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Running a Food Hub

Assessing Financial Viability

VOLUME THREE

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Introduction

This report is part of a multi-volume, technical report series published by USDA under the over-arching title of *Running a Food Hub*. This third volume in the series provides in-depth guidance on assessing the financial viability of food hubs.

The purpose of this report is to provide benchmarks for established and emerging food hubs to use as a comparison for assessing their own financial viability and for making strategic business decisions. The financial analysis can provide valuable insight into how changes in major costs and revenue affect the overall operations and profitability of food hub businesses.

There are many existing food hubs with operations that differ from the assumptions used for this analysis. Food hubs may be more or less efficient in key areas, such as size of operations, product cost, transportation or other areas. For the sake of brevity, this report attempts to focus on the most significant areas of concern that most often affect business viability.

Economic analysis in this report is based on information from industry research, discussions and interviews with key food hub personnel from across the United States, and the knowledge of the consultants. Sections presenting key assumptions for the analysis are presented in narrative form to aid in understanding the logic used during the construction of the analysis. This report has been divided into these three major sections:

The **"Methods of Analysis"** section introduces the Operational Model and Operational Period approach used for the construction of the financial analysis and comparisons of the models.

The **"Operational Models"** section presents a closer look at different components of each operational model. It provides the details, narrative, and in-depth analysis of the assumptions that underpin the report. Readers can find the food hub type that most resembles their venture and compare points of similarity.

The **"Operational Models and Periods Comparison"** section concludes the body of the document by juxtaposing some key financial and operational results of each operational model and operational period to compare the various types of entities. It is here that hub operators can learn lessons, compare results, and see the benefits and obstacles unique to the various food hub types.

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Methods of Analysis

Categorizing common financial issues across a variety of food hubs is difficult because of the differences in operations. Some food hubs may enjoy advantages or resources in certain areas of operations, personnel, or business that enable them to perform more successfully than others, or achieve greater sales levels in a shorter period of time. Each food hub is unique and operates with a distinctive combination of expenses. There are also often environmental circumstances affecting the food hub's ability to remain in operation.

Even with these variations in organization, many food hubs still encounter common issues at similar points in their development. This financial analysis uses a prototypical approach and provides points of comparison to create detailed financial operation statements. It is not intended to represent any specific food hub. Rather, the operational income and expenses for the food hub in the viability analysis are based on an amalgamation of several food hub examples. This information was subsequently vetted with a USDA review process to ensure numbers were representative of actual revenue and expenses experienced by similarly structured food hubs.

Further, this analysis assumes that food hubs have access to a variety of producers and members, and is located within 50 miles of customers. It assumes that food hubs sell a mix of products that primarily include produce, but also may include dairy or other products, depending on the food hub's operational model.

This analysis is based on two common food hub ***Operational Models*** (***Wholesale and Direct-to-Consumer***) operating in three key ***Operational Periods*** (***Breakeven, Growth, and Viability***).Where applicable, considerations of a food hub's ***Startup*** period is also discussed.

Business Operational Models

Food hubs function under a variety of business operation models, which differ based on how and where the food hub sells its products. This document examines two models: a Wholesale Food Hub and a Direct-to-Consumer Food Hub. There are different types of the Direct-to-Consumer food hub model; we have chosen to use the Community Supported Agriculture (CSA) type. While

there are numerous types of food hubs in existence, these two business operational models seem to be the most widely used among food hubs.[1]

Wholesale food hub

In general, wholesale food hubs often have the following characteristics:

- May be more focused on retailers as the main customer base.
- Product offerings may include more of a variety of items that aid in expanding the seasonality of sales.
- Delivers products to end customers and does not rely on volunteer labor, instead relying on dedicated labor to repack items and deliver product.

The term "wholesale food hub" is an umbrella term that can apply to food hubs with a variety of target markets. Local restaurants, individual or regional grocery stores, large-scale grocery chains, and institutions — such as schools, hospitals, and corporate cafeterias — can all be considered "wholesale" markets.

Direct-to-Consumer Food Hub

In general, direct-to-consumer food hubs often have the following characteristics:

- Sales tend to focus on fresh produce.
- Distribution is made directly to end consumers, with pick-up locations at customer residences, workplaces, or other designated sites.
- They are operated by a mix of staff and volunteer labor.
- They usually charge retail prices for their products.

The direct-to-consumer model highlights the use of an intermediary service provider to connect farmers with community members. For the purposes of our financial analysis, the direct-to-consumer model reflects what is commonly known as a Community Supported Agriculture (CSA) hub, though there are numerous ways to operate a direct-to-consumer-based food hub. The goal of this approach is to provide the most profit to the producers while also generating income needed for the continuation of the business. As an operation with low overhead, the sales levels needed to

[1] More information on the different types of food hub operational models can be found in Volume 2 of this series: *Running a Food Hub: A business operations guide.* This and other USDA reports can be downloaded at http://www.rd.usda.gov/publications/publications-cooperatives

achieve the various operational periods are lower than those exhibited by the wholesale food hub model.

Business Operational Periods

Year-long snapshots, or *operational periods*, were chosen based on sales level and corresponding costs and activities to provide as broad a picture of a food hub's typical operations as possible. While the analysis presents 1-year pictures of a food hub's operations, they do not necessarily represent consecutive years. It is likely that a food hub will experience several years of growth with neutral cash flow, then experience a loss that will cause the food hub to only cover its operating expenses. The operational periods, therefore, are meant as a guide and correspond to a snapshot of operations and sales levels at a particular period in time, along with corresponding expenses.

This financial analysis focuses on the core food hub commercial activity of procuring food from producers and selling it to buyers, or food aggregation and distribution. The analysis does not incorporate costs for other important mission-based food hub activities. The costs of providing additional services may increase the amount of sales necessary to achieve specific operational periods from those presented in the financial analysis.

Likewise, the analysis does not include any grant funds or donations. The income from these sources would decrease the amount of sales necessary to achieve a specific operational period presented in the financial analysis.

Breakeven

Attaining the breakeven point represents a milestone for a food hub. Prior to this point, the food hub loses money on every unit sold. Achieving breakeven in this analysis indicates a hub is a workable business and is able to satisfy the needs of its customers. It can begin to look toward future financial stability.

While attaining the breakeven stage is necessary for a food hub to achieve long-term sustainability, it is by no means an endpoint. Remaining too long at this point presents serious risks to the hub because sufficient profits are not being generated to cover items such as interest expenses, depreciation, and taxes. Nor will there be a return from operations to the owners. The food hub at this stage is still under tremendous risk from unforeseen circumstances, such as equipment or other infrastructure failure.

Growth

Achieving the growth level means that not only are operational costs

being covered, but the entity is generating enough income to reach cash-flow neutrality and to cover any additional expenses over the course of the year (on a cash-flow basis). There is still a need for outside cash to cover seasonal shortfalls, but, on an annual basis, the food hub would reach a level of income generated that is sufficient to cover all expected needs. During the growth operational period, the food hub is covering its fixed and variable costs and is producing a profit on a net income basis. However, the focus now shifts to covering the hub's cash flow needs. The food hub shows a positive net income for the first time at this point.

The growth operational period represents a tipping point. Next to the startup period, the growth period is often the most dangerous crossroads for the food hub. If the hub is not managed properly from a financial point of view, it can easily slide back and progress can be reversed. If the hub is able to continue its success, it can move to a viable level of operations that allows it to begin expansion for future activities rather than merely sustaining its current level of operations.

Viability

This level represents the hub's ability to be sustainable in the long term, where the organization is making enough net income to fund possible expansion or additional operations. The food hub is a mature business that is able to set aside reserves for unexpected problems and is better equipped to weather bumps in the road. For our financial models, viability is defined as the point at which the food hub retains about 5.5 percent of sales revenue as operating profits over a year.

When the food hub becomes viable, no outside cash is needed to maintain adequate cash reserves at any point during the year. At this level, the hub is able to generate sufficient cash through operations to fund expenses and normal equipment replacement, as well as generate reserves for future activities.

If the food hub is a for-profit entity, it may consider beginning to provide a return to investors or owners; if it is a nonprofit entity, it may begin to expand its involvement in community activities or be able to internally fund activities that have previously relied on outside funding sources, such as grants or community funds.

Even at this level of sales, the food hub should continue to look toward the future, as this represents only the cusp of long-term viability. The sales level needed to reach viability may need to be higher to cover some non-revenue-generating, mission-based activities of the food hub.

Operational Models:
Wholesale Food Hubs

This analysis outlines the scope and daily operations of a prototypical wholesale food hub. The goal of this section is to present an analysis that is as adaptable to as many similar ventures as possible. Every attempt was made to be realistic while still permitting ease in interpretation and application. A more in-depth discussion of the numerous factors for operating a food hub has been included in volume 2 of this series, the *Food Hub Operations Guide*.[2]

This section begins by estimating annual sales by business operational period based on the financial modeling; it then continues by "unpacking" the model assumptions or factors that result in the sales needed to reach the breakeven, growth, and viability stages of business development.

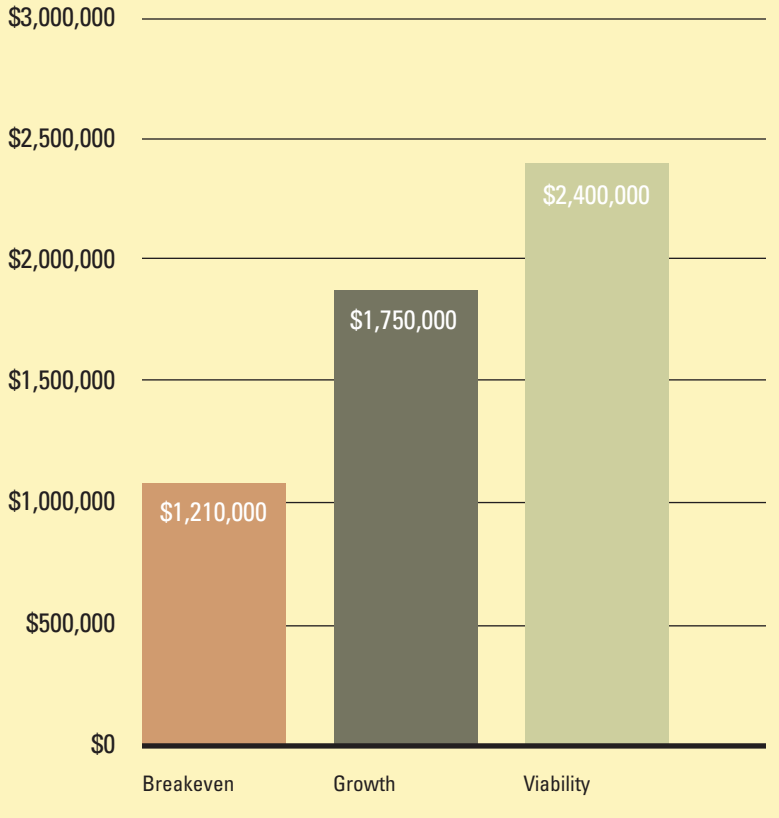
[2] The food hub operations guide can be downloaded at http://www.rd.usda.gov/publications/publications-cooperatives

Annual Sales by Business Operational Periods

To reach a breakeven level of operation, the typical wholesale food hub would be required to generate an annual sales level of around $1.2 million. During the time between breakeven and the food hub beginning to enter an earnings level that leads to long-term financial viability, the venture would need to generate around $1.75 million in sales in a year.

With about $2.4 million in annual sales, the food hub would begin to earn sufficient revenue to provide longer term viability. Even at this sales level, an unexpected expense could detrimentally affect growth and operations. The food hub should strive to grow sales beyond this point to reap profits that may be needed to cover unexpected costs.

Figure 1—Annual Sales Levels by Operational Periods



Model Assumptions

Product Lines

Product lines for wholesale hubs vary widely, often including a broad mix of produce, meats, dairy foods, shelf-stable foods, and other items. The typical wholesale food hub has three sales channels: a produce line, a dairy line and an "other" line. This other line includes items such as meats, eggs, jellies, and other shelf-stable items not categorized as produce or dairy. Table 1 outlines sales distribution, by percent of sales, included in the financial analysis.

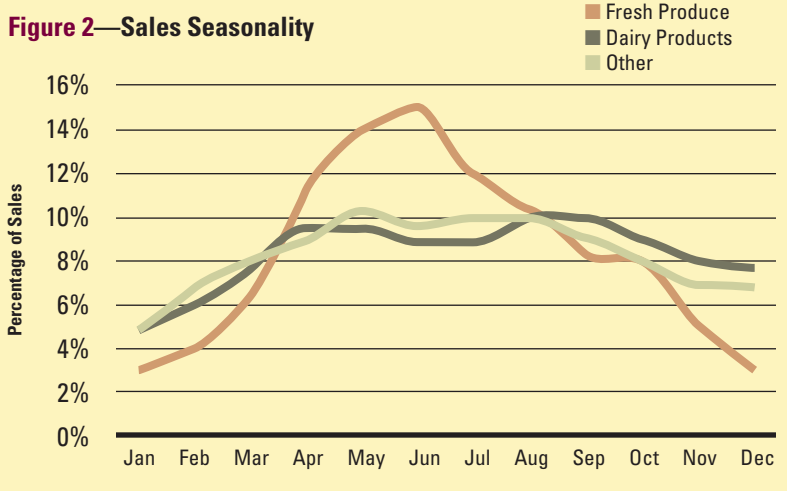
Table 1
Sales Distribution

Fresh Produce	70%
Dairy Products	10%
Other	20%

A wholesale hub will assist farmers in crop planning activities, which aids in expanding the production season of produce and helps ensure a consistent supply of produce throughout the growing season. Dairy and "other" product lines are typically less impacted by seasonality than are produce items, the latter being mainly available during the summer.

Fresh produce is the largest income generator for the food hub, but sales of dairy foods and other products allow for a steady source of year-round income, which is especially important during the slower winter months. Additionally, products falling under dairy and other groups can be sold at a higher markup percentage, generating more profit per pound of product sold than does produce. Figure 2 outlines the annual seasonality for each of the three product lines.

Figure 2—Sales Seasonality



Though the hub strives to maintain a minimal amount of inventory at any one time, loss of products during transport, storage, and delivery is unavoidable. As a result, the hub will experience increased product losses for both of these categories during the fall and winter months, as well as a decline during the spring and summer.

Product Pricing

To account for the variety of products sold through the food hub, as well as the price variation exhibited with product lines (lettuce versus spinach versus cucumbers), a weighted average value for a 25-pound box of product was determined for each product line. These products were combined to provide an overall average for the value of the food box. This value increases over the life of the project as demand grows and as a larger amount of higher valued products — such as meats and shelf-stable items — are sold through the food hub. On average, the price of the products sold through the food hub will increase by around 7 percent per year.

