck, warehouse, office and staff. It can also support around 16 different farms and producers. Due to economies of scale the service can also afford to give 75% of the revenues back to the farmers. However, this higher margin may be offset with lower pricing in an urban competitive market. With sales just under \$1 million the operation makes a loss of a few thousand dollars a year, but when sales are above \$1 million and costs are managed, then the service can generate its own profit and not rely on grants.

Model 2: Suburban Distribution System

Suburban aggregation service located in or servicing wholesale customers in medium sized cities such as Kelowna, BC. The following assumptions have been made:

- 70% of revenues for the farmers
- 30% revenues for the distribution service
- Maximum of 6 produce farms with maximum weekly orders of \$1,500
- Maximum of 1 protein farms with maximum weekly orders of \$1,000
- Maximum of 1 specialty (e.g. cheese) farms with maximum weekly orders of \$500
- Seasonality, with higher sales between April to December
- 20 customers ordering on average twice per week
- 750 square foot warehouse with cooler, space & office at \$8/sq.ft (probably located on a farm)
- \$15,000 equipment costs amortised over 10 years
- \$3/sq.ft. utility costs
- \$2/sq.ft. maintenance costs
- \$2/sq.ft. permits, licenses, taxes and insurance costs
- \$417/month truck lease
- \$2,500/annum truck insurance
- \$750/annum professional fees
- \$50,000/annum co-ordinator wages (who also manages the warehouse and deliveries)
- 2.5% of revenues for marketing costs
- 2% of revenues for inventory management software (plus \$1,000 set up fee in first year)
- 1% of revenues for truck gas
- All distribution is done by the aggregation service.
- Growth of 15% year on year.

Table 4: Proforma of a Suburban Small/medium farm product distribution System

Suburban	2015	2016	2017
TOTAL PRODUCT REVENUES	\$265,200	\$304,980	\$350,727
<i>FARM REVENUES</i>	<i>\$185,640</i>	<i>\$213,486</i>	<i>\$245,509</i>
<i>AGGREGATION SERVICE REVENUES</i>	<i>\$79,560</i>	<i>\$91,494</i>	<i>\$105,218</i>
<i>DISTRIBUTOR(S) REVENUES</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
TOTAL AGGREGATOR COSTS	\$86,466	\$90,439	\$94,253
<i>FIXED COSTS</i>	<i>\$20,625</i>	<i>\$21,031</i>	<i>\$21,458</i>
<i>LABOUR (inc benefits)</i>	<i>\$50,000</i>	<i>\$52,500</i>	<i>\$55,125</i>
<i>VARIABLE COSTS</i>	<i>\$15,841</i>	<i>\$16,907</i>	<i>\$17,670</i>
AGGREGATOR SURPLUS/DEFICIT	(\$6,906)	\$1,055	\$10,965

A suburban distribution service can expect to have significantly lower annual revenues than an urban service of around \$300k, with potential to see higher seasonality in sales through the year. With lower sales, but similar costs such as truck costs, the suburban service will need to take a higher % of the revenues of 30% to pay costs. Costs can be managed if the co-ordinator can take on warehouse and delivery tasks as well as operating of a smaller warehouse/office space. This can be done by renting excess space at one of the partnering farms, as long as zoning permits it. In most cases 50% of the product has to be from the farm. The service only becomes profitable when annual revenues are over \$300k, which can support around 8 farms.

Model 3: Rural Distribution Service

Rural aggregation service located in or servicing wholesale customers in rural areas such as Cowichan Valley, BC. The following assumptions have been made:

- 70% of revenues for the farmers
- 20% revenues for the aggregation service
- 10% revenues for 3rd party distributors
- Maximum of 6 produce farms with maximum weekly orders of \$1,200
- No protein or specialty farms/producers.
- Seasonality, with higher sales between April to December
- 15 customers ordering on average twice per week
- 100 square foot office space at \$8/sq.ft (probably located on a farm)
- \$2,000 equipment costs amortised over 10 years
- \$1/sq.ft. utility costs
- \$1/sq.ft. maintenance costs
- \$2/sq.ft. permits, licenses, taxes and insurance costs
- No truck or driver.
- \$500/annum professional fees
- \$25,000/annum co-ordinator wages (part time)
- 2.5% of revenues for marketing costs
- 2% of revenues for inventory management software (plus \$1,000 set up fee in first year)
- Growth of 15% year on year.

