



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

Writing a Business Plan: An Example for a Small Premium Winery

*An example of a business plan written for a small
premium winery in the Finger Lakes Region of New York*

by

**Mark E. Pisoni
and
Gerald B. White**



**Department of Applied Economics and Management
College of Agriculture and Life Sciences
Cornell University, Ithaca, New York 14853-7801**

It is the policy of Cornell University actively to support equality of educational and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age or handicap. The University is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.

Table of Contents

INTRODUCTION	1
EXAMPLE BUSINESS PLAN.....	3
<i>EXECUTIVE SUMMARY.....</i>	<i>3</i>
<i>BUSINESS DESCRIPTION:.....</i>	<i>4</i>
<i>PLAN OF OPERATIONS.....</i>	<i>5</i>
<i>MANAGEMENT TEAM.....</i>	<i>7</i>
<i>INDUSTRY ANALYSIS:.....</i>	<i>8</i>
<i>COMPETITOR ANALYSIS.....</i>	<i>10</i>
<i>MARKETING PLAN</i>	<i>13</i>
<i>FINANCIAL PLAN</i>	<i>19</i>
<i>APPENDIX.....</i>	<i>26</i>
REFERENCES	44

Writing a Business Plan: An Example for a Small Premium Winery

By Mark E. Pisoni and Gerald B. White*

INTRODUCTION

This is the second publication directed toward helping vintners and prospective investors to develop a business plan for a premium winery in New York State. (The first publication was Pisoni and White, *Writing a Business Plan: A Guide for Small Premium Wineries*, E. B. 2002-06). The first bulletin was a template for developing a business plan for a small premium winery in New York State.

The main aim of this bulletin is to serve as an example of a business plan, developed using the format from EB 2002-06, that demonstrates the marketing potential and the financial feasibility for a winery producing premium wines that sell at price points above \$20 per bottle. The plan has three major components.

The first component emphasizes the plan of operations and the management team for the example winery.

The second component is the development of a marketing strategy that will differentiate the premium product from other wines in the market. This differentiation is aimed at enabling the premium producer to market wines at prices not yet received by many New York wineries. Emphasis will be placed on various aspects of product offering, price, promotion, and distribution strategies. In particular, emphasis will be devoted to developing alternative distribution outlets. It is hypothesized that New York producers must emphasize different marketing channels, not relying only on sales at the tasting room, to be successful in the premium category.

The third component of the example business plan estimates the investment and operating costs for a small winery producing the highest quality Pinot Noir. To ensure efficient use of the winery's facilities and to meet current market demands, the proposed winery will also produce small high quality lots of Chardonnay, Riesling, and Cabernet Franc. This production strategy will allow the winery to best use its equipment and distribute through

*The authors are former Graduate Assistant, Department of Applied Economics and Management, Cornell University, currently with the management team of Pisoni Vineyards and Winery, Gonzales, CA; and Professor, Department of Applied Economics and Management, Cornell University. This project was funded by a grant from the New York State Department of Agriculture and Markets "Grow NY" Program and a subcontract through the Research Committee of the Finger Lakes Pinot Noir Alliance. Appreciation is expressed to Bob Pool for his review and helpful suggestions on an earlier draft of this publication.

the optimal marketing channels. Winery equipment needs in the example plan were developed through consultations with premium California producers and representatives of equipment suppliers. The equipment component list was then refined to fit the New York situation by consultations with Thomas Henick-Kling, Thomas Cottrell and members of the Research Committee of the Finger Lakes Pinot Noir Alliance. The Research Committee also helped to specify the retail prices and the allocation percentages to the three distribution channels (winery tasting room, direct to retailers, and distributors).

The overall goal of the project was to develop an optimal marketing strategy, enological and viticultural practices, and evaluate the economic feasibility for producing an ultra premium Pinot Noir varietal wine in New York State. Specific objectives were

- 1) To develop a strategy for successfully marketing ultra premium wines from New York State priced at higher price points (i. e. \$20 per bottle) than most wineries are now attaining,
- 2) To develop cash flow estimates for 10 years in the development of the prototype winery to determine the economical potential.
- 3) To assess the risk of investment in the model winery to economic parameters such as wine prices, interest rates, grape prices, and equipment costs.

For vineyard practices and costs for these premium vinifera varieties, see White and Pisoni, Cost of Establishment and Production of Vinifera Grapes in the Finger Lakes Region of New York, 2001 (E.B. 2002-01).

Potential Use

This example business plan can be used by individual firms to develop estimates for their own operations. The close working relationship with the Finger Lakes Pinot Noir Alliance's Research Committee helps to ensure that the final prototype plan is adaptable to the New York situation. The results can be of immediate use to the members of this group who either already have, or will soon, develop their individual plans for attaining premium Pinot Noir production.