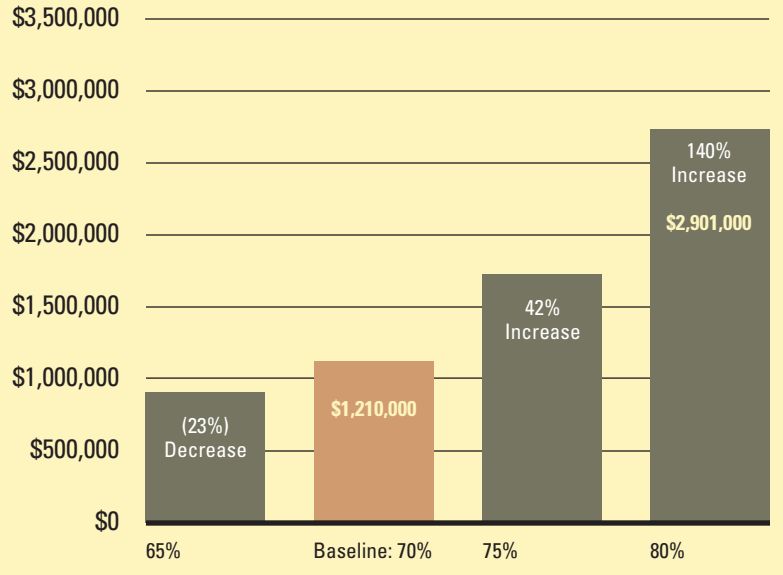
A wholesale food hub should expect to work with buyers who wish to purchase items on an account and pay a monthly invoice or statement. The food hub should also accept credit card payments, which smaller establishments, such as restaurants or local grocery stores, are likely to prefer, rather than paying by cash or check. For each credit card sale, it is assumed that the food hub will incur a 2-percent fee. While food hubs dealing with smaller clients may encounter more credit card sales, we dedicated about 10 percent of purchases to be made via credit card in the financial analysis.

Once a customer has purchased items, the food hub should expect an average lag of 23 days (typical range is 15-30 days) to receive payment. A 5.5-percent interest rate has also been applied to this accounts receivable timeline to capture the carrying costs a food hub will experience. This interest expense arises from a hub using short-term loans or a credit card to cover production costs — including labor and packaging — until the business is able to collect sales revenue.

Payment to Producers

Farmers and producers will require that payments they receive from the food hub cover the cost of producing the items as well as generate a profit. The wholesale hub will provide a 70/30 split, with 70 percent of sales dollars collected from customers being returned to farmers and 30 percent being retained by the food hub. These funds cover the costs of operating the business.

Figure 3—Sales Needed To Reach Breakeven



There can be a slight variation from this 70/30 split. But based on the scenario results presented in the chart above, for a food hub to retain 25 percent of sales revenue to cover operations, it would need to obtain about $1.75 million in sales to achieve similar earnings before interest, taxes, depreciation, and amortization (EBITDA) to reach the breakeven operations level. To increase return to farmers only by 10 percent and continue to be financially viable, the hub would have to more than double sales. In this model, when the return to farmers increased to above 85 percent, the food hub could not maintain enough residual revenue to cover costs and remain in operation.

Correspondingly, reducing the price paid to producers would reduce the sales necessary to achieve breakeven, but that may not be in line with the food hub's mission or be acceptable to the food hub's producers.

Certification Fees

The wholesale hub discussed in this document will undergo a Good Handling Practices (GHP) audit, while the farmers themselves will be required to obtain and maintain Good Agricultural Practices (GAP)

certification. These requirements will provide access to customers who prefer, or require, these certifications. Larger customers, such as hospitals and school systems, also often require food safety and production certifications prior to their initial purchases. Additionally, regulatory bodies may require a food hub and its producers to receive certain certifications before they are allowed to sell food items to the public. A portion of the food hub's sales will be used to pay for these necessary certifications.

Location

The food hub's location is chosen to facilitate the transportation of goods, both from producers to the hub, as well as from the hub to end customers. The expenses related to transportation — such as the cost of diesel fuel, driver wages, and the monthly lease or interest loan payments on vehicles — results in a major cost category for the food hub.

For the purposes of this analysis, the food hub is situated in a semi-urban area. This setting allows the hub to be centrally located between the hub's farmers and customers. If the hub is located in a rural area, some costs may be reduced, such as lease rates and employee wages.

Using an average cost of leasing space in various semi-urban areas around the country, we calculate an annual lease expense of around $22,000 for a 6,500-square-foot facility. While this space seems to be large initially, it provides the food hub with space for growth as business and inventory increases.

The wholesale hub will operate with the least amount of "on-hand" inventory possible by turning around products within 2 days of receiving them from producers. Because there will not be large amounts of inventory on hand, the food hub will not require an extensive storage area.

Facility Operations and Delivery

The food hub facility will operate 6 days per week and conduct deliveries 3 days per week. This allows a day of prep time between deliveries, while still frequent enough that customers receive sufficient product in a timely manner. While the number of delivery days included in the analysis remains constant at 3 days per week, the number of stops per delivery will increase over time.

Producers are required to drop off their product appropriately packaged and ready for sale. Prior to being sent out for delivery, products are grouped to fulfill orders. A 5-cent packaging cost for every $25 of product is included, covering the cost of boxes and for general handling and storage.

All 3 years of operations in the analysis also assume an expense for forklift

rental of about $800 per month. Leasing the forklift allows the food hub to mitigate some risks for a more specialized piece of equipment and covers the more specialized maintenance and upkeep that may be required. The financial models assume that delivery trucks were purchased and in operation at the start of the breakeven period; there is not a significant difference between leasing and purchasing in the average costs over the lifetimes of the vehicles.

Truck Costs

We assume that the food hub will be replacing vehicles during the breakeven period of operation. The model food hub for this study will purchase a used 20-foot refrigerated truck for about $45,000 and a used supplementary delivery truck for $40,000. This assumes that increased sales will provide the funds to qualify for loans. The second truck, slightly smaller than the first, allows the food hub to have a second vehicle on hand during times of peak sales and to serve as a backup if the primary truck has mechanical issues. The financing section of this document includes details on the loan acquired to purchase these vehicles.

The hub has an established customer base at this point. Since dependability is key to retaining customers, vehicles must be properly maintained. An annual repair and maintenance contingency allotment of $2,500 has been budgeted. During the life of the food hub, maintenance cost will increase as higher sales levels and product volume will place additional strain on the equipment.

An additional overhead charge of about 30 cents per mile driven is included in the economic analysis to cover additional expenses — such as insurance and wear — associated with owning a vehicle. Because of the nearby urban setting and assumed population density, it is not anticipated that mileage will significantly increase to accommodate additional stops as the hub seeks to "in-fill" its delivery routes, rather than increasing the geographic delivery area. During the peak sales season, the average miles traveled per truck is 80 miles round trip, increasing to 100 miles during the growth period and 120 miles by the end of the viability period.

Fuel Costs

Based on the average price of diesel fuel during the winter of 2014, the food hub will pay about $3.30 per gallon. If the trucks average 10 miles per gallon, the hub will spend between $300 and $700 monthly on fuel. The variation in fuel prices accounts for lower sales months when the food hub will not require the use of both trucks and will be driving slightly fewer miles.

Fuel is an extremely volatile cost category, as indicated by the 60-cent-per-gallon decline in diesel cost from the spring to winter of 2014. If the food hub were to pay the higher spring price, total fuel costs would grow to $8,000 in the first year, compared to $6,800 if the cost of fuel remained at $3.30 per gallon. The food hub should have a contingency plan in place to counteract unexpected changes in fuel prices.

Driver and Delivery Costs

Deliveries are conducted by drivers employed by the food hub who unload and deliver the products to individual customers along established routes. Hours often have to be limited during portions of the year when sales and deliveries are lower, and the wholesale hub limits driver hours to part-time during these periods. The number of hours required to deliver the food hub's products will increase and necessitate a second driver during peak seasons. The driver positions are hourly and are paid $13.50 per hour during the first year, with small pay increases each following year.

During the breakeven period, the food hub will employ one driver during the first and last 2 months of the year. For the remaining 8 months, two dedicated drivers will be required for deliveries. In total, the food hub will spend about $22,000 on driver wages during this period. Beginning in the growth period, the hub will employ two year-around drivers at a cost of about $28,000, increasing to $38,000 during the viability period.

While product delivery is constrained by the capacity and load capabilities of the delivery vehicles, the analysis shows that the main constraint for deliveries is the time available for drivers to deliver product, assuming they work an 8-hour shift. The following table shows the time requirements for transporting product from the food hub to the customer.

Table 2
Transportation Time Requirements

Load Time (Hours)	0.67
Drive time (Hours)	2.29
Delivery Admin. (Hours)	0.50
General Admin./Driver (Hours)	1.00

Total truck capacity is assumed to be about 22,500 lbs. A single driver delivering to smaller wholesale customers would likely not be able to deliver this amount of product in one day. This is an understood inefficiency in operating a medium-scale food hub. By contrast, a larger commercial-size venture can better maximize truck capacity for bulk deliveries.

Consider the example of a driver who unloads 450 lbs. (about 18 boxes of product at 25 lbs. each) per stop and makes 3 stops in 1 hour. This would result in an average delivery amount of 675 lbs. per half hour. After

deducting time spent driving a roundtrip of 80 miles at an average speed of 35 mph (2.29 hours) and taking care of miscellaneous activities such as paperwork (.5 hours), the driver only has about 5.21 hours left of actual delivery time (during an 8-hour shift).

Actual delivery time of 5.21 hours, multiplied by the 3 deliveries per hour, allows for about 15 deliveries of 450 lbs. each, resulting in a total of 6,750 lbs. per day delivered by 1 driver in an 8-hour shift. For our calculations, this was rounded to an average of 7,000 lbs. An additional cost per delivery equal to one-half hour of pay per delivery day has been added to account for time spent in administration (such as for paperwork and customer interaction) during the deliveries.

While some inefficiency is to be expected, changes in efficiency can directly impact a food hub's profits, because transportation costs can account for a significant portion of an entity's expenses. Decreasing the efficiency of delivery stops by reducing the number of pounds of product delivered per half hour by just 20 percent (equal to 540 lbs. per half hour) can require additional sales of more than $16,000 at the breakeven point, more than $22,000 for the growth level, and more than $29,000 in the viability level to reach similar EBITDA and net income figures.[3]

Labor Requirements

The wholesale hub approaches its labor requirements from a more functional view, as opposed to dedicated employees' positions. This analysis considers that individual hub employees often fulfill multiple roles. While an individual may earn a specific wage while fulfilling the responsibilities of multiple positions, such as a general manager or sales manager, the same individual may also aid in other activities.

The "full-time equivalent" (FTE) chart in the following table provides a comparison point when assessing the role-based labor approach; it translates staff-hours required to fulfill each role into a number of FTEs. To calculate the FTE, it is assumed full-time employees work 40 hours per week.

For example, in the table below, the general manager will become a full time employee during the viability operation level, when the food hub requires a full-time employee to adequately fulfill this role. Across all labor positions in the first year, the food hub will require staff-hours equivalent to three and two-thirds full-time employees. By the end of the viability period, this figure will increase to around six and a quarter full-time employees.

The general, sales and production managers are salaried positions. The

[3] A detailed table outlining transportation costs can be found in the appendix.

Table 3
Hourly Labor Calculations

Full-time Equivalent (FTE) Calculator

Growth Phases	Gen. Mgr.	Sales Mgr.	Prod. Mgr.	Driver	General Labor	Line Super.	Book-keeper	Total FTE
Breakeven	0.65	0.40	0.50	0.68	0.48	0.79	0.17	3.67
Growth	0.85	0.50	0.65	0.91	0.51	0.77	0.36	4.55
Viability	1.00	1.00	0.85	1.19	0.83	0.80	0.61	6.27

remaining four labor categories are hourly. Office and administrative labor is considered fixed and does not vary directly with sales, while driver, general labor, and line supervisor hours are directly determined by sales levels. Salaried labor will transition over the 3-year period from part-time to full-time jobs. This is a result of the role-based approach. In years when management positions are considered part time, these individuals will likely be fulfilling other roles, such as delivering or receiving packaging. The following table shows the annual costs for hourly and salaried labor, including the overhead expense for salaried labor.

For the purposes of the analysis, staff is paid on the last day of the month, and fringe benefits and overhead is directly calculated as 30 percent. Fringe and overhead on salaried employees is included as part of the fixed sales and marketing expenses reported in the expense and revenue portion of the model. Figures for various positions were chosen based on information taken from Bureau of Labor Statistics average wage figures, then adjusted when specific positions/roles were not available. Actual food hub wage and salary rates will vary based on a variety of factors.

Table 4
Annual Wholesale Labor Costs

	Breakeven	Growth	Viability
Hourly	$60,765	$76,952	$106,324
Salary	$98,475	$127,075	$180,700

The hub employs a general manager who is responsible for organizing, overseeing, and directing all food hub operations, as well as coordinating the supply of products for orders that have been placed. He or she also addresses customer service issues and, in some cases, assists in delivering product during the slow months of operation. This role reaches a full-time basis

Table 5
Salaried Labor Costs

	Salaried Labor	
General Manager Salary	**$55,000**	
% Involvement Breakeven	65%	$35,750
% Involvement Growth	85%	$46,750
% Involvement Viability	100%	$55,000
Sales Manager Salary	**$50,000**	
% Involvement Breakeven	40%	$20,000
% Involvement Growth	50%	$25,000
% Involvement Viability	100%	$50,000
Production Manager Salary	**$40,000**	
% Involvement Breakeven	50%	$20,000
% Involvement Growth	65%	$26,000
% Involvement Viability	85%	$34,000

during the viability period.

The hub also employs a sales manager to oversee the acquisition of new customer accounts and related activities in order to grow the sales of the food hub. A production manager coordinates farmers with each other and the food hub to maximize their ability to meet the demand of customers and to prevent the oversupply of products during the peak growing season and to minimize waste during slower periods. This role is critical for interacting with producers and establishing solid, trusting relationships.