Table 5: Proforma of a Rural Small/medium farm product distribution System

Rural	2015	2016	2017
TOTAL PRODUCT REVENUES	\$163,280	\$187,772	\$215,938
<i>FARM REVENUES</i>	<i>\$114,296</i>	<i>\$131,440</i>	<i>\$151,156</i>
<i>AGGREGATION SERVICE REVENUES</i>	<i>\$32,656</i>	<i>\$37,554</i>	<i>\$43,188</i>
<i>DISTRIBUTOR(S) REVENUES</i>	<i>\$16,328</i>	<i>\$18,777</i>	<i>\$21,594</i>
TOTAL AGGREGATOR COSTS	\$ 35,388	\$ 36,734	\$ 38,282
<i>FIXED COSTS</i>	<i>\$ 1,900</i>	<i>\$ 1,945</i>	<i>\$ 1,992</i>
<i>LABOUR (inc benefits)</i>	<i>\$ 25,000</i>	<i>\$ 26,250</i>	<i>\$ 27,563</i>
<i>VARIABLE COSTS</i>	<i>\$ 8,488</i>	<i>\$ 8,539</i>	<i>\$ 8,727</i>
AGGREGATOR SURPLUS/DEFICIT	(\$2,732)	\$820	\$4,906

A rural distribution service, again, has lower annual revenues at around \$200k. The lower revenues can only support around 6 farms and potentially fruit and vegetable farms only, but this will depend on the community. With lower revenues the distribution service will not be able to afford a truck, warehouse or staff to operate them. Therefore storage and distribution will have to be outsourced to 3rd party transportation companies and possibly distributors. This could be established distributors, transportation companies, jobbers or even the farmers themselves using their own trucks and “piggy backing” orders. Orders will also need to be cross docked at farms or central locations because of the lack of warehouse space. The operation will need to be run by a part time co-ordinator. Again this could be a role taken on by a farmer or shared amongst the farmers. Based on the assumptions the rural model annual revenues become profitable at around \$180k.

Feasibility of a Small/medium farm product distribution System in Rural BC

There are 2 different variations of rural distribution systems; either a rural distribution system that delivers within the rural community e.g. Cariboo, BC and therefore has a limited customer base or a rural distribution system that is close to an urban area and has a large customer base e.g. Fraser Valley, BC. This section analyses the feasibility for a rural distribution system with a limited customer base. Below are the key components and considerations of a rural small/medium farm product distribution system:

- **Co-ordinator** – with potential sales of less than \$200k per annum and 70% of the sales going to the farmers and potentially 10% to the distributor, transportation service, jobbers or couriers, there is only \$40k per annum left to manage and co-ordinate the distribution service. Labour is the most expensive cost to the service. A large percentage of the \$40k can go to labour, yet there still needs to be some left for inventory management software, marketing costs and office material costs. Therefore a co-ordinator will need to be a part time position. Analysing other models and what the needs are of farmers, not having a co-ordinator is not an option, neither is having a junior person. Therefore a part time position could be taken up by a farmer, farmer employee or a person who has a role within an affiliated organisation e.g. manager of a farmers' market. It is also possible for the co-ordinator to be a staff person from the buyers side e.g. warehouse manager or buyer of a retailer or restaurant.
- **Online ordering tool** – from the wide range of online ordering tool options some are meant to be affordable for smaller operations with low setup fees and ongoing small percentage of revenue fees. A good example is Local Orbit with starter options of \$19/month and 2% of revenues. They are also introducing a lower fee structure of annual fees of \$250 with no additional fees. This makes it feasible for small operations to use sophisticated tools that allows them to manage inventory and allow their buyers to order online from multiple farms.
- **Trucking** – with total revenues of less than \$40k/annum for the distribution service it isn't feasible for the service to have its own truck. Deliveries can be made by the farmers, 3rd party transportation services, a shared truck or picked up by the buyers themselves from a central location. For example some services use farmers' markets or retail outlets as pick up points for buyers, such as restaurants and retailers.
- **Warehousing** – similar to trucks the lower revenues make it difficult to afford a standalone warehouse. Options include renting warehouse space, using storage space of one of the partnering farms (if zoning allows it) or not having any storage and just using a cross docking facility or central location for pick up where all farmers will need to drop their product off at.
- **Processing** – any processing facilities will need to be limited and small e.g. washing and/or chopping. Other options are shared use facility such as a commercial kitchen where products are processed to sell at other venues e.g. farmers' markets or farm gate sales.
- **Branding** – central branding does not have to add a lot of cost to the service and as identified helps raise the visibility and credibility of small farms and is therefore seen as key component to the model.

However it is important that the budget spent on central branding is managed accordingly and is realistic for the predicted revenue stream.