It should be emphasized that the financial feasibility analysis shown in this publication is not meant to represent the financial performance of an average small farm winery in New York. The situation in the example plan is different in several respects from the average New York winery. First, production is limited to about 9,000 cases using high quality vinification methods and top of the line equipment; secondly, production is totally from vinifera varieties; and thirdly, price points are higher than those being attained by most New York wineries. The ultimate aim is to develop a strategy for eventually breaking out of heavy reliance on tasting room sales direct to consumers. (The concept of this business plan is not to represent what the New York wine industry is now, but what it could be in the future for some wineries who are paying the utmost attention to quality and marketing strategy.)

EXAMPLE BUSINESS PLAN

Executive Summary

The proposed small premium winery will be located in the Finger Lakes region of New York. Annual production will begin at 1,850 cases in year one and increase to 9,250 cases in year five. The winery will produce the following four vinifera varieties: Pinot Noir, Cabernet Franc, Chardonnay, and Riesling. The majority of the wine will be sold out of the tasting room, but as production increases we will utilize other distribution channels (high-end restaurants and wine shops) to reach customers.

The key to the winery's success will be its high quality vinifera wine. Research shows that consumers are drinking more expensive and higher quality wines, and the proposed winery will capitalize on these consumption trends. Few wineries in the Finger Lakes focus exclusively on vinifera varieties, and doing so will differentiate us from local competitors.

The following table summarizes the amount of money needed each year to establish the proposed small, premium winery. The money will be used to construct the winery and tasting room, purchase the necessary winemaking equipment, and cover the annual operating expenses.

Year	Amount of money needed
Year 0	\$ 690,042
Year 1	\$ 630,150
Year 2	\$ 267,818
Year 3	\$ 154,257
Year 4	\$ 1,545
Total over four years	\$ 1,734,812

Business Description:

Mission Statement:

Our mission is to produce the highest quality vinifera wines from the Finger Lakes region of New York. The winery will provide an enjoyable lifestyle and adequate standard of living for both the owner and employees.

Business Description:

I am entering the wine business because of my love of wine, winemaking, and the winemaker lifestyle. I have worked as a cellar rat and winemaker for a number of years for other wineries gaining the experience I need to carry out my dream of owning and operating my own small premium winery.

The proposed winery will be located in the Finger Lakes region of New York. There are a number of successful wineries in the Finger Lakes, but, the majority of these wineries focus on making wines from native varieties and French-American hybrids. These wines are very popular among local consumers; however, I feel there will be a growing demand for high quality vinifera wines from the Finger Lakes region in the near future. Research shows that as consumers become more sophisticated about wine, they gravitate towards higher quality vinifera wines.

The winery is currently in the developmental stages, but the initial production plans and growth strategies have been established. The winery will produce Pinot Noir, Cabernet Franc, Riesling, and Chardonnay from vineyards throughout the Finger Lakes. Production will begin at about 2,000 cases (about 500 of each varietal) and increase to 10,000 cases in year five.

The winery has been set up as a Limited Liability Company (LLC). An LLC was selected because of its liability protection, flexibility, and favored tax treatment. An LLC protects its owners from being held personally responsible for the business's liabilities. The most money an investor can lose is his or her investment in the company.

Goal # 1: Obtain the permits necessary for commercial wine production		
Objectives:	When?	Who?
(1) Contact Uncork NY & extension offices for information	January	Me
(2) Contact local wineries to learn of their experiences and recommendations for a lawyer	January	Me
(3) Send to BATF and SLA for application packets	January	Me
(4) Hire a lawyer to help with the application process	February	Me
(5) Have all forms and paperwork submitted	April	Me

Plan of Operations

The proposed winery will purchase grapes from top vineyards around the Finger Lakes regions. Grapes will be transported to the winery via flatbed trailers and, as is customary in the wine industry, grape growers pay for harvesting and transportation charges. (For vineyard operations and costs, see White and Pisoni, 2002.)

Red wine making process

Hand harvested grapes (Pinot Noir and Cabernet Franc) will be removed from the flatbed trailer with a forklift and the grape bins will be dumped onto the sort table with a conveyor. The grapes will then move along the conveyor and workers will remove any rotten or unripe grapes. The grapes will then go into the crusher/destemmer that rests on top of the stainless steel fermentation vat. The red grapes will ferment for about 14 days in the open top stainless steel fermentation vats. Once fermentation is complete, the free run wine will be pumped out of the stainless steel tanks and placed into oak barrels for aging. The must will be pumped into the press, and the pressed wine will then be pumped into French oak barrels for aging. The wines will age in barrel for about 12 months and will most likely be racked twice. Wines will then be pumped out of barrel, filtered, and run through the bottling line. There the wine will be bottled, corked, labeled, and capsuled. Workers will take the finished wine off at the end of the bottling line and place the wine in cases where it will age another six months prior to release. Thus, the wine is sold 18 months after harvest.

White wine making process

Chardonnay is made in a similar fashion except that after pressing the juice falls into a settling tank where it settles overnight. The free run juice is then pumped off into barrels where it ferments. The must is then pumped out of the tank and pressed, and the pressed wine is pumped into barrels to ferment. The wine ages for 12 months and then is bottled in similar fashion to the red varieties. Thus, Chardonnay wine is sold 18 months after harvest.