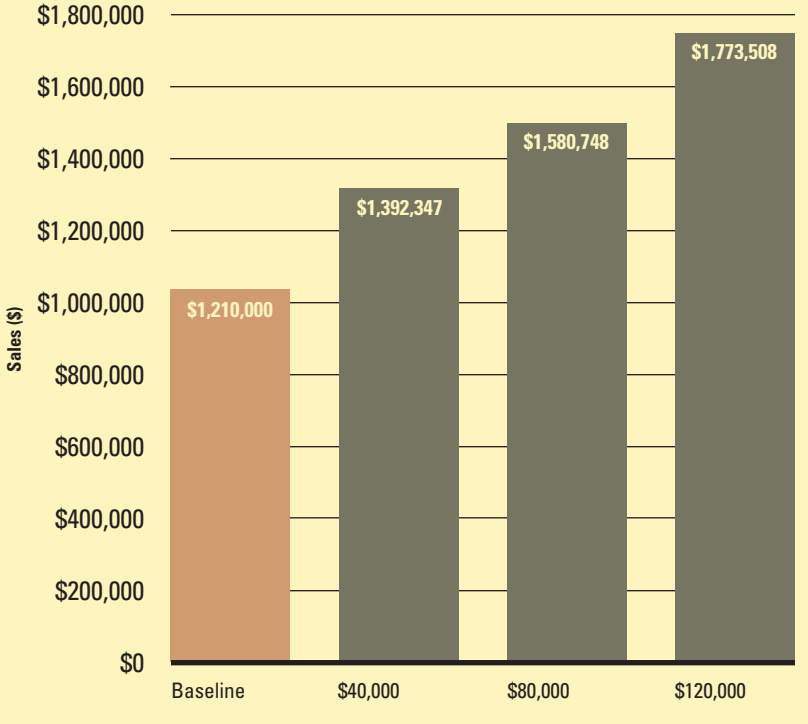
General laborers will conduct daily activities, including product reception, storage, packaging, and handling. They also assist the delivery driver by loading the truck on designated days. A warehouse manager is needed full-time, year-round, to oversee the daily warehouse operations. This is a more senior role than the general labor positions and is responsible for overseeing other laborers without the direct oversight of management. Finally, a part-time office worker assists with any administrative and accounting duties not handled by an outside accounting firm.

Salary and wage rates vary, based on the location of the food hub, the local labor market, and labor costs. They are another major factor affecting the food hub's profitability. For example, a driver position (Standard Occupational Code (SOC) 53-3031) has a national mean wage of $13.33 per hour, while the same position in California has a mean wage of $15.27 per hour. While overtime has not been used in the analysis, the food hub will

likely have to address this issue at some point in its growth and expansion. Hourly paid personnel will receive overtime equivalent to time and a half for any pay period in which their work hours exceed 40 hours per week.

If the food hub is faced with higher labor costs, it will require substantial additional sales to cover these costs. The following chart shows how adding $40,000 in annual labor costs can affect the sales levels required for the wholesale hub to achieve breakeven. It would require more than $180,000 in sales to cover this cost. Doubling this annual labor figure to $80,000 would require an additional $370,000 in sales to cover the extra costs. Adding $120,000 of increased labor costs requires acquiring more than $560,000 in additional sales to reach breakeven.[4]

Figure 4—Sales Required for Breakeven Additional Labor



[4] A detailed table outlining labor costs can be found in the appendix.

General Expenses

The following section outlines some of the other general expenses that a food hub of this size and sales strategy may incur in the course of operation. For simplicity in reporting, some expense categories have been grouped together.

Food hubs need a promotional campaign to create awareness. But many wholesale food hubs do not use traditional promotion and marketing campaigns. Instead, they focus on lower cost efforts — such as word-of-mouth or social media — to build customer awareness. About $5,000 is needed annually to cover this cost.

The analysis includes a fixed expense of $250 per month for business insurance. Insurance premiums for the food hub were based on costs paid by a food hub of similar size and scope to the typical food hub. The policy includes occurrences, general aggregate, product liability, and combined single-limit auto insurance coverage.

The reporting of non-cash expenses can vary; the analysis incorporates some information regarding taxes but does not outline specifics, such as the Federal income tax liabilities.

- Business Personal Property Tax is assumed to be expensed at a rate of 55 cents per $100 valuation. This tax rate applies to real estate and personal property.

- Due to variations in tax handling strategies, income taxes are not dealt with in the analysis. Tax strategy may be quite important as the food hub approaches viability.

Depreciation expenses are accounted for using the straight-line method. The food hub will take out a $150,000 loan during its initial startup year for operating equipment with a collective salvage value of $15,000 and a useful life of 15 years. A second loan of $55,000 will be taken during the third year of this analysis to fund the purchase of additional equipment with a collective salvage value of $5,500 and a useful life of 7 years.

The following cost categories are included to represent the remaining general costs that most businesses will incur over the course of operation. This category includes allocation for items such as office supplies, software maintenance, phones and other telecommunications equipment, legal and accounting fees, certification fees for Good Handling practices (GHP) or other annual food safety certifications, as well as for unforeseen and bad debt expenses. See the appendix for more details.

Equity and Financing

The financial analysis includes a $150,000 carryover loan from the start of business operations used to purchase equipment. The terms of this loan are for 10 years at an interest rate of 6.5 percent, which is a "loaded rate" that includes interest and fees charged by the lender. Examples of equipment are tables, pallet jacks, cooling systems, fire extinguishers and other safety equipment, as well as office and breakroom items. The hub continues to make principal and interest payments on this loan over the course of all three operational periods.

Additional equipment, such as two refrigerated trucks, will be purchased at the start of the breakeven phase. Equipment needs vary depending on the type of product handled, customer and producer requirements, and services offered by the hub. A term loan for $75,000, of which 75 percent (or $56,000), will be financed, will be carried over 6 years at a 7-percent financing rate.

In addition to the equipment loan, the food hub will also take out and repay three short-term loans to assist in covering expenses and to provide adequate cash reserves during the first breakeven and growth periods. During the viability phase, sales have grown to a point where the business no longer requires outside funding to supplement the cash generated by the food hub itself. The following are the details of these loans; all three loans are assumed to be for 1 year at 7-percent interest.

- A line of credit for $89,000 obtained in January of the breakeven phase.
- A second short-term loan of $15,000 in October of the breakeven phase.
- A final $80,000 line of credit in January of the growth phase.

In addition to lines of credit, the food hub will require about $100,000 in owner equity to cover cash flows and allow for adequate amounts of cash on hand. It is assumed that equity will be provided by the owners, although it could originate from various sources, including grants or third-party capital investments.

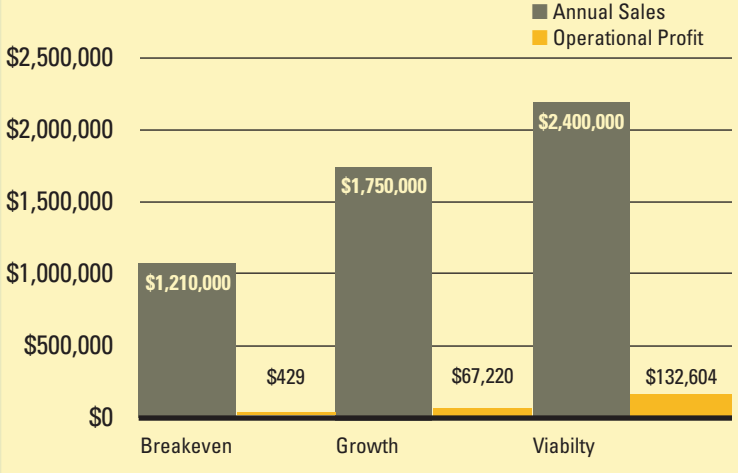
Photo courtesy of Fifth Season Cooperative

RESULTS

- Sales of $1.21 million result in the food hub's ability to reach a breakeven level, meaning that it can cover all its variable and fixed expenses, including management salaries. However, at this level the food hub does not have residual money to produce a profit. Once depreciation and interest have been subtracted from EBITDA, the food hub will experiences net losses.

- At the growth level – based here on annual sales of $1.75 million — the venture is able to produce an operational profit of around $67,000, or 3.8 percent of annual sales.

Figure 5—Annual Sales by Operational Period



- The food hub reaches a sales level that would indicate long-term economic viability, with annual sales of about $2.4 million. This point of viability is based on about 5.5 percent of sales being retained as profits.

As a reminder, the figures for each operational period represent revenue and corresponding costs for a typical food hub at a particular point in time, not for consecutive years of operation. Food hubs in specific regions of the United States will experience variations in costs that are unique to their location. In addition, operations and the types of product costs will also vary, based on a food hub's product line.

The analysis shows that the main costs influencing profitability are food costs, labor, and transportation expenses. These expenses are highly variable, depending on the food hub's location and levels of service. A portion of these costs may be mitigated through careful planning of transportation logistics and by optimizing labor efficiency.

Table 6
Wholesale Food Hub *pro forma*

	Breakeven	Growth	Viability
Revenue	$1,210,000	$1,750,000	$2,400,000
Total Variable Operating Costs	($950,252)	($1,351,977)	($1,857,308)
Variable Margin (Loss)	**$259,748**	**$398,023**	**$542,692**
Total Equipment Costs	($34,377)	($38,649)	($44,693)
Total Facilities Costs	($43,280)	($44,578)	($45,916)
Total Selling and Marketing Costs	($5,000)	($5,150)	($5,305)
General and Administrative Expenses	($128,263)	($172,425)	($218,175)
Unforeseen and Contingency Expenses	($48,400)	($70,000)	($96,000)
Wholesale Baseline Earnings EBITDA (Loss)	**$429**	**$67,220**	**$132,604**
Interest Expense	($4,252)	($6,149)	($8,433)
Depreciation Expense	($9,000)	($9,000)	($16,071)
Net Income (Loss)	**($12,823)**	**$52,071**	**$108,099**

The above *pro forma* shows the individual components that comprise the summary figures, presented above. Greater detail can be found in the "Expense and Revenue" table in the Supplemental Tables section of this report.

The breakeven level only generates enough revenue to cover operational costs. But because it is operating at a negative net income basis, a food hub at this stage would need to continue to grow to maintain viability for any period of time. On a cash-flow basis, the hub would require outside cash of about $70,000 to maintain positive cash flows and adequate cash reserves.

At the growth level of operation, a food hub is able to cover operational as well as other costs — including depreciation and interest expenses — and generates enough net income to provide a small return to owners. Additionally, on a cash-flow basis, the food hub is reaching a breakeven level of cash on hand by the end of this period. Outside cash of $50,000 is still required for necessary cash reserves.

The viability level of operation is the minimum point at which a typical food hub becomes a sustainable business. This includes generating enough net income to make investments needed to grow the business and to provide a significant return to the owners. Even at this stage, the food hub may well require more funding, especially if higher costs are experienced than were used for our analysis.

Photo courtesy of Red Tomato

Operational Models:
Direct-to-Consumer Food Hubs

The direct-to-consumer hub model involves the use of an intermediary service provider to connect farmers with community members. The goal of this model hub is to provide the most profit to the producer-farmers while also generating enough income to remain in business. As an operation with low overhead expenses, the sales levels needed to achieve the various operational levels are lower than those needed for wholesale food hubs.

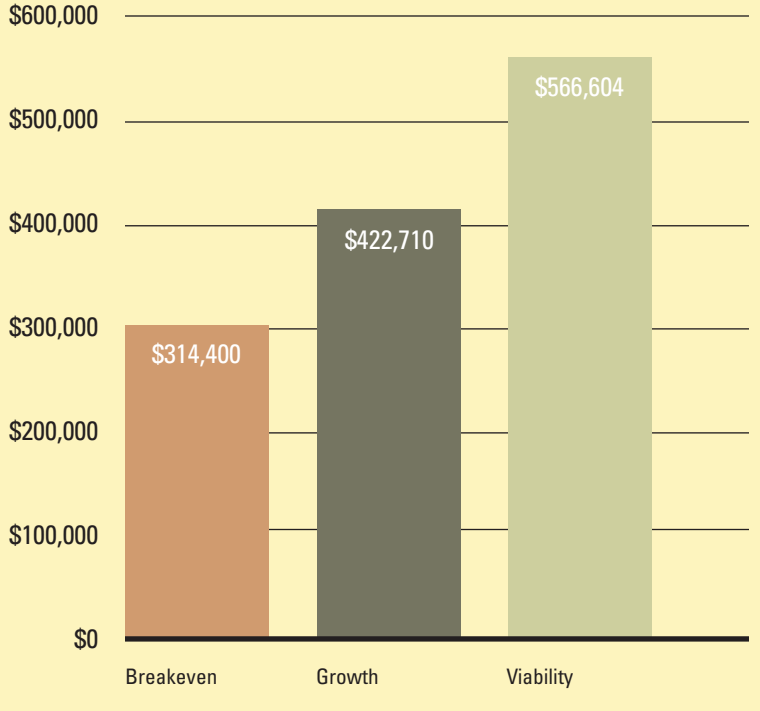
This section begins by estimating annual sales for business operational periods, then "unpacks" the model assumptions (or factors) that impact the sales levels needed to reach the breakeven, growth, and viability phases of the business.

Annual Sales by Business Operational Periods

To reach a breakeven level, a typical direct-to-consumer food hub needs to generate annual sales of around $314,000. In the time between breakeven and long-term financial viability, the venture would need to generate around $422,000 in annual sales.

With annual sales of about $566,000, the food hub would begin to earn sufficient revenue to provide longer term viability. It should be noted that even at this sales level, an unexpected expense could detrimentally affect the business. The food hub should strive to grow beyond this point of annual sales to achieve the higher profits that could be needed to cover unexpected costs.

Figure 6—Annual Sales Levels by Operational Periods



Model Assumptions

Product Line

One primary factor that allows a direct-to-consumer food hub to operate at a smaller volume level is that produce is the only "product line" carried. Many small food hubs grow past the startup phase, but have not begun to sell other product lines that require significant capital investment in items such as coolers and delivery trucks.

For the direct-to-consumer hub used for our model, the produce growing period falls into a median "seasonality range," rather than the longer or shorter growing seasons of some regions of the country.

As a result of this median growing season, sales will occur from March through October, with the majority of sales taking place in June. A direct-to-consumer hub will usually cease operations from November through February, resuming sales in March. The exception to this is during the viability phase, when growth in sales necessitates a longer season to pay for additional products available outside of the typical spring and summer seasons.

Location

Unlike the wholesale model, the direct-to-consumer model hub needs a minimal amount of warehouse space. The facility used for our analysis is a 1,000-square-foot warehouse, located in a suburban area and leased for $2.20 per square foot annually. The warehouse will simply serve as the central point where produce is received and repacked into boxes for delivery to consumer pickup points. The business employs a just-in-time method for inventory, so it will only hold product long enough to aggregate and repack for delivery.

Table 7
Direct-to-Consumer Warehouse Lease

Expected Rent (per square foot)	$2.20
Estimated Size of Warehouse (sq. feet)	1,000
Rent (per month)	$183
Rent (per year)	$2,200

Operations

The direct-to-consumer hub operates by sourcing product from a group of farmers who agree to provide a variety of produce during a certain period of the year. Their shipments to the food hub are scheduled by the farm coordinator, who assists with production planning and logistics.