- **Farms and farmers** – due to the lower revenues of a rural small/medium farm product distribution service; it is recommended that sales from the service are a small percentage of the overall revenues of the farm, especially in the beginning. Because of the short supply chain and the possibility that one of the farm staff members may be running the distribution service, a very close relationship with the customers is paramount for all farms connected to the service.
- **Supportive customer base** – this will be essential to a small operation as the customer base potentially can be just a handful of customers and losing one would significantly hamper the operations of the service. Similar to New North Florida Co-op and integral partnership with one or two customers is beneficial for the success of a rural small/medium farm product distribution service. In some cases customers may need to or want to invest in the distribution service, especially if it is essential to them meeting certain business goals.
- **Governance** – rural small/medium farm product distribution services tend to be closer to their buyers and as identified above will rely heavily on them for survival. It is therefore highly recommended customers are on the board of the service.
- **Initial capital** – as identified in the pro formas a rural distribution service when running at a capacity of around \$200k will only break even if costs are managed accordingly. Therefore initial capital may be needed for the first year or two to help the service establish a customer base and revenues to be able to run profitably. Initial capital can come from grants, donations or in-kind funding to help get the service started. In-kind funding could take the form of time investment from the partnering farms with the knowledge the service will eventually increase revenues overall for the partnering farms.
- **Economic Viability** - A USDA report on food distribution hubs called Regional Food Hub Resource Guide⁶ looked at their economic viability, with an in-depth review of 20 of them. Of the 20, those that have been established for more than 9 years and/or with revenues of over \$1 million stated they were financially stable and independent. Food distribution hubs either younger or reliant on grants stated that the lower revenues and relying on grants and volunteers left the operation more vulnerable. Another challenge was available capital for investment for growth, however some food distribution hubs were reliant on the fact some of their goals as a service justified relying on grants and volunteers. Another threat to food distribution hubs, especially smaller operations, is the precarious nature of food distribution businesses that have inherent challenges in them such as low margins, lots of competition and perishability of the product.

Further practical recommendations for developing a rural small/medium farm product distribution system in BC

Further to the key components above for a rural small/medium farm product distribution service in BC the following recommendations can further develop it:

⁶ <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5097957>

- Start off small and build revenues up through the season. Do not make the mistake of investing heavily in infrastructure that will not be needed for 12 months or more. Be realistic with the revenue potential of the service and utilise infrastructure.
- Make sure there is enough demand before starting a distribution service within the community. Connect with local restaurants and institutions and secure business before the “doors are open”. Partner with key customers and even invite them to be on the board.
- Plan ahead and connect 3 to 5 farms to work closely together. Select farms that complement each other, can work together, are geographically close together and have little overlap with products.
- Set realistic goals (e.g. revenue targets) and manage everyone’s expectations.

Recommendations for Small/medium farm product distribution Systems in BC

Small farm distribution services have shown to have positive impacts on farming communities across North America, by increasing small and medium sized farmer revenues and profits. This research has shown there is a strong demand for them and their product in BC by buyers and a need by the farmers themselves as an additional revenue channel. However, they can be a risky venture with a lot of upfront investment in time and money to make them work. Therefore any distribution service in BC needs proper planning and support in place to provide them with a chance of success. This research and its reports provide templates for distribution services and can be used as guides to measure how much demand there is in a community and which model, if any, is suitable.

The following are key recommendations to move forward with supporting small/medium farm product distribution services in BC:

- **Feasibility study** – the first thing to identify with any business is it feasible? The community needs to understand the demand for local food in their region. This includes the demand for products and services from both wholesale buyers and farmers. Every business wants to increase their revenues, but do farmers want to do it through a small/medium farm product distribution service? Do buyers want to buy the product from such services? This research has shown there is a strong demand for such a service in Vancouver, but it needs to go deeper and understand the volumes of specific items through the year and the price buyers are willing to pay. This research has shown the strongest demand in BC is coming from restaurants who are already buying significant volume from small and medium sized farms. Second to this are specialty grocery retailers such as Choices and Whole Foods. Independently run local grocery retailers have also shown interest in listing local products as well, such as Roots in Victoria and Hopcott Premium Meats in Pitt Meadows. As for institutional buying, UBC and UVic currently purchase large volumes of local food, however this practice is still an exception rather than a rule for institutions so selling opportunities with local institutions at this scale are limited in the short term. In the longer term the potential is significant from schools, hospitals and municipal facilities.
- **Business plan** – once the feasibility of a service has been identified and its size, a business plan needs to be developed. A business plan will cover the feasibility of the service again but also the costs, actual partners (farmers and buyers), the operations, marketing, staffing, governance and community benefits, as well as provide a clear understanding of the model type and size needed in the community (i.e. urban, rural or suburban). The business plan will help identify next steps, in particular funding needed to launch the service and maintain it for its first few months. The business plan will also be a tool that can help secure funding for the project e.g. grants and loans.

