

# Vermont Producers and Wholesale Markets: Survey Results

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## Introduction

In the fall of 2014, The Vermont Agency of Agriculture Food and Markets (VAAFMM) developed and administered a survey to Vermont food and farm businesses. The goal of the survey was to better understand food and farm businesses that are currently engaged and/or interested in selling to wholesale markets<sup>1</sup>. The Northeast Organic Farming Association of Vermont (NOFA-VT) and VAAFMM enlisted David Conner, a food systems researcher with expertise in statistical analysis, to analyze the survey results to determine Vermont producers' interest in and current service to institutional and other wholesale markets. This report highlights key results of the survey and their implications for technical assistance to Vermont producers.



## Methods

The survey questions were developed by VAAFMM and reviewed by numerous stakeholders before being distributed to Vermont food and farm businesses. Questions focused on certifications, infrastructure, markets and perceived barriers to selling in wholesale markets. The survey frame was composed of food and farm businesses known to VAAFMM, NOFA-VT and other food systems stakeholders within the state. The survey was developed on Survey Monkey and a link was sent to those in the sample frame. A total of 125 survey responses were collected, but only 119 were useable.

Data were uploaded into SPSS and analyzed by Conner. Data analysis focused on how businesses currently selling in wholesale markets have been affected by their participation in wholesale markets. A 'NOVA' analysis was used to measure if respondents who answered questions about their wholesale aspirations differently had statistically significant different answers to questions about various business characteristics.

## Results

Compared to the entire population of Vermont farmers, the survey sample has higher than average income, fewer acres in production, more direct sales relationships, and represents more organic farms than the state average (see Table 1). Some of the discrepancies may be because not all respondents to the survey are farmers (i.e. included food processors).

**Table 1:** Comparing sample and state means<sup>1</sup>

	<b>Sample</b>	<b>State</b>
Annual Sales (\$)	209,234	105,765
Acres	70 <sup>2</sup>	171
% direct sales	19	4
% dairy farmers	16	15
% certified organic	32	8

<sup>1</sup>Source: 2012 NASS Census of Agriculture

<sup>2</sup>Only farmers (as opposed to processors) were included in this calculation



<sup>1</sup> For this survey, "wholesale markets" was defined as all markets in which the purchaser is not the final consumer. Such markets include grocery stores (of all sizes), restaurants, and all institutions. "Institutions" were defined as any organization, establishment, foundation, or society devoted to the promotion of a particular cause or program, especially one of a public, educational, or charitable character.

Survey respondents sell their products in diverse market channels:

- 42% sell through CSA shares;
- 64% sell through farmers' markets;
- 58% sell through U-pick, on-line marketplaces and/or farm stands;
- 79% sell directly to accounts (direct sales to institutions, restaurants, and retailers);
- 47% sell indirectly to institutions, restaurants and retailers through a producer cooperative, distributor or food hub; and
- 40% sell indirectly to consumers through alternative market channels.



Most respondents (84%) have diversified their market channels and sell to more than one market channel listed above, with the greatest proportion (26%) selling to three diverse channels.

- 16% sell to one channel;
- 12% sell to two channels;
- 26% sell to three channels;
- 20% sell to four channels;
- 13% sell to five channels; and
- 14% sell to six channels.

Over half of respondents (60%) currently sell to wholesale markets (directly and/or indirectly), and an additional 34% are interested in selling to wholesale markets. Of the respondents who currently sell to wholesale markets, nearly half (46%) are looking to expand their direct sales to institutions, retailers, or restaurants and a third (33%) are looking to expand their indirect sales to institutions, retailers, or restaurants through a producer cooperative, distributor, or food hub.

Most respondents sell directly to consumers--through farmers' markets, CSA shares, or on-farm sales (U-pick, online marketplace, and/or farm stands)--and/or directly to institutions, restaurants, and/or retailers. The reliance on direct sales to consumers and accounts demonstrated above is borne out in the infrastructure and capacities of these same businesses. For example, most respondents (84%) have liability insurance (necessary for nearly all types of markets), but very few have GAP certification (5%) or a HAACP plan (11%), which are more generally required or rewarded in intermediated wholesale markets.