The direct-to-consumer hub collects subscription orders from individuals who pay an upfront fee to receive produce during a set period. Consumers

have the option of purchasing a full share for $420 in the spring, or $540 in the summer. The price of shares will grow in later years as the summer season expands to include additional weeks. Individuals may also buy smaller half shares, which contain less produce and may be more suitable for individuals or smaller families. These half shares cost $210 for the spring season and $270 for summer.

Securing an adequate number of subscriptions is, of course, vital. Because customers pay an upfront fee, the hub needs to pay special attention to managing this "up-front" revenue. It must ensure that the funds are not exhausted before services are complete.

Over time and from season to season, the hub may find that it must work harder to maintain a steady level of subscribing customers; previous members may not renew. New subscribers may only replace those who have dropped out, requiring even more effort to actually increase total subscriptions.

This analysis assumes that 60 percent of subscribers will pay for full shares, the other 40 percent for half shares. In rural areas, a higher percentage of subscriptions will typically be for a full share, while half shares may be more common in urban and suburban areas.

The balance of full versus half shares greatly affects the food hub's profitability. Reversing the percentages used above (so that 40 percent buy full shares and 60 percent half shares) will reduce revenue by nearly $40,000 during the breakeven phase. This would require an additional 70 spring and 70 summer customers to generate the same profits as are predicted the original model.

For our projection, the food hub maintains a healthy member base, selling slightly more summer shares each season than spring shares. The table below provides the numbers of subscribers assumed at each operations period.

Pickup locations are operated mostly by volunteer labor, with hub employees handling some of the more heavily trafficked sites. The food hub will partner with local organizations, such as churches and schools, to use their facilities for the

Table 8
Number of Shares Sold

Breakeven — Spring	370
Breakeven — Summer	440
Growth — Spring	510
Growth — Summer	565
Viability — Spring	605
Viability — Summer	685

Table 9
Number of Pickup Locations

Breakeven	10
Growth	15
Viability	25

pickup sites. These partners will be compensated through donations from the food hub, which are calculated as 3 percent of sales.

Because the direct-to-consumer food hub relies on pickup locations to distribute boxes of produce, establishing reliable, convenient locations is critical. Fostering good-will within the community and forging a long-term relationship with the pickup site hosts can help a food hub gain a solid reputation in the community and contribute to the hub's long-term success.

To progress to the growth period, sales need to increase, requiring a corresponding increase in pickup locations. At this point, the hub will likely begin to exhaust initial market advantages for its core customer base. Greater creativity in attracting and retaining customers will be necessary during this important period. The viability stage will require significantly greater number of pickup locations, increasing to 25, and the number of delivery days will increase to 4 times per week. The hub's unique circumstances and the size of the community served will determine if this goal is achievable.

Labor Requirements

Similar to the wholesale food hub, the direct-to-consumer hub's human resource needs are based upon functional roles, with individual employees often fulfilling multiple roles. Each employee is assigned tasks, but will also likely aid in other activities.

Our direct-to-consumer food hub model incorporates the use of volunteer labor as well as paid staff. Volunteers primarily help with general (less skilled) labor and typically can help reduce labor costs. Because volunteers can lack consistency and may not be available when needed, they are not always a reliable source of help and can often lead to greater costs in other areas of operation. A volunteer coordinator is generally required to oversee these individuals and coordinate training activities and schedules.

Though this study primarily focuses on the cost factors, there are multiple reasons a food hub may decide to use volunteer labor. These may include finding individuals with a specific skill set that would not be available for hire. Volunteer labor also gives the food hub a stronger tie to community.

Finding a qualified general manager and farm coordinator is key to the success of a food hub. The general manager oversees the overall operation, while the farm coordinator deals with the producers. All non-driver employees should be available to assist the part-time driver in making deliveries, as needed.

A volunteer-driven workforce has obvious advantages in terms of cost

savings, but it may create disadvantages, especially in the area of organizational challenges. These issues may become more apparent during the growth stage as the scale of operations increases. Without community support and proper management of volunteers, a food hub will struggle to succeed.

Table 10
Direct-to-Consumer Full-time Employees

FTE Calculator							
Year	Gen. Mgr.	Farm Cord.	Prod. Mgr.	Retail Labor	General Labor	Drive Labor	Total FTE
Breakeven	0.40	0.00	0.25	0.19	0.10	0.10	1.04
Growth	0.50	0.15	0.30	0.19	0.21	0.16	1.52
Viability	0.60	0.20	0.40	0.20	0.21	0.20	1.81

With enough reliable volunteers, a direct-to-consumer hub can rely on part-time, as opposed to full-time, paid staff. The table above presents the FTEs required for the various operational levels. The general manager will come closest to a full-time job, reaching 60 percent of full-time work during the business viability phase.

Because the direct-to-consumer food hub is a substantially smaller business, compared to the wholesale model, the amount of FTEs for the former will be lower. At viability, the direct-to-consumer hub will need the equivalent of 1.81 full-time equivalent workers. This results in each FTE earning around $33,000 annually.

The managers and volunteer coordinator are salaried positions, all others are hourly. Driver, general labor, pick-up point labor, and volunteer labor hours are all directly based upon sales levels. The pick-up point laborers are employees of the hub, while volunteers are unpaid community members who want to aid the food hub.

Volunteer labor is especially helpful in reducing labor costs during the startup period. Volunteer programs can help food hubs gain community involvement and be a source for permanent staff. However, volunteer laborers can be less reliable than paid staff. There are indirect costs in using volunteers that should not be overlooked. As the food hub grows, the availability of volunteer labor becomes less important to overall profitability.

The following table shows the annual costs for hourly and salaried labor, including the overhead expense for salaried labor. Drivers working for our

model food hub will use their personal vehicles to move product; they will be compensated at the standard mileage rates, as set by the U.S. Internal Revenue Service. The number of miles driven will increase over time as the food hub adds new pick-up locations. The number of delivery days also increases from 2 days in the breakeven period to 4 days during the viability phase.

Table 11
Annual Wholesale Labor Costs

	Breakeven	Growth	Viability
Hourly	$13,171	$17,640	$18,021
Salary	$23,725	$33,150	$41,600

General Expenses

Our direct-to-consumer hub model will operate on as lean a basis as possible, meaning that many of the costs included in the wholesale food hub model have been reduced or eliminated. For example, this hub will require substantially less sales to reach the three profit phases of business development. The promotional budget has thus been reduced to $4,000 per year, versus $5,000 for the wholesale hub model.

The direct-to-consumer food hub strives to provide returns to farmers, allowing them to receive dividend income or patronage (in the case of a co-op) above wholesale prices for their crops. For each full share sold, which is produced over about an 18-week time span, the hub pays the farmer $360. A half share is purchased from the farmer for $180, or half the cost of a full share, and the farmer provides product for 14 weeks. Each year, the business spends around 67 percent of its sales revenue to purchase produce from farmers, making this the hub's single largest expense.

Photo courtesy of Common Market Philadelphia

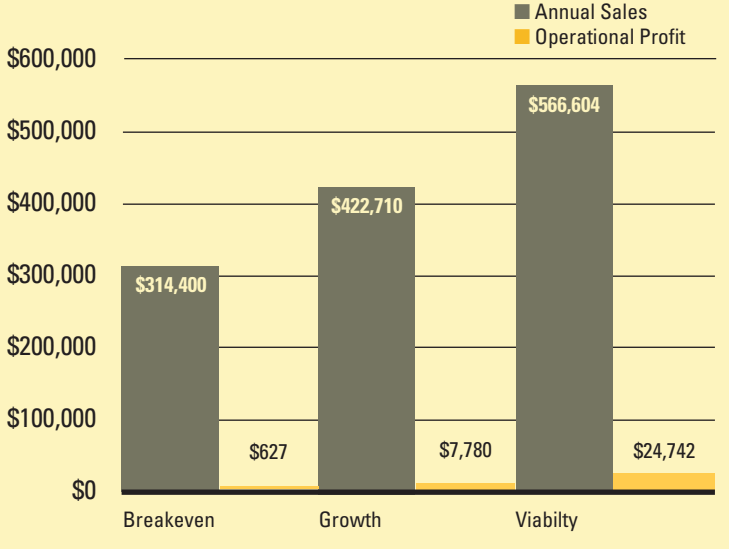
Direct-to-Consumer Food Hub

RESULTS

- In order to reach the breakeven stage — when the food hub is able to cover its variable and fixed expenses — the hub must generate about $314,000 from sales. Even then, it will report a net loss (as will the wholesale hub).

- In the growth phase, the hub's sales grow to about $423,000, yielding an operational profit of just under $7,800, or around 1.8 percent of sales. The food hub also produces a small net income of $2,900. At this point, the business reaches cash-flow neutrality.
- When the venture is able to reach viability, it is generating more than $566,000 per year in sales and producing an operational profit (EBITDA) of more than $24,000, or 4.4 percent of sales. The venture also generates a positive net income of nearly $19,000.

Figure 7—Direct-to-Consumer Sales Levels and Operational Profit



Our direct-to-consumer model hub will not require farmers to become members in order to sell to the venture, which reduces the amount of equity flowing to the business. However, because this is a low-cost business for which funds are obtained at the beginning of the season, additional equity from outside sources is not required to maintain positive cash flows. Business growth in the growth and viability phases provides enough cash to maintain adequate reserves without the use of additional equity.

This business has substantially smaller sales than does the wholesale hub model examined earlier. Thus, less sales revenue is required to achieve the breakeven, growth, and viability business stages. The hub is able to cover operational costs during the breakeven phase with annual sales of $314,000, about $896,000 less than required for the wholesale hub to reach the same point.

To generate about $8,000 of operational profit during the growth phase, the food hub would need annual sales of about $423,000. At the viability stage, the business is generating a profit of more than $24,000, equivalent to 4.4 percent of sales of $566,000. At the viability stage, sales are about $1.8 million less than for the wholesale hub model.

Table 12
Direct-to-Consumer *pro forma*

	Breakeven	Growth	Viability
Revenue	$314,400	$422,710	$566,604
Total Variable Operating Costs	($255,524)	($341,005)	($451,705)
Variable Margin (Loss)	**$58,876**	**$81,705**	**$114,899**
Total Equipment Costs	($6,957)	($9,902)	($14,033)
Total Facilities Costs	($12,420)	($12,793)	($13,176)
Total Selling and Marketing Costs	($4,000)	($4,120)	($4,244)
General and Administrative Expenses	($28,585)	($38,656)	($47,372)
Unforeseen and Contingency Expenses	($6,288)	($8,454)	($11,332)
EBITDA* (Loss)	**$627**	**$7,780**	**$24,742**
Interest Expense	($1,707)	($2,296)	($3,077)
Depreciation Expense	($2,549)	($2,549)	($2,549)
Net Income (Loss)	**($3,630)**	**$2,935**	**$19,116**

* Earnings before interest, taxes, depreciation, and amortization

Operational Models Comparisons

Table 13 summarizes the major differences between the wholesale and direct-to-consumer food hub models.

This analysis shows that the wholesale food hub provides the most return — as a percent of sales dollars — to farmers. But the wholesale operation also requires the highest sales levels to reach the breakeven or long-term viability stages. It also requires the most resources to achieve these sales levels, including the need to lease a larger warehouse and procure two delivery trucks.

While the direct-to-consumer model provides lower returns to farmers than does the wholesale model, it also requires lower annual sales to attain long-term viability and does not require owner equity during the breakeven stage to prevent negative cash flows. The use of volunteer labor helps offset the lower sales.

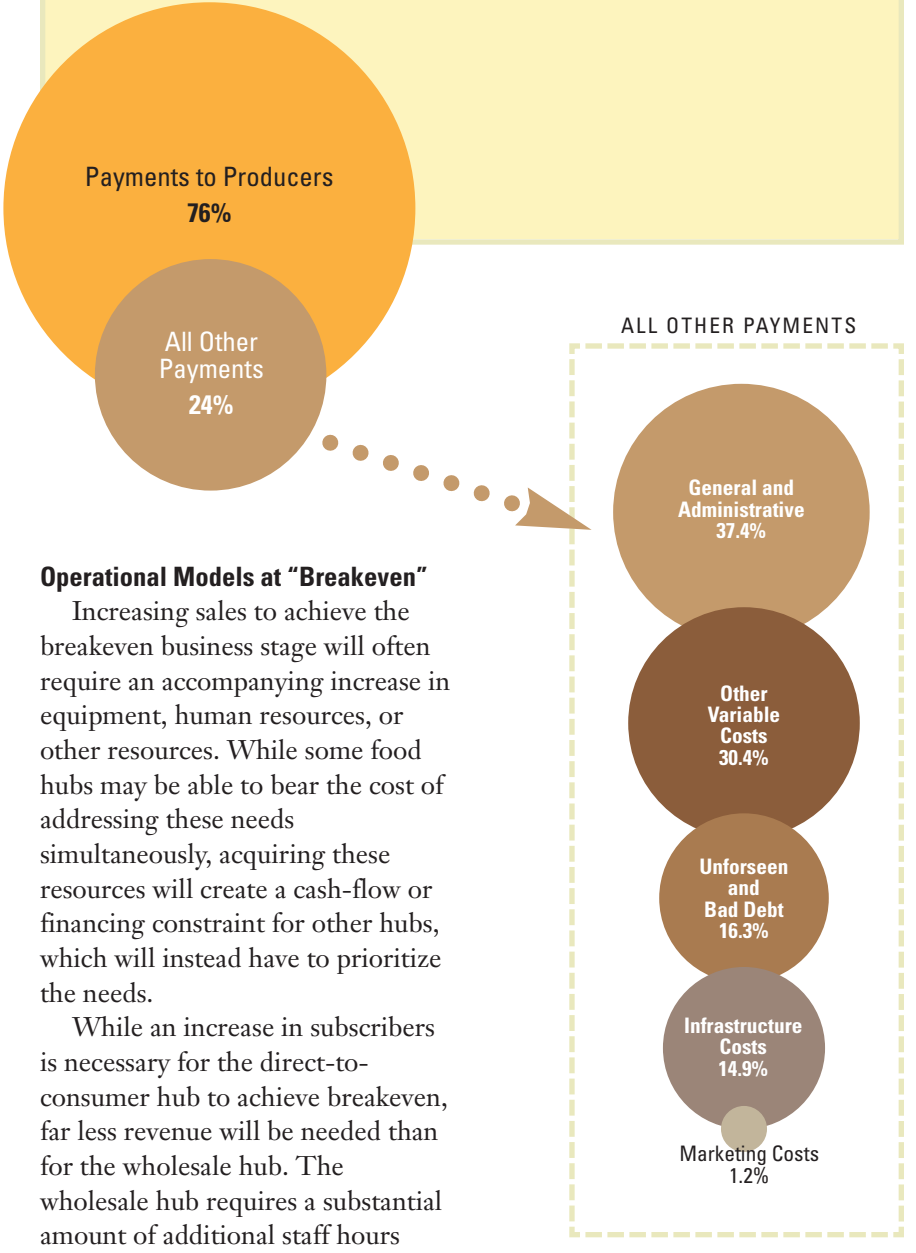
Table 13
Operational Model Summary Comparison

	Wholesale	Direct-to-Consumer
Products	Produce, Dairy & Other	Produce
Facility (Ft.^{2})	6,500	1,000
Delivery Vehicles	Pruchase Two Trucks	Personal Vehicles with Mileage Reimbursement
Staff Levels at Viability (FTE*)	6.3	1.8
Breakeven Sales	$1.21 Million	$314,000
Viability Sales	$2.4 Million	$567,000

**Fulltime Equivalent*

As the single largest expense for both hub operational models, payments to producers will have the greatest impact on whether a food hub can progress through the operational phases used in this analysis. Figure 7 compares the product-cost variable to other typical expenses.