- **Funding** – If we use as examples the food hubs case studies reviewed by the USDA report, most small/medium farm product distribution services need upfront investment for trucks, staff, branding, storage etc. and in a lot of cases are not profitable for the first year or two. Based on the goals of the community and the business plan, funding will need to be secured before launch. Funding can include grants, loans and investments from the businesses and organisations involved (farmers and suppliers). There are a number of institutions in BC and Canada that have a focus on supporting local food initiatives such as Vancity, BC Real Estate Foundation and the McConnell Foundation. Further details on funding in BC can be seen in the “Possible Funding Sources” chapter below and in Report 3.
- **Governance** – establish the governance of the service early and invite key stakeholders to the board e.g. chefs, store managers, municipal representatives, farmers, farmers’ market staff or board members and other community organisations. The key role of the service is the co-ordinator, who needs to be a strong leader with good knowledge of both farmers and customers. Not-for-profits offer key benefits to a small/medium farm product distribution service including access to grants, credibility between farmers, restaurant and retailers, knowledge, connections and infrastructure in place.
- **Educating suppliers and customers** – hold workshops and other discussion sessions for suppliers and customers, so they know what is involved with the service. Manage expectations as to volume, pricing, quality etc. especially at the start. In particular work closely with farms who have never supplied wholesale before and to make them “wholesale ready”. A meet and greet between suppliers and customers is also highly recommended.
- **Procedures** – Develop procedures for the different staff and stakeholder roles before the launch and on an ongoing basis, to maintain a high level of service to the customers and to manage the very small margins. Procedures will include uploading information to the online ordering tool, ordering from the online ordering tool, picking, packing and shipping, receiving, co-ordinating and aggregating orders, order deliveries, invoicing, refunds and payments.

The next chapter outlines a recommended action plan and time line for a pilot role out.

Next Steps

- **Central co-ordination** – BC has a handful of informal small/medium farm product distribution services, however from the research and discussions involved with this project there is a large need and demand for their services. BC therefore has a great opportunity to build a connected infrastructure for small farm food distribution across the province that is operated more efficiently and effectively. It is therefore recommended that services are co-ordinated and linked in some way, to share best practice and possibly link in the ordering websites so customers can see a wider selection of farmers and farm product. Organisations that have been approached and could possibly manage the central co-ordination include:
 - FarmFolk CityFolk (the lead organization for this research project),
 - BC Association of Farmers’ Markets
 - BC Co-operative Association

- **Pilot Projects** – It is recommended that the central co-ordination body select, support, and measure the effects of 3 models in 3 different regions of BC in 2014. These pilots will further develop the models proposed here and create a better understanding of how to customize and run the distribution service so it is profitable for both the farmers and the organization operating it. The learnings from the pilot would then be compiled in a 7th stand-alone companion report to this feasibility study. This 7th report will provide the needed analysis of the models in order for distribution systems to be established in communities across BC. The pilot could include:
 - Set a criteria for preferred pilots.
 - Invite communities, not-for-profits or other groups to apply to be a pilot.
 - Select pilots based on the above criteria.
 - Select 3 pilots in 3 different regions e.g. central Vancouver Island (rural), Metro Vancouver (urban) and Okanagan (suburban).
 - Set key performance indicators to monitor the services.
 - Monitor the performance on weekly basis e.g. get each pilot to fill out a performance sheet out and call them weekly to discuss.
 - Share best practice between pilots e.g. monthly teleconferences.
 - Evaluate the performance of each service at the end of the growing season and document best practices.
 - Use best practice research to roll out and support more distribution services.

- **Key Partners** – identify and work with key partners (additional to suppliers and customers) within the community to leverage their support and backing or in some cases to act as the co-ordinator of the small/medium farm product distribution service:
 - Civic groups – these include not-for-profit food and agricultural organisations, agricultural advisory committees and other local community groups.
 - Organisations and businesses - in BC there is a strong network of farmers’ markets that are well established in the community, connected to numerous small and medium sized farms in the area and have credibility amongst farmers and with potential buyers, such as chefs. Other partners include food banks, who potentially could have infrastructure available and agricultural marketing boards and associations.
 - Government - in some cases local governments are looking to support their regional farmers through food hubs and food distribution. In most cases this can be identified in their Agricultural Plans. For example the North Saanich Agriculture Economic Development Strategy⁷ (2012) states “supporting community acquisition of agricultural land for farming and related ‘food hub’ functions”. Provincial ministries, especially Ministry of Agriculture, have programs that support the economic development of farms, as does the Ministry of Jobs, Tourism and Skill Training looking to increase employment opportunities in rural areas.

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<http://www.northsaanich.ca/Assets/Current+Projects/North+Saanich+Agriculture/Agriculture+Economic+Development+Strategy.pdf?method=1>