The food and farm businesses in the sample sell a variety of products. Just over a third of respondents (34%) are diversified operations, selling more than one of the products listed below. When asked to identify their four highest volume products:

- 46% identified one or more vegetables;
- 24% identified one or more meat products;
- 20% identified one or more fruits;
- 16% identified dairy (including fluid milk and other dairy products);
- 13% identified a value-added product;
- 6% identified eggs;
- 5% identified grains; and
- Less than 5% identified maple, or legumes.



Table 2 presents how businesses that are currently selling in wholesale markets perceive barriers to doing so. The most challenging barriers to overcome are meeting product consistency and form (i.e. minimally processed) requirements, while the least challenging barrier is being profitable with lower margin/prices.

**Table 2:** Perception of barriers (four-point scale) to selling in wholesale markets reported by businesses currently selling to wholesale markets

<b>Barriers to serving institutional and wholesale markets</b>	<b>Degree of difficulty (1-4 scale; 1=very easy, 4=very difficult)</b>
Being profitable in markets with lower margins/prices	2.04
Overcoming seasonal constraints, e.g. schools are not in session during most of the growing season	2.81
Identifying and connecting with new institutional/wholesale accounts	2.86
Distributing to multiple sites	2.90
Connecting with distributors and food hubs to carry your product	3.01
Developing market appropriate marketing materials	3.04
Meeting the large volume requirements	3.13
Meeting food safety and liability requirements	3.40
Meeting product form factor requirements/specifications	3.46
Providing a minimally processed product	3.47
Meeting product consistency requirements	3.78

Table 3 presents the percentage of businesses currently selling to wholesale markets that have made various changes to their business model as a result of selling to wholesale markets. The most common changes reported are the purchase of capital infrastructure (other than processing equipment) and the construction of new on-farm facilities. The least common change was pursuing food safety certifications, such as GAP, GHP, and HACCP.

**Table 3:** Percentage of businesses currently selling in wholesale markets that have made various changes to their business model *as a result of selling to wholesale markets*

<b>Change made to business model</b>	<b>Percentage of businesses currently selling wholesale that made the change</b>
Became GAP, GHP, or HACCP certified	11%
Leased more land to put into production	17%
Worked with a food processor or food hub selling into new markets	21%
Put more land into production that your farm already owned or leased	21%
Bought processing equipment	25%
Changed the mixture or characteristics of our products to meet institutional and wholesale market demand	32%
Developed and implemented a formal food safety plan	33%
Constructed new on-farm facilities (e.g. wash station, storage unit, etc.)	38%
Bought other capital infrastructure (e.g. delivery truck, machinery, etc.)	42%

Table 4 presents business characteristics, such as infrastructure, practices related to excess product, and certifications, that vary significantly by a business's type of engagement with wholesale markets. Only characteristics that are significantly different (at  $\alpha=0.10$ ) are reported in Table 4. Businesses currently selling to wholesale markets are more likely to be certified organic both by USDA and Vermont Organic Farmers (VOF). They are also more likely to have access to infrastructure resources, including dry storage, refrigerated storage, a washing station, a packing facility, and a dedicated staff driver. Moreover, they are more likely to participate in a gleaning program and sell excess product and "seconds" to institutions or wholesale buyers. Businesses interested in expanding into wholesale markets are more likely to process seconds or gleaned products into cut or frozen value-added products.



**Table 4:** Business characteristics by current engagement in wholesale markets

<b>Business Characteristic</b>	<b>Not interested in wholesale</b>	<b>Interested in wholesale, but no current sales</b>	<b>Currently sell wholesale</b>
Dry storage***	10%	37%	72%
Refrigerated storage***	40%	40%	69%
Washing station***	20%	35%	60%
Packing facility***	10%	23%	51%
Dedicated staff driver*	0%	14%	25%
Participate in a gleaning program**	20%	23%	31%
Sell excess product to institutions or wholesale buyers**	10%	23%	46%
Process seconds or gleaned produce into cut or frozen value-added products**	0%	30%	15%
USDA Certified Organic***	0%	9%	29%
(VOF) Certified***	10%	9%	35%

\*denotes significance at  $\alpha=0.10$ ; \*\*denotes significance at  $\alpha=0.05$ ; \*\*\*denotes significance at  $\alpha=0.01$

## Discussion

**Businesses already selling to wholesale markets are more likely to have invested in critical pieces of on-farm processing, storage, and distribution infrastructure.** Most of these businesses have dry storage, refrigerated storage, a washing station, and a packing facility, and they are significantly more likely to have these critical pieces of infrastructure than businesses that do not sell to wholesale markets. Our analysis cannot determine whether businesses invested in these infrastructure pieces in order to be able to sell in wholesale markets or as a result of selling to wholesale markets, or neither. The results do suggest, however, that wholesale-savvy businesses have these key pieces of infrastructure in common, suggesting they help businesses meet the demands of wholesale markets.