Figure 8—Typical Food Hub Expenses Comparison



Operational Models at "Breakeven"

Increasing sales to achieve the breakeven business stage will often require an accompanying increase in equipment, human resources, or other resources. While some food hubs may be able to bear the cost of addressing these needs simultaneously, acquiring these resources will create a cash-flow or financing constraint for other hubs, which will instead have to prioritize the needs.

While an increase in subscribers is necessary for the direct-to-consumer hub to achieve breakeven, far less revenue will be needed than for the wholesale hub. The wholesale hub requires a substantial amount of additional staff hours compared to the smaller direct-to-consumer hub.

Table 14
Breakeven Operational Period *Pro Forma* Comparison

	Wholesale	Direct-to-Consumer
Revenues	$1,210,000	$314,400
Total Variable Operating Costs	($950,252)	($255,524)
Variable Margin (Loss)	**$259,748**	**$58,876**
Total Equipment Costs	($34,377)	($6,957)
Total Facilities Costs	($43,280)	($12,420)
Total Selling and Marketing Costs	($5,000)	($4,000)
General and Administrative Expenses	($128,263)	($28,585)
Unforeseen and Contingency Expenses	($48,400)	($6,288)
Baseline EBITDA* (Loss)	**$429**	**$627**
Interest Expense	($4,252)	($1,707)
Depreciation Expense	($9,000)	($2,549)
Net Income (Loss)	**($12,823)**	**($3,630)**

*Earnings before interest, taxes, depreciation, and amortization

Operational Models at "Growth"

At this stage, the food hub will likely be faced with "trade-off" issues. Many will need to increase personnel. But because of sales and production seasonality, it is difficult to decide whether to retain employees year-round or continue with seasonal or part-time help.

Because they have achieved significant sales at this point, the hubs will need to formalize operational procedures and processes. Activities that were improvised during startup and breakeven, or cost-cutting measures in areas such as marketing and branding, will need to be re-examined and more strategic plans implemented. Supply or sales arrangements that were previously conducted "on a handshake" basis will need to transition to legal contracts.

The increase in sales and need for reliability and consistency at this stage will likely require additional investment for technology or training for the hub's employees or producers. At this point, the hub will also likely need to institute business systems and fix some operational concerns that were improvised during startup or breakeven. Such steps will be necessary to progress to the business viability phase.

Because of the need to diversify and attract new customers, wholesale food hubs are attracted to the higher gross margins of direct-to-consumer sales. These hubs then begin to engage in activities that move them closer to a hybrid operational model. In general, hybrid food hubs incorporate some

of the characteristics of both wholesale and direct-to-consumer hubs. Direct-to-consumer operations often achieve a scale and capability that makes them attractive to wholesale customers, and they too may evolve into a hybrid hub operation.

A direct-to-consumer food hub usually serves a smaller area or region, so it does not necessarily require the use of large trucks nor (if only selling produce) a refrigerated truck; a wholesale hub likely would need such equipment.

Though this financial analysis does not consider income from grants and donations, hubs that have previously benefited from donations or other outside funding may begin to experience "donor fatigue." The hub will appear to be of sufficient size and scale that it does not appear to need further community support, or supporters simply move on to other projects.

It is also important to note that many nonprofit and mission-driven food hubs purposely remain at a smaller operational stage. A hub that chooses to remain at the growth phase of operation may need continued donor support.

At the growth stage, the wholesale hub may have an advantage, because its customers are more likely to remain loyal. Direct-to-consumer hubs often experience customer loss from season to season, and must strive just to replace these losses, rather than actually grow the customer base. Though they may be harder to attract at first, wholesale customers, with their increased focus on price and reliability, often stay with their suppliers longer.

Each of the food hubs will see increases in human resources, either in

Table 15
Growth Operational Period *Pro Forma* Comparison

	Wholesale	Direct-to-Consumer
Revenues	$1,750,000	$422,710
Total Variable Operating Costs	($1,351,977)	($341,005)
Variable Margin (Loss)	**$398,023**	**$81,705**
Total Equipment Costs	($38,649)	($9,902)
Total Facilities Costs	($44,578)	($12,793)
Total Selling and Marketing Costs	($5,150)	($4,120)
General and Administrative Expenses	($172,425)	($38,656)
Unforeseen and Contingency Expenses	($70,000)	($8,454)
Baseline EBITDA* (Loss)	**$67,220**	**$7,780**
Interest Expense	($6,149)	($2,296)
Depreciation Expense	($9,000)	($2,549)
Net Income (Loss)	**$52,071**	**$2,935**

*Earnings before interest, taxes, depreciation, and amortization

number of employees or in wage rates. This is especially true of salaried employees.

Even during the growth stage, additional delivery equipment will likely not be needed by direct-to-consumer hubs, and their paid staff will continue to be minimal, with most labor performed by volunteers.

Operational Models at "Viability"

With higher gross margins and a focus on lean operations and use of low-cost resources, direct-to-consumer hubs can achieve viability at a much lower sales level than the wholesale model.

The hub models also differ in their ability to acquire and maintain customers, especially at the viability level. While a concern during any operational phase, this is a major concern for direct-to-consumer hubs at the viability stage, which is often a period of high customer turnover. The hub will need to find a way to keep current customers engaged and returning, while simultaneously attracting new customers. Because of the nature of wholesale operations, these hubs are much more likely to have an easier time maintaining customers, providing that the hub's commitment to quality and customer service remains high.

Table 16
Viability Operational Period *Pro Forma* Comparison

	Wholesale	Direct-to-Consumer
Revenues	$2,400,000	$566,604
Total Variable Operating Costs	($1,873,858)	($451,705)
Variable Margin (Loss)	**$526,142**	**$114,899**
Total Equipment Costs	($44,693)	($14,033)
Total Facilities Costs	($29,366)	($13,176)
Total Selling and Marketing Costs	($5,305)	($4,244)
General and Administrative Expenses	($218,175)	($47,372)
Unforeseen and Contingency Expenses	($96,000)	($11,332)
Baseline EBITDA* (Loss)	**$132,604**	**$24,742**
Interest Expense	($8,433)	($3,077)
Depreciation Expense	($16,071)	($2,549)
Net Income (Loss)	**$108,099**	**$19,116**

*Earnings before interest, taxes, depreciation, and amortization

Conclusion

It is clear from the analysis conducted in this report that various operational model food hubs can be viable businesses. Sufficient sales can be achieved at reasonable levels to provide enough revenue to cover the costs of supporting activities, personnel, and infrastructure.

Regardless of the operational model, each venture must carefully consider the details of its operations. Small changes in costs can have a large impact on the finances of a food hub, due to the relatively low operating margins inherent in such ventures.

Product expenses are the largest single cost category. Changes in prices paid to producers can significantly affect profitability and, in some cases, even impact the hub's ability to remain in operation. Based on scenarios presented in this analysis, labor costs can also impact the sales levels required to achieve the various operational phases outlined in this report.

Outside financial support (e.g., grants, low-interest loans, community funds) can be critical to helping food hubs achieve success. Such outside funding can greatly reduce the sales revenue required to achieve financial stability.

Increasing the amount of money financed for purchasing equipment or investing in infrastructure produces little effect on the entity's overall finances. Food hubs often find it difficult to qualify for loans and financing, particularly when they are just beginning.

Each food hub will face different circumstances and goals, based on its unique mission. From a financial viewpoint, there is no "best" hub operational model. As food hubs grow, they typically begin to expand activities that more closely resemble other operational models, including hybrid operations which engage in both wholesale and direct-to-consumer sales. Regardless the evolution of the model, food hubs should seek to organize — including their operational and financial activities — around their core mission, and then strive to make sound financial choices.

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Photo courtesy of New North Florida Cooperative

Supplemental Tables
Wholesale Model

Table 17
Prototypical Wholesale Food Hub Balance Sheet

	Breakeven (B/E)	Growth (GR)	Viability (VI)
Assets			
Cash and Equivalents	($9,818)	($7,039)	$100,007
Accounts Receivables	$77,306	$111,806	$153,333
Total Current Assets	$67,487	$104,766	$253,341
Buildings And Equipment, Net	$141,000	$132,000	$123,000
Total Assets	**$208,487**	**$236,766**	**$376,341**
Liabilities and Members' Equity			
Current Liabilities			
Accounts Payable and Accrued Expenses	($11,999)	($24,568)	($33,693)
Accrued Interest	$4,252	($6,149)	($8,433)
Current Maturities of Long-Term Debt	($4,463)	($3,939)	($3,382)
Total Current Liabilities	**($12,210)**	**($34,657)**	**($45,508)**
Long-term Debt			
Senior Debt	$60,607	$52,027	$42,889
Less Current Maturities of Long-Term Debt	($4,463)	($3,939)	($3,382)
Members' Equity			
Member Equity and Equity Equivalents	$327,377	$171,265	$274,243
Retained Earnings (Losses)	($162,823)	$52,071	$108,099
Total Liabilities & Members' Equity	**$208,487**	**$236,766**	**$376,341**

Table 18
Wholesale Expense and Revenue Summary Figures

Wholesale Baseline	Annual Total Breakeven	Percent of Revenue Breakeven
Income		
Fresh Produce ($)	847,000	70.00%
Dairy Products ($)	121,000	10.00%
Other ($)	242,000	20.00%
Grant Funds ($)	0	0.00%
Total Sales All Types	**1,210,000**	**100.00%**
Variable Costs		
Product Lost in Transport/Handling & Returns	(38,557)	(3.2%)
Revenue to Farms (0.7)	(844,600)	(69.8%)
Credit Card Processing	(2,420)	(0.2%)
Packaging Material Expense	(2,881)	(0.2%)
Variable Labor & Delivery Expense	(61,794)	(5.1%)
Total Variable Costs	**(950,252)**	**(78.5%)**
Variable Margin	**259,748**	**21.5%**
Fixed Costs		
Equipment Loan Interest Pmnts	(8,401)	(0.7%)
Business Personal Property Tax	(554)	(0.0%)
Tools, Dies, Fixtures, Maint/Repairs	(10,100)	(0.8%)
Fixed Vehicle Expenses and Forklift Rental	(15,322)	(1.3%)
Total Equipment Costs	**(34,377)**	**(2.8%)**
Facilities		
Rent Expense	(22,100)	(1.8%)
Facility Expenses and Insurance	(5,580)	(0.5%)
Utilities	(15,600)	(1.3%)
Total Facility Costs	**(43,280)**	**(3.6%)**
Fixed Sales and Marketing		
Promotional Costs	(5,000)	(0.4%)
Total Selling and Marketing Costs	**(5,000)**	**(0.4%)**
General/Administrative		
Mgmt./Admin. Support/Fringe and Ovhd.	(105,963)	(8.8%)
General Expenses & Fees (Software, Legal, Phone, OFC Supplies etc.)	(22,300)	(1.8%)
Total General/Administrative Costs	**(128,263)**	**(10.6%)**
Unforeseen/Contingency		
Unforeseen Expenses and Bad Debt	(48,400)	(4.0%)
Total Fixed Costs	**(259,320)**	**(21.4%)**
Wholesale Baseline EBITDA*	**429**	**0.0%**
Equipment Depreciation	(9,000)	(0.7%)
Receivables Interest (23 days @ 0.085)	(4,252)	(0.4%)
Net Wholesale Baseline Income	**(12,823)**	**(1.1%)**

** Earnings before interest, taxes, depreciation, and amortization*

Annual Total Growth	Percent of Revenue Growth	Annual Total Viability	Percent of Revenue Viability
1,225,000	70.00%	1,680,000	70.00%
175,000	10.00%	240,000	10.00%
350,000	20.00%	480,000	20.00%
0	0.00%	0	0.00%
1,750,000	**100.00%**	**2,400,000**	**100.00%**
(56,913)	(3.3%)	(78,052)	(3.3%)
(1,212,431)	(69.3%)	(1,670,875)	(69.6%)
(3,500)	(0.2%)	(4,800)	(0.2%)
(4,167)	(0.2%)	(5,714)	(0.2%)
(74,966)	(4.3%)	(97,867)	(4.1%)
(1,351,977)	**(77.3%)**	**(1,857,308)**	**(77.4%)**
398,023	**22.7%**	**542,692**	**22.6%**
(7,326)	(0.4%)	(6,180)	(0.3%)
(765)	0.0%)	(1,020)	(0.0%)
(18,128)	(1.0%)	(22,792)	(0.9%)
(12,430)	(0.7%)	(14,701)	(0.6%)
(38,649)	**(2.2%)**	**(44,693)**	**(1.9%)**
(22,763)	(1.3%)	(23,446)	(1.0%)
(5,747)	(0.3%)	(5,920)	(0.2%)
(16,068)	(0.9%)	(16,550)	(0.7%)
(44,578)	**(2.5%)**	**(45,916)**	**(1.9%)**
(5,150)	(0.3%)	(5,305)	(0.2%)
(5,150)	**(0.3%)**	**(5,305)**	**(0.2%)**
(143,291)	(8.2%)	(187,662)	(7.8%)
(29,134)	(1.7%)	(30,513)	(1.3%)
(172,425)	**(9.9%)**	**(218,175)**	**(9.1%)**
(70,000)	(4.0%)	(96,000)	(4.0%)
(330,803)	**(18.9%)**	**(410,088)**	**(17.1%)**
67,220	**3.8%**	**132,604**	**5.5%**
(9,000)	(0.5%)	(16,071)	(0.7%)
(6,149)	(0.4%)	(8,433)	(0.4%)
52,071	**3.0%**	**108,099**	**4.5%**

Table 19
Wholesale Labor Summary

Breakeven (B/E)						
		Jan	**Feb**	**Mar**	**Apr**	**May**
Driver	# Emp.	1	1	2	2	2
Rate/Hr.	Total Hrs.	62	75	103	142	168
$13.50	Cost	$830	$1,015	$1,388	$1,922	$2,270
Admin Cost		$174	$174	$347	$347	$347
			Total Cost			**$22,469**
General Labor	# Emp.	1	1	1	1	1
Rate/Hr.	Total Hrs.	42	77	79	101	101
$10.50	Cost	$441	$809	$833	$1,058	$1,058
			Total Cost			**$10,433**
Warehouse Manager	# Emp.	1	1	1	1	1
Rate/Hr.	Total Hrs.	86	86	171	171	171
$15.50	Cost	$1,329	$1,329	$2,657	$2,657	$2,657
	Overtime Hours	–	–	–	–	–
	Cost	$0	$0	$0	$0	$0
			Total Cost			**$25,575**
Total Cost Production		**$2,600**	**$3,153**	**$4,878**	**$5,638**	**$5,985**
Office/ Admin.	# Emp.	1	1	1	1	1
Rate/Hr.	Total Hrs.	30	30	30	30	30
$16.00	Cost	$480	$480	$480	$480	$480
			Total Cost			**$5,760**
Total Labor Cost B/E		**$55,005**				

Jun	Jul	Aug	Sep	Oct	Nov	Dec
2	2	2	2	2	1	1
174	151	141	120	117	86	69
$2,347	$2,039	$1,899	$1,614	$1,575	$1,159	$938
$347	$347	$347	$347	$347	$174	$174
1	1	1	1	1	1	1
101	101	101	101	79	56	56
$1,058	$1,058	$1,058	$1,058	$833	$584	$584
1	1	1	1	1	1	1
171	171	171	171	107	86	86
$2,657	$2,657	$2,657	$2,657	$1,661	$1,329	$1,329
–	–	–	–	–	–	–
$0	$0	$0	$0	$0	$0	$0
$6,062	**$5,754**	**$5,614**	**$5,329**	**$4,069**	**$3,072**	**$2,851**
1	1	1	1	1	1	1
30	30	30	30	30	30	30
$480	$480	$480	$480	$480	$480	$480

Table 19 (Continued) **Wholesale Labor Summary**

		Growth (GR)			
		Q1	Q2	Q3	Q4
Driver	# Emp.	2	2	2	2
Rate/Hr.	Total Hrs.	311	661	556	362
$14.00	Cost	$4,359	$9,257	$7,777	$5,073
Admin Cost		$360	$360	$360	$360
	Total Cost			**$27,907**	
General Labor	# Emp.	1	1	1	1
Rate/Hr.	Total Hrs.	220	302	302	236
$11.00	Cost	$2,417	$3,325	$3,325	$2,593
	Total Cost			**$12,720**	
Warehouse Manager	# Emp.	1	1	1	1
Rate/Hr.	Total Hrs.	321	450	514	321
$15.50	Cost	$4,982	$6,975	$7,971	$4,982
	Overtime Hours	-	-	-	-
	Cost	$0	$0	$0	$0
	Total Cost			**$24,911**	
Total Cost Production		**$12,118**	**$19,917**	**$19,433**	**$13,009**
Office/Administrative	# Emp.	1	1	1	1
Rate/Hr.	Total Hrs.	126	252	252	126
$16.50	Cost	$2,079	$4,158	$4,158	$2,079
	Total Cost			**$12,474**	
Total Labor Cost GR		**$64,478**			

Wholesale Labor Summary

		Viability (VI)			
		Q1	**Q2**	**Q3**	**Q4**
Driver	# Emp.	2	2	2	2
Rate/Hr.	Total Hrs.	398	874	729	470
$14.75	Cost	$5,874	$12,893	$10,754	$6,937
Admin Cost		$379	$379	$379	$379
	Total Cost			**$37,975**	
General Labor	# Emp.	1	1	1	1
Rate/Hr.	Total Hrs.	425	431	495	367
$11.75	Cost	$4,999	$5,062	$5,818	$4,307
	Total Cost			**$21,904**	
Warehouse Manager	# Emp.	1	1	1	1
Rate/Hr.	Total Hrs.	321	386	514	450
$16.00	Cost	$5,143	$6,171	$8,229	$7,200
	Overtime Hours	-	-	-	-
	Cost	$0	$0	$0	$0
	Total Cost			**$26,743**	
Total Cost Production		**$16,395**	**$24,506**	**$25,180**	**$18,823**
Office/Administrative	# Emp.	1	1	1	1
Rate/Hr.	Total Hrs.	252	378	378	252
$17.00	Cost	$4,284	$6,426	$6,426	$4,284
	Total Costs			**$21,420**	
Total Labor Cost VI		**$106,324**			

Table 20
Wholesale Transportation Summary

Transportation Expense for Breakeven (B/E) ($)	Jan	Feb	Mar	Apr	May
Number of Delivery Days per Week	3	3	3	3	3
Number of Delivery Days per Month	12.9	12.9	12.9	12.9	12.9
$ Value of Produce Per Delivery Day	$1,976	$2,635	$4,282	$7,247	$9,223
$ Value of Dairy Per Delivery Day	$471	$565	$706	$894	$894
$ Value of Other Per Delivery Day	$941	$1,318	$1,506	$1,694	$1,976
Lbs. of Product Per Delivery Day	3990	5274	7710	11867	14573
Total Truckload Capacity	22500	22500	22500	22500	22500
% of Total Truck Capacity Utilized Per Load	18%	23%	34%	53%	65%
Number of Trucks Required	1.0	1.0	2.0	2.0	2.0
Total Average Miles Traveled per Delivery-All Trucks	**80**	**80**	**160**	**160**	**160**
Variable Vehicle Expenses					
Diesel Expense/Month	$339	$339	$679	$679	$679
Mileage Expense Per Mile Driven	$0	$0	$0	$0	$0
Reefer Unit Expense	$0	$0	$0	$0	$0
Total Variable Vehicle Expense	**$339**	**$339**	**$679**	**$679**	**$679**
Fixed Vehicle Expense					
Overhead Expense	$298	$298	$597	$597	$597
Total Fixed Vehicle Expense	**$298**	**$298**	**$597**	**$597**	**$597**
Personnel Expense					
Load Time (hr.) (Gen Labor)	6.9	7.3	8.6	8.6	8.6
Drive Time (hr.) (Driver)	23.5	25.0	29.4	29.4	29.4
Unload Time (hr.) (Driver)	38.0	50.2	73.4	113.0	138.8
Delivery Admin (hr.) (Gen Labor)	5.1	5.5	6.4	6.4	6.4
Total Time (hr.)	**73.5**	**88.0**	**117.9**	**157.4**	**183.2**
Driver Pay	$993	$1,188	$1,591	$2,126	$2,473
Driver Overtime Pay	$0	$0	$0	$0	$0
Loader Pay	$120	$128	$150	$150	$150
Total Personnel Expense	**$1,113**	**$1,316**	**$1,742**	**$2,276**	**$2,624**
Total Delivery Expense	**$1,751**	**$1,954**	**$3,017**	**$3,551**	**$3,899**

Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
3	3	3	3	3	3	3	
12.9	12.9	12.9	12.9	12.9	12.9	12.9	
$9,882	$7,905	$6,917	$5,270	$5,270	$3,294	$1,976	
$847	$847	$941	$941	$847	$753	$706	
$1,788	$1,882	$1,882	$1,694	$1,506	$1,318	$1,318	
15166	12774	11685	9470	9166	6392	4671	
22500	22500	22500	22500	22500	22500	22500	
67%	57%	52%	42%	41%	28%	21%	
2.0	2.0	2.0	2.0	2.0	1.0	1.0	
160	**160**	**160**	**160**	**160**	**80**	**80**	
$679	$679	$679	$679	$679	$339	$339	
$0	$0	$0	$0	$0	$0	$0	
$0	$0	$0	$0	$0	$0	$0	
$679	**$679**	**$679**	**$679**	**$679**	**$339**	**$339**	**$6,789**
$597	$597	$597	$597	$597	$298	$298	
$597	**$597**	**$597**	**$597**	**$597**	**$298**	**$298**	**$5,966**
8.6	8.6	8.6	8.6	8.6	7.3	7.3	
29.4	29.4	29.4	29.4	29.4	25.0	25.0	
144.4	121.7	111.3	90.2	87.3	60.9	44.5	
6.4	6.4	6.4	6.4	6.4	5.5	5.5	
188.9	**166.1**	**155.7**	**134.6**	**131.7**	**98.6**	**82.3**	
$2,550	$2,242	$2,102	$1,817	$1,778	$1,332	$1,110	
$0	$0	$0	$0	$0	$0	$0	
$150	$150	$150	$150	$150	$128	$128	
$2,700	**$2,393**	**$2,253**	**$1,968**	**$1,929**	**$1,459**	**$1,238**	**$23,010**
$3,976	**$3,668**	**$3,528**	**$3,243**	**$3,204**	**$2,097**	**$1,876**	**$35,764**

Table 20 (Continued)
Wholesale Transportation Summary

Trasnportation Expense for Growth (GR) ($)	GR Q1	GR Q2	GR Q3	GR Q4
Number of Delivery Days per Week	3	3	3	3
Number of Delivery Days per Quarter	39	39	39	39
$ Value of Produce Per Delivery Day	$4,288	$12,704	$9,687	$5,081
$ Value of Dairy Per Delivery Day	$839	$1,270	$1,316	$1,112
$ Value of Other Per Delivery Day	$1,815	$2,631	$2,631	$1,996
Lbs of Product Per Delivery Day	8,183	20,057	16,357	9,752
Truckload Capacity	22,500	22,500	22,500	22,500
% of Truck space Utilized Per Load	36%	89%	73%	43%
Number of Trucks Required	2.0	2.0	2.0	2.0
Total Average Miles Traveled per Delivery—All Trucks	**200**	**200**	**200**	**200**
Variable Vehicle Expense				
Diesel Expense/Quarter	$2,622	$2,622	$2,622	$2,622
Mileage Expense Per Mile Driven	$0	$0	$0	$0
Reefer Unit Expense	$0	$0	$0	$0
Total Variable Vehicle Expense	**$2,622**	**$2,622**	**$2,622**	**$2,622**
Fixed Vehicle Expense				
Overhead Expense	$2,304	$2,304	$2,304	$2,304
Total Fixed Vehicle Expense	**$2,304**	**$2,304**	**$2,304**	**$2,304**
Personnel Expense				
Load Time (hr)	22.7	25.8	25.8	24.6
Drive Time (hr)	78	88	88	84
Unload Time (hr)	233.8	573.1	467.3	278.6
Delivery Admin (hr)	17.0	19.3	19.3	18.3
Total Time (hr)	**351.1**	**706.4**	**600.6**	**405.3**
Driver Pay	$1,638	$9,889	$8,409	$1,891
Driver Overtime Pay	$0	$0	$0	$0
Loader Pay	$407	$463	$463	$439
Total Personnel Expense	**$2,046**	**$10,352**	**$8,871**	**$2,331**
Total Delivery Expense	**$6,972**	**$15,278**	**$13,798**	**$7,257**

Trasnportation Expense for Vitality (VI) ($)				
	VI Q1	**VI Q2**	**VI Q3**	**VI Q4**
Number of Deliveries per Week	3	3	3	3
Number of Deliveries per Quarter	39	39	39	39
$ Value of Produce Per Delivery Day	$5,880	$17,422	$13,284	$6,969
$ Value of Dairy Per Delivery Day	$1,151	$1,742	$1,804	$1,524
$ Value of Other Per Delivery Day	$2,489	$3,609	$3,609	$2,738
Lbs of Product Per Delivery Day	11,223	27,507	22,432	13,375
Truckload Capacity	22,500	22,500	22500	22500
% of Truck space Utilized Per Load	50%	122%	100%	59%
Number of Trucks Required	2.0	2.0	2.0	2.0
Total Average Miles Traveled per Delivery—All Trucks	**240**	**240**	**240**	**240**
Variable Vehicle Expense				
Diesel Expense/Quarter	$3,241	$3,241	$3,241	$3,241
Mileage Expense Per Mile Driven	$0	$0	$0	$0
Reefer Unit Expense	$0	$0	$0	$0
Total Variable Vehicle Expense	**$3,241**	**$3,241**	**$3,241**	**$3,241**
Fixed Vehicle Expense				
Overhead Expense	$2,848	$2,848	$2,848	$2,848
Total Fixed Vehicle Expense	**$2,848**	**$2,848**	**$2,848**	**$2,848**
Personnel Expense				
Load Time (hr)	22.7	25.8	25.8	25.8
Drive Time (hr)	78	88	88	88
Unload Time (hr)	320.6	785.9	640.9	382.1
Delivery Admin (hr)	17.0	19.3	19.3	19.3
Total Time (hr)	**437.9**	**919.2**	**774.2**	**515.4**
Driver Pay	$2,153	$13,558	$11,420	$2,534
Driver Overtime Pay	$0	$0	$0	$0
Loader Pay	$417	$474	$474	$474
Total Personnel Expense	**$2,570**	**$14,032**	**$11,894**	**$3,008**
Total Delivery Expense	**$8,659**	**$20,121**	**$17,983**	**$9,097**

Table 21
Wholesale Cash flow

	Ongoing	Jan	Feb	Mar	Apr
Operating Activities					
Net Income (loss)	(11,349)	(11,987)	(10,906)	1,327	15,249
Non cash charges to net income (loss)	0	0	0	0	0
Depreciation	750	750	750	750	750
Tax Credit	0	0	0	0	0
(Increase) Decrease in current assets	0	0	0	0	0
Accounts receivable	10,761	(1,855)	(11,132)	(19,481)	(32,932)
Inventories	0	0	0	0	0
Increase (decrease) in current liabilities	0	0	0	0	0
Accounts payable and accrued expenses	0	0	0	0	0
Accrued interest	145	153	204	293	444
Net Cash Provided by (Used in) Operating Activities	$306	($12,940)	($21,084)	($17,110)	($16,489)
Investing Activities					
Purchases of property and equipment	(75,000)	0	0	0	0
Financing Activities					
Member contributions (distributions)	18,750	0	0	0	0
Other contributions	0	153	204	293	444
Grants	0	0	0	0	0
Net borrowings (payments) on short-term loans or notes	0	0	0	0	0
Principal payments on long-term loans	0	(1,327)	(1,327)	(1,327)	(1,327)
Proceeds from long-term debt borrowings	56,250	0	0	0	0
Net Cash Provided by (Used in) Financing Activities	0	(1,174)	(1,123)	(1,033)	(882)
Net Increase in Cash	$306	($14,113)	($22,207)	($18,144)	($17,371)
Cash — beginning of period	$20,000	$20,306	$6,193	($16,014)	($34,157)
Cash — end of period	**$20,306**	**$6,193**	**($16,014)**	**($34,157)**	**($51,529)**