**Businesses already selling to institutional or wholesale markets are less likely to see price as a barrier, and more likely to see consistency, logistics, product specifications and processing as barriers.** Building on the point above, wholesale markets require participating businesses make a complex set of investments, spanning: adopting effective practices for production, logistics and marketing, record keeping, relationships, equipment, and infrastructure. Even with these investments, meeting wholesale requirements are an ongoing challenge for food and farm businesses. Contrary to popular belief, price and profitability are not significant barriers; wholesale and institutional markets can be part of a successful farm or food business's marketing portfolio.

**Selling to wholesale markets allows businesses to invest in key infrastructure.** Nearly 40% of respondents' that currently sell to wholesale markets reported constructing new on-farm facilities and purchasing capital infrastructure as a result of selling wholesale, suggesting participation in wholesale markets allows businesses to expand and/or mature.

**Businesses are willing to adjust their business models to meet demands of wholesale markets.** Nearly a third of respondents that currently sell in wholesale markets reported developing a formal food safety plan and changing the mixture or characteristics of their products to meet wholesale market demands. These adaptations would likely not have been made if the businesses were not confident that the wholesale market was a viable option, thus echoing the finding that experienced wholesale sellers are less concerned about profitability than meeting product form or consistency requirements.

**Businesses engaged in wholesale markets are more likely to be certified organic.** Many producers who rely largely or solely on direct-to-consumer markets are exempt from food safety regulations and rely on word of mouth and relationships with customers to convey their product information. For these producers, certification may not be cost effective. For producers serving wholesale markets, however, buyers may require or reward the certified organic label, and it may bring a premium price in the wholesale marketplace.

**Businesses already selling to wholesale markets are more likely to profit from excess product and 'seconds' by selling them to institutions or wholesale buyers.** These businesses already have established relationships with institutions and wholesale buyers that want to purchase excess product or 'seconds' at a lower price.

## Implications for Outreach and Further Research

The results of this survey suggest avenues of outreach. There are a host of infrastructure needs to sell to wholesale markets, such as washing, packing, storage and transportation. Technical assistance providers can work to ensure producers have capital to make these investments. Two specific initiatives come to mind. First, model business plans for these investments can encourage investment plan development and can both guide producer investment (What is the right time for investment? How will it cash flow?) and provide lenders with credible evidence to justify loans.

Second, technical assistance can help both current and prospective wholesale businesses better understand the processing, consistency, and food safety requirements of buyers. Training can help overcome these barriers and ensure the production of consistent and safe products. Research can guide these outreach initiatives. Case studies of farm and food businesses who have made the needed investments and successfully sell wholesale can help guide order of investments and inform how debt service and cash flow result. Similarly, interviews or surveys with buyers and producers can inform best practices for meeting the consistency, processing and safety needs of the market.



## Conclusions

This report outlines the current state of wholesale readiness of more than 100 Vermont food and farm businesses. The report demonstrates that there is significant interest amongst Vermont producers to either expand service to or begin serving wholesale markets. As such, it is necessary to provide producers with relevant technical assistance to facilitate their transition to or expansion within wholesale markets. Results from this survey show that effectively meeting wholesale orders is complex, even for experienced food and farm businesses, but that it can be part of a successful market portfolio.

Furthermore, the results demonstrate that businesses already selling to wholesale markets have different characteristics and practices than those seeking to expand into wholesale markets. Understanding the differences between businesses that are already selling to wholesale markets and those that would like to start doing so can inform technical assistance offerings to businesses looking to expand into wholesale markets.

The strengths of this study are the relatively high number and diversity of respondents, which offers a good snapshot on a broad array of business types. The major weakness is the lack of a representative sample. Results may not be accurately generalized to the entire Vermont food and farm business population. Future research should focus on understanding the financial outcomes of investments in wholesale equipment and infrastructure and developing best practices for meeting the consistency, processing and safety needs of the wholesale marketplace.