May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	B/E
								Annual
18,158	13,864	626	52	(7,526)	(3,774)	(13,720)	(14,187)	(12,823)
0	0	0	0	0	0	0	0	0
750	750	750	750	750	750	750	750	9,000
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
(22,264)	(4,175)	18,553	8,813	18,090	2,783	22,264	13,451	(7,885)
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
546	565	480	440	357	344	242	181	4,252
($2,809)	$11,005	$20,410	$10,055	$11,671	$103	$9,537	$195	($7,457)
							0	
0	0	0	0	0	0	0	0	(75,000)
0	0	0	0	0	0	0	0	0
546	565	480	440	357	344	242	181	4,252
0	0	0	0	0	0	0	0	0
0	(2,000)	0	0	(1,000)	0	(11,000)	3,000	(11,000)
(1,327)	(1,327)	(1,327)	(1,327)	(1,327)	(1,327)	(1,327)	(1,327)	(15,920)
0	0	0	0	0	0	0	0	56,250
(780)	(2,761)	(846)	(887)	(1,970)	(982)	(12,084)	1,854	(22,668)
($3,590)	$8,244	$19,563	$9,168	$9,701	($879)	($2,548)	$2,049	($30,125)
($51,529)	($55,118)	($46,874)	($27,311)	($18,143)	($8,441)	($9,320)	($11,868)	$20,306
($55,118)	**($46,874)**	**($27,311)**	**($18,143)**	**($8,441)**	**($9,320)**	**($11,868)**	**($9,818)**	**($9,818)**

Table 21 (Continued)
Wholesale Cash flow

	GR Q1	GR Q2	GR Q3
Operating Activities			
Net Income (loss)	(19,994)	87,520	16,982
Non cash charges to net income (loss)	0	0	0
Depreciation	2,250	2,250	2,250
Tax Credit	0	0	0
(Increase) Decrease in current assets	0	0	0
Accounts receivable	(28,999)	(95,258)	29,293
Inventories	0	0	0
Increase (decrease) in current liabilities	0	0	0
Accounts payable and accrued expenses	0	0	0
Accrued interest	(941)	(2,251)	(1,848)
Net Cash Provided by (Used in) Operating Activities	($47,684)	(7,739)	$46,678
Investing Activities			
Purchases of property and equipment	0	0	0
Financing Activities			
Member contributions (distributions)	0	0	0
Other contributions	941	2,251	1,848
Grants	0	0	0
Net borrowings (payments) on short-term loans or notes	0	0	0
Principal payments on long-term loans	(4,248)	(4,248)	(4,248)
Proceeds from long-term debt borrowings	0	0	0
Net Cash Provided by (Used in) Financing Activities	(3,308)	(1,998)	(2,401)
Net Increase in Cash	($50,991)	($9,736)	$44,277
Cash — beginning of period	($9,818)	($60,810)	($70,546)
Cash — end of period	**($60,810)**	**($70,546)**	**($26,269)**

GR Q4	VI Q1	VI Q2	VI Q3	VI Q4	Annual Total GR	Annual Total VI
(32,438)	(24,883)	133,914	36,612	(37,544)	52,071	108,099
0	0	0	0	0	0	0
2,250	4,018	4,018	4,018	4,018	9,000	16,071
0	0	0	0	0	0	0
0	0	0	0	0	0	0
53,667	(13,116)	(130,640)	40,173	73,600	(41,298)	(29,983)
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
(1,110)	(1,290)	(3,087)	(2,534)	(1,522)	(6,149)	(8,433)
$22,368	($35,272)	$4,205	$78,269	$38,551	$13,624	$85,754
0	0	0	0	0	0	0
0	31,000	0	0	0	0	31,000
1,110	1,290	3,087	2,534	1,522	6,149	8,433
0	0	0	0	0	0	0
0	0	0	0	0	0	0
(4,248)	(4,535)	(4,535)	(4,535)	(4,535)	(16,994)	(18,141)
0	0	0	0	0	0	0
(3,139)	27,755	(1,449)	(2,001)	(3,013)	(10,845)	21,293
$19,230	($7,517)	$2,756	$76,268	$35,539	$2,779	$107,047
($26,269)	($7,039)	($14,556)	($11,799)	$64,469	($9,818)	($7,039)
($7,039)	**($14,556)**	**($11,799)**	**$64,469**	**$100,007**	**($7,039)**	**$100,007**

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Photo courtesy of The Agriculture and Land-Based Training Association

Supplemental Tables
Direct-to-Consumer Model

Table 22
Prototypical Direct-to-Consumer Food Hub Balance Sheet

	Breakeven (B/E)	Growth (GR)	Viability (VI)
Assets			
Cash and Equivalents	16,836	19,890	38,967
Accounts Receivables	20,087	27,006	36,200
Inventories	0	0	0
Total Current Assets	**36,923**	**46,897**	**75,167**
Buildings and Equipment, Net of Depreciation	39,941	37,391	34,842
Other Assets, Net of Amortization	0	0	0
Total Assets	**$76,864**	**$84,288**	**$110,009**
Liabilities and Members' Equity			
Current Liabilities			
Accounts Payable and Accrued Expenses	0	0	0
Accrued Interest	1,707	(2,296)	(3,077)
Current Maturities of Long-Term Debt	(1,264)	(1,116)	(958)
Total Current Liabilities	**$443**	**($3,411)**	**($4,035)**
Long-term Debt			
Senior Debt	17,168	14,737	12,149
Less Current Maturities of Long-Term Debt	(1,264)	(1,116)	(958)
Members' Equity			
Member Equity and Equity Equivalents	214,147	71,143	83,737
Dispersed Member Equity	0	0	0
Retained Earnings (Losses)	(153,630)	2,935	19,116
Total Liabilities and Members' Equity	**$76,864**	**$84,288**	**$110,009**

Table 23
Direct-to-Consumer Expense and Revenue

Direct-to-Consumer Baseline	Annual Total Breakeven	Percent of Revenue Breakeven
Income		
Fresh Produce ($)	314,400	100.00%
Grant Funds ($)	0	0.00%
Total Sales All Types	**314,400**	**100.00%**
Variable Costs		
Product Lost in Transport/Handling & Returns	(7,531)	(2.4%)
COGS Produce ($)	(209,600)	(66.7%)
Donations To Pickup Sites	(9,432)	(3.0%)
Credit Card Processing	(2,830)	(0.9%)
Packaging Material Expense	(12,960)	(4.1%)
Variable Labor & Delivery Expense	(13,171)	(4.2%)
Total Variable Costs	**(255,524)**	**(81.3%)**
Variable Margin	**58,876**	**18.7%**
Fixed Costs		
Equipment Loan Interest Pmnts	(1,264)	(0.4%)
Business Personal Property Tax	(233)	(0.1%)
Tools, Dies, Fixtures, Maint/Repairs	(2,600)	(0.8%)
Fixed Vehicle Expenses and Forklift Rental	(2,859)	(0.9%)
Total Equipment Costs	**(6,957)**	**(2.2%)**
Facilities		
Rent Expense	(2,200)	(0.7%)
Facility Expenses and Insurance	(6,020)	(1.9%)
Utilities	(4,200)	(1.3%)
Total Facility Costs	**(12,420)**	**(4.0%)**
Fixed Sales and Marketing		
Promotional Costs	(4,000)	(1.3%)
Total Selling and Marketing Costs	**(4,000)**	**(1.3%)**
General/Administrative		
Mgmt./Admin. Support/Fringe and Ovhd.	(23,725)	(7.5%)
General Expenses & Fees (Software, Legal, Supplies etc.)	(4,860)	(1.5%)
Total General/Administrative Costs	**(28,585)**	**(9.1%)**
Unforeseen/Contingency		
Unforeseen Expenses and Bad Debt	(6,288)	(2.0%)
Total Fixed Costs	**(58,250)**	**(18.5%)**
Direct-to-Consumer Baseline EBITDA*	**627**	**0.2%**
Equipment Depreciation	(2,549)	(0.8%)
Receivables Interest (23 days @ 0.085)	(1,707)	(0.5%)
Net Direct-to-Consumer Baseline Income	**(3,630)**	**(1.2%)**

**Earnings before interest, taxes, depreciation, and amortization*

Annual Total Growth	Percent of Revenue Growth	Annual Total Viability	Percent of Revenue Viability
422,710	100.00%	566,604	100.00%
0	0.00%	0	0.00%
422,710	**100.00%**	**566,604**	**100.00%**
(7,873)	(1.9%)	(10,630)	(1.9%)
(281,807)	(66.7%)	(377,736)	(66.7%)
(12,681)	(3.0%)	(16,998)	(3.0%)
(3,804)	(0.9%)	(5,099)	(0.9%)
(17,200)	(4.1%)	(23,220)	(4.1%)
(17,640)	(4.2%)	(18,021)	(3.2%)
(341,005)	**(80.7%)**	**(451,705)**	**(79.7%)**
81,705	**19.3%**	**(451,705)**	**(79.7%)**
(1,116)	(0.3%)	(958)	(0.2%)
(218)	(0.1%)	(204)	(0.0%)
(2,678)	(0.6%)	(2,758)	(0.5%)
(5,890)	(1.4%)	(10,112)	(1.8%)
(9,902)	**(2.4%)**	**(14,033)**	**(2.5%)**
(2,266)	(0.5%)	(2,334)	(0.4%)
(6,201)	(1.5%)	(6,387)	(1.1%)
(4,326)	(1.0%)	(4,456)	(0.8%)
(12,793)	**(3.0%)**	**(13,176)**	**(2.3%)**
(4,120)	(1.0%)	(4,244)	(0.7%)
(4,120)	**(1.0%)**	**(4,244)**	**(0.7%)**
(33,150)	(7.8%)	(41,600)	(7.3%)
(5,506)	(1.3%)	(5,772)	(1.0%)
(38,656)	**(9.1%)**	**(47,372)**	**(8.4%)**
(8,454)	(2.0%)	(11,332)	(2.0%)
(73,925)	**(17.5%)**	**(90,157)**	**(15.9%)**
7,780	**1.8%**	**24,742**	**4.4%**
(2,549)	(0.6%)	(2,549)	(0.5%)
(2,293)	(0.5%)	(3,077)	(0.5%)
2,935	**0.7%**	**19,116**	**3.4%**

Table 24
Direct-to-Consumer Labor Summary

Breakeven (B/E)					
		Jan	**Feb**	**Mar**	**Apr**
Volunteer Labor	# Emp.	0	0	8	8
Rate/Hr.	Total Hrs.	0	0	47	47
$0.00	Cost	$0	$0	$0	$0
	Total Cost	**$0**			
Driver	# Emp.	0	0	1	1
Rate/Hr.	Total Hrs.	0	0	20	31
$13.00	Cost	$0	$0	$265	$397
	Total Cost	**$2,646**			
General Warehouse Labor	# Emp.	0	0	1	1
Rate/Hr.	Total Hrs.	0	0	17	34
$10.00	Cost	$0	$0	$171	$343
	Total Cost	**$2,057**			
Pickup Point Labor	# Emp.	0	0	2	2
Rate/Hr.	Total Hrs.	0	0	42	59
$10.50	Cost	$0	$0	$882	$1,235
	Total Cost	**$8,467**			
Total Cost Production:		**$0**	**$0**	**$1,318**	**$1,975**
Total Labor Cost B/E	**$13,171**				

May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
8	8	8	8	8	8	0	0
47	47	47	47	47	47	0	0
$0	$0	$0	$0	$0	$0	$0	$0
1	1	1	1	1	1	0	0
31	31	31	20	20	20	0	0
$397	$397	$397	$265	$265	$265	$0	$0
1	1	1	1	1	1	0	0
34	34	34	17	17	17	0	0
$343	$343	$343	$171	$171	$171	$0	$0
2	2	2	2	2	2	0	0
59	59	59	42	42	42	0	0
$1,235	$1,235	$1,235	$882	$882	$882	$0	$0
$1,975	**$1,975**	**$1,975**	**$1,318**	**$1,318**	**$1,318**	**$0**	**$0**

Table 24 (Continued) **Direct-to-Consumer Labor Summary**

		Growth (GR)			
		GR Q1	**GR Q2**	**GR Q3**	**GR Q4**
Volunteer Labor	# Emp.	13	13	13	13
Rate/Hr.	Total Hrs.	373	142	142	111
$0.00	Cost	$0	$0	$0	$0
	Total Cost	**$0**			
Driver	# Emp.	1	1	1	1
Rate/Hr.	Total Hrs.	38	129	129	41
$13.25	Cost	$500	$1,704	$1,704	$539
	Total Cost	**$4,446**			
General Labor	# Emp.	1	1	1	1
Rate/Hr.	Total Hrs.	34	167	206	34
$10.25	Cost	$351	$1,713	$2,109	$351
	Total Cost	**$4,966**			
Pickup Point Labor	# Emp.	2	2	2	2
Rate/Hr.	Total Hrs.	67	126	126	84
$10.75	Cost	$1,445	$2,709	$2,709	$1,806
	Total Cost	**$9,072**			
Total Cost Production:		**$2,296**	**$6,126**	**$6,521**	**$2,697**
Total Labor Cost GR	**$17,640**				

Direct-to-Consumer Labor Summary

		Viability (VI)			
		VI Q1	**VI Q2**	**VI Q3**	**VI Q4**
Volunteer Labor	# Emp.	20	20	20	20
Rate/Hr.	Total Hrs.	70	175	175	70
$0.00	Cost	$0	$0	$0	$0
	Total Cost	**$0**			
Driver	# Emp.	1	1	1	1
Rate/Hr.	Total Hrs.	36	122	122	41
$13.50	Cost	$484	$1,649	$1,649	$550
	Total Cost	**$4,331**			
General Labor	# Emp.	1	1	1	1
Rate/Hr.	Total Hrs.	34	167	206	34
$10.50	Cost	$360	$1,755	$2,160	$360
Total Cost	**$5,076**				
Pickup Point Labor	# Emp.	2	2	2	2
Rate/Hr.	Total Hrs.	76	126	126	84
$11.00	Cost	$1,663	$2,772	$2,772	$1,848
	Total Cost	**$9,467**			
Total Cost Production:		**$2,507**	**$6,176**	**$6,581**	**$2,758**
Total Labor Cost VI	**$18,021**				

Table 25
Direct-to-Consumer Transportation Summary

Trasnportation Expense for Breakeven (B/E) ($)	Jan	Feb	Mar	Apr	May
Number of Delivery Days per Week	2	2	2	2	2
Number of Delivery Days per Month	9	9	9	9	9
$ Value of Produce Per Delivery Day	$0	$0	$2,934	$4,402	$5,502
$ Value of Dairy Per Delivery Day	$0	$0	$0	$0	$0
$ Value of Misc. Per Delivery Day	$0	$0	$0	$0	$0
$ Value of Other Per Delivery Day	$0	$0	$0	$0	$0
Lbs. of Product Per Delivery Day	$0	$0	$0	$0	$0
Total Truckload Capacity	11250	11250	11250	11250	11250
% of Total Truck Capacity Utilized Per Load	**0%**	**0%**	**0%**	**0%**	**0%**
Number of Drop Off Points Per Delivery	10	10	10	10	10
Amount of Product Left at Each Point (Lbs)	0	0	0	0	0
# of 25 Lb Boxes Per Point (Units)	0	0	0	0	0
Number of Trucks Required	0.0	1.0	1.0	1.0	1.0
Total Average Miles Traveled per Delivery	**0**	**75**	**75**	**75**	**75**
Fixed Vehicle Expense					
Vehicle Reimbursement Expense	$0	$0	$357	$357	$357
Total Fixed Vehicle Expense	**$0**	**$0**	**$357**	**$357**	**$357**
Personnel Expense					
Load Time (hr) (Gen Labor)	0.0	4.9	5.7	5.7	5.7
Drive Time (hr) (Driver)	0.0	31.0	36.4	36.4	36.4
Unload Time (hr) (Driver)	0.0	0.0	0.0	0.0	0.0
Delivery Admin (hr) (Gen Labor)	0.0	3.6	4.3	4.3	4.3
Total Time (hr)	**0.0**	**39.5**	**46.5**	**46.5**	**46.5**
Driver Pay	$0	$0	$604	$604	$604
Driver Overtime Pay	$0	$0	$0	$0	$0
Loader Pay	$0	$0	$100	$100	$100
Total Personnel Expense	**$0**	**$0**	**$704**	**$704**	**$704**
Total Delivery Expense	**$0**	**$0**	**$1,062**	**$1,062**	**$1,062**

Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2	2	2	2	2	2	2	
9	9	9	9	9	9	9	
$6,602	$5,869	$5,135	$4,035	$2,201	$0	$0	
$0	$0	$0	$0	$0	$0	$0	
$0	$0	$0	$0	$0	$0	$0	
$0	$0	$0	$0	$0	$0	$0	
$0	$0	$0	$0	$0	$0	$0	
11250	11250	11250	11250	11250	11250	11250	
0%	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	
10	10	10	10	10	10	10	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
1.0	1.0	1.0	1.0	1.0	0.0	0.0	
75	**75**	**75**	**75**	**75**	**0**	**0**	
$357	$357	$357	$357	$357	$0	$0	
$357	**$357**	**$357**	**$357**	**$357**	**$0**	**$0**	**$2,859**
5.7	5.7	5.7	5.7	5.7	0.0	0.0	
36.4	36.4	36.4	36.4	36.4	0.0	0.0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4.3	4.3	4.3	4.3	4.3	0.0	0.0	
46.5	**46.5**	**46.5**	**46.5**	**46.5**	**0.0**	**0.0**	
$604	$604	$604	$604	$604	$0	$0	
$0	$0	$0	$0	$0	$0	$0	
$100	$100	$100	$100	$100	$0	$0	
$704	**$704**	**$704**	**$704**	**$704**	**$0**	**$0**	**$5,634**
$1,062	**$1,062**	**$1,062**	**$1,062**	**$1,062**	**$0**	**$0**	**$8,493**

Table 25 (Continued)
Direct-to-Consumer Transportation Summary

Trasnportation Expense for Growth (GR) ($)	GR Q1	GR Q2	GR Q3	GR Q4
Number of Delivery Days per Week	3	3	3	3
Number of Delivery Days per Quarter	13	39	39	13
$ Value of Produce Per Delivery Day	$13,495	$6,407	$0	$0
$ Value of Dairy Per Delivery Day	$0	$0	$0	$0
$ Value of Misc. Per Delivery Day	$0	$0	$0	$0
$ Value of Other Per Delivery Day	$0	$0	$0	$0
Lbs of Product Per Delivery Day	0	0	0	0
Truckload Capacity	11250	11250	11250	11250
% of Truck space Utilized Per Load	0%	0%	0%	0%
Number of Drop Off Points Per Delivery	15	15	15	15
Amount of Product Left at Each Point (Lbs)	0	0	0	0
# of 25 Lb Boxes Per Point (Units)	0	0	0	0
Number of Trucks Required	1.0	1.0	1.0	1.0
Total Average Miles Traveled per Delivery	**100**	**100**	**100**	**100**
Fixed Vehicle Expense				
Vehicle Reimbursement Expense	$736	$2,209	$2,209	$736
Total Fixed Vehicle Expense	**$736**	**$2,209**	**$2,209**	**$736**
Personnel Expense				
Load Time (hr)	7.6	25.8	25.8	8.2
Drive Time (hr)	70	238	238	75
Unload Time (hr)	0.0	0.0	0.0	0.0
Delivery Admin (hr)	5.7	19.3	19.3	6.1
Total Time (hr)	**83.0**	**283.0**	**283.0**	**89.6**
Driver Pay	$367	$3,750	$3,750	$396
Driver Overtime Pay	$0	$0	$0	$0
Loader Pay	$136	$463	$463	$146
Total Personnel Expense	**$502**	**$4,212**	**$4,212**	**$542**
Total Delivery Expense	**$1,239**	**$6,421**	**$6,421**	**$1,279**

Trasnportation Expense for Vitality (VI) ($)				
	VI Q1	**VI Q2**	**VI Q3**	**VI Q4**
Number of Deliveries per Week	4	4	4	4
Number of Deliveries per Quarter	17	51	51	17
$ Value of Produce Per Delivery Day	$12,162	$6,860	$0	$0
$ Value of Dairy Per Delivery Day	$0	$0	$0	$0
$ Value of Misc. Per Delivery Day	$0	$0	$0	$0
$ Value of Other Per Delivery Day	$0	$0	$0	$0
Lbs of Product Per Delivery Day	0	0	0	0
Truckload Capacity	11250	11250	11250	11250
% of Truck space Utilized Per Load	0%	0%	0%	0%
Number of Drop Off Points Per Delivery	25	25	25	25
Amount of Product Left at Each Point (Lbs)	0	0	0	0
# of 25 Lb Boxes Per Point (Units)	0	0	0	0
Number of Trucks Required	1.0	1.0	1.0	1.0
Total Average Miles Traveled per Delivery-All Trucks	**125**	**125**	**125**	**125**
Fixed Vehicle Expens				
Vehicle Reimbursement Expense	$1,264	$3,792	$3,792	$1,264
Total Fixed Vehicle Expense	**$1,264**	**$3,792**	**$3,792**	**$1,264**
Personnel Expense				
Load Time (hr)	10.1	34.5	34.5	11.5
Drive Time (hr)	64	219	219	73
Unload Time (hr)	0.0	0.0	0.0	0.0
Delivery Admin (hr)	7.5	25.7	25.7	8.6
Total Time (hr)	**81.8**	**278.7**	**278.7**	**92.9**
Driver Pay	$368	$3,763	$3,763	$418
Driver Overtime Pay	$0	$0	$0	$0
Loader Pay	$185	$632	$632	$211
Total Personnel Expense	**$553**	**$4,395**	**$4,395**	**$629**
Total Delivery Expense	**$1,817**	**$8,187**	**$8,187**	**$1,893**

Table 26
Direct-to-Consumer Cash flow

	Ongoing	Jan	Feb	Mar	Apr
Operating Activities					
Net Income (Loss)	(3,428)	(4,518)	(4,285)	88,815	(33,324)
Non cash charges to net income (loss)					
Depreciation	212	212	212	212	212
Tax Credit	0	0	0	0	0
(Increase) Decrease in current assets					
Accounts receivable	0	0	0	(95,312)	95,312
Inventories					
Increase (decrease) in current liabilities					
Accounts payable and accrued expenses					
Accrued interest	0	0	0	675	0
Net Cash Provided by (Used in) Operating Activities	($3,215)	($4,306)	($4,072)	($5,609)	$62,200
Investing Activities					
Purchases of property and equipment	0				
Financing Activities					
Member contributions (distributions)	0	0	0	0	0
Other contributions		0	0	675	0
Grants		0	0	0	0
Net borrowings (payments) on short-term loans or notes		0	0	0	0
Principal payments on long-term loans		(190)	(190)	(190)	(190)
Proceeds from long-term debt borrowings	0				
Net Cash Provided by (Used in) Financing Activities	0	(190)	(190)	485	(190)
Net Increase in Cash	**($3,215)**	**($4,496)**	**($4,263)**	**($5,124)**	**$62,010**
Cash — beginning of period	$20,000	$16,785	$12,289	$8,026	$2,902
Cash — end of period	**$16,785**	**$12,289**	**$8,026**	**$2,902**	**$64,912**

May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	B/E
								Annual
(40,001)	127,354	(42,227)	(37,119)	(30,442)	(19,314)	(4,285)	(4,285)	(3,630)
212	212	212	212	212	212	212	212	2,549
0	0	0	0	0	0	0	0	0
								0
0	(145,728)	145,728	0	0	0	0	0	0
								0
								0
0	1,032	0	0	0	0	0	0	1,707
($39,788)	($17,130)	$103,714	($36,906)	($30,230)	($19,102)	($4,072)	($4,072)	$627
								0
								0
								0
0	0	0	0	0	0	0	0	0
0	1,032	0	0	0	0	0	0	1,707
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
(190)	(190)	(190)	(190)	(190)	(190)	(190)	(190)	(2,282)
								0
(190)	842	(190)	(190)	(190)	(190)	(190)	(190)	(575)
($39,979)	**($16,288)**	**$103,524**	**($37,097)**	**($30,420)**	**($19,292)**	**($4,263)**	**($4,263)**	**$52**
$64,912	$24,933	$8,646	$112,170	$75,073	$44,653	$25,362	$21,099	$16,785
$24,933	**$8,646**	**$112,170**	**$75,073**	**$44,653**	**$25,362**	**$21,099**	**$16,836**	**$16,836**

Table 26 (Continued)
Direct-to-Consumer Cash flow

	GR Q1	GR Q2	GR Q3
Operating Activities			
Net Income (Loss)	117,195	69,142	(146,676)
Non cash charges to net income (loss)			
Depreciation	637	637	637
Tax Credit	–	–	–
(Increase) decrease in current assets			
Accounts receivable	(44,558)	(18,909)	63,468
Inventories			
Increase (decrease) in current liabilities			
Accounts payable and accrued expenses			
Accrued interest	(947)	(1,349)	–
Net Cash Provided by (Used in) Operating Activities	**$72,327**	**49,522**	**($82,571)**
Investing Activities			
Purchases of property and equipment	–		
Sale of Property and Equipment			
Financing Activities			
Member contributions (distributions)	–	–	–
Other contributions	947	1,349	–
Grants	–	–	–
Net borrowings (payments) on short-term loans or notes	–	–	–
Principal payments on long-term loans	(608)	(608)	(608)
Proceeds from long-term debt borrowings	–		
Net Cash Provided by (Used in) Financing Activities	**339**	**741**	**(608)**
Net Increase in Cash	**$72,666**	**$50,263**	**($83,178)**
Cash — beginning of period	$16,836	$89,503	$139,766
Cash — end of period	**$89,503**	**$139,766**	**$56,587**

GR Q4	VI Q1	VI Q2	VI Q3	VI Q4	Annual Total GR	Annual Total VI
(36,727)	139,399	117,859	(192,414)	(45,728)	2,935	19,116
					–	–
637	637	637	637	637	2,549	2,549
–	–	–	–	–	–	–
					–	–
–	(53,831)	(37,136)	90,967	–	–	–
					–	–
					–	–
–	(1,144)	(1,933)	–	–	(2,296)	(3,077)
($36,089)	**$85,061**	**$79,427**	**($100,809)**	**($45,091)**	**$3,189**	**$18,589**
	–				–	–
	–				–	–
–	–	–	–	–	–	–
–	1,144	1,933	–	–	2,296	3,077
–	–	–	–	–	–	–
–	–	–	–		–	–
(608)	(647)	(647)	(647)	(647)	(2,430)	(2,588)
					–	–
339	**485**	**1,269**	**(647)**	**(647)**	**(135)**	**489**
$72,666	**$85,558**	**$80,713**	**($101,456)**	**($45,738)**	**$3,054**	**$19,077**
$56,587	$19,890	$105,448	$186,161	$84,705	$16,836	$19,890
$19,890	**$105,448**	**$186,161**	**$84,705**	**$38,967**	**$19,890**	**$38,967**

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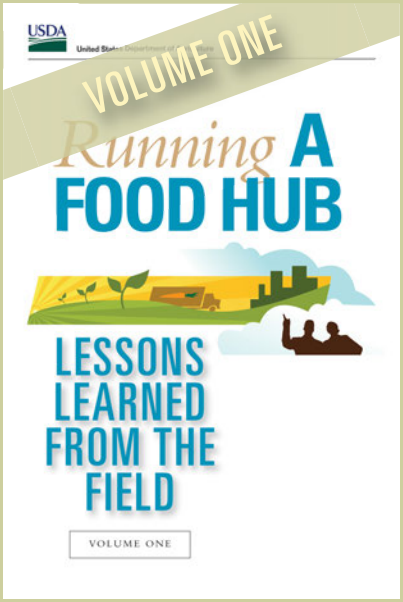

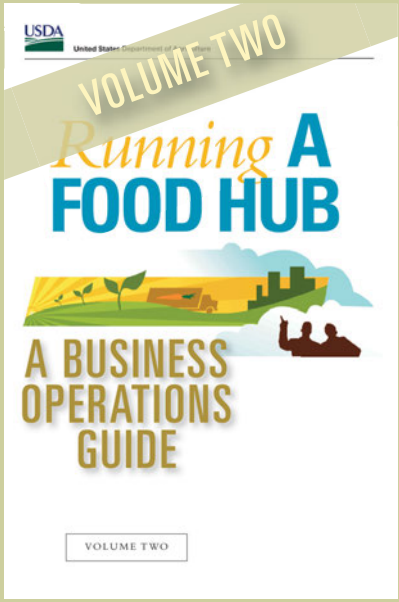

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