Riesling is made in a similar fashion except that after pressing, the wine is fermented and aged in stainless steel tanks instead of oak barrels. Riesling is only aged six months in the tanks and then it is bottled. The wine ages another six months in bottle and is then sold. Thus, the Riesling is sold 12 months after harvest.

Sales

The majority of sales take place in the tasting room and thus distribution is not a serious issue. The wine is aged in the winery and when it is ready to be sold it is brought into the tasting room as needed. Wines are then sold from a cash register in the tasting room.

In year five a small percent of wine, 10%, is being sold to local restaurants and in year six another 10% of wine is sold through distributors. A full time marketing/sales person is hired in year five to take care of these sales to restaurants.

Projected Personnel Requirements

Employee job descriptions

Position	Job Description
Winemaker/ General Manager	Wine production, quality control, coordinating winery operation and maintenance, sales, marketing, financial record keeping, and staffing
General Manager	Coordinate winery operation and maintenance, sales, marketing financial record keeping, and staffing (Starting in year 5)
Winemaker	Wine production, lab management, and quality control (Starting in year 5)
Assistant Winemaker	Assist winemaker in lab duties, quality control, wine production, and inventory management (Years 3 and 4)
Sales Person	Promote and market wine, organize product shipping functions, and maintain relationship with distributors (Starting in year 5)
Cellar Rat	Assist winemaker with wine production, quality control, winery operation and maintenance, and warehousing
Tasting room manager	Operate tasting room, monitor tasting room inventory, give winery tours, and control tasting room sales (Starting in year 4)
Temporary harvest worker	Assist winemaker with wine production during harvest, (Starting in year 2)
Temporary bottling worker	Assist winemaker with wine bottlings (Starting in year 2)
Clerical/ secretarial	Answer phone calls, file papers, assist with accounting
Tasting room/ Customer Service	Pour wines in tasting room, give winery tours (Starting in year 2)

Source: Folwell, Bales, and Edwards, 2000.

Full time Personnel Requirements & Expenses

Job Title	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7+
Winemaker/ General Manager	\$ 42,500	\$ 43,775	\$ 45,088	\$ 46,509			
General Manager					\$ 50,000	\$ 51,525	\$ 53,097
Winemaker					\$ 47,927	\$ 49,389	\$ 50,895
Assistant Winemaker			\$ 30,000	\$ 30,915			
Marketing/ Sales					\$ 40,000	\$ 41,220	\$ 42,477
Tasting Room Manager				\$ 30,000	\$ 30,915	\$ 31,858	\$ 32,830
Cellar Rat	\$ 26,000	\$ 26,793	\$ 27,610	\$ 28,452	\$ 29,320	\$ 30,214	\$ 31,136
Total Full time annual labor expense	\$ 68,500	\$ 70,589	\$ 102,742	\$ 135,876	\$ 198,162	\$ 204,206	\$ 210,434

Part time Personnel Requirements & Expenses

Job Title	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7+
Temporary harvest worker at winery		\$ 2,473	\$ 2,549	\$ 2,626	\$ 2,706	\$ 2,789	\$ 2,874
Temporary harvest worker at winery					\$ 2,706	\$ 2,789	\$ 2,874
Temporary bottling worker		\$ 1,855	\$ 1,911	\$ 1,970	\$ 2,030	\$ 2,092	\$ 2,156
Temporary bottling worker						\$ 2,092	\$ 2,092
Clerical/ Secretarial	\$ 5,200	\$ 5,359	\$ 5,522	\$ 5,690	\$ 5,864	\$ 6,043	\$ 6,227
Tasting room/ customer service		\$ 5,359	\$ 11,044	\$ 11,381	\$ 11,728	\$ 12,086	\$ 12,454
Tasting room/ customer service							\$ 12,454
Total Part time annual labor Expense	\$ 5,200	\$ 15,045	\$ 21,026	\$ 24,294	\$ 25,035	\$ 27,890	\$ 41,195

Management Team

Bob Smith, *General Manager*

Bob Smith's duties as general manager include coordinating grape purchasing, winery operation and maintenance, sales, marketing, financial record keeping, and staffing. Smith worked as general winemaker for White's Finger Lakes winery for 10 years and worked as a winemaker prior to that experience. He attended Cornell and graduated with a degree in Agricultural Economics.

Name in Bold, *Winemaker*

Name in Bold, *Sales/Tasting room manager*

Industry Analysis:

Wine consumption trends

The industry analysis shows that current consumption trends are favorable for the domestic wine market, especially for producers of ultra premium wines. Total domestic and per capita wine consumption have increased each year since 1993. Retail wine sales have increased 8.2 percent per year over the past five years. The dramatic growth in retail wine sales can be attributed to the increasing popularity of premium wines.

The following table illustrates the rapid growth of the premium wine market. Even though the table reports only California table wine shipments, it serves as a good example for the US wine market because California represents over 90 percent of all US production. The high premium segment (\$7 per bottle and above) of the table wine market is growing the fastest in terms of volume. This segment increased 14 percent by volume while the entire table wine market increased only three percent. Even more striking is the amount of revenue the high premium segment generates. In 1999, the high premium segment commanded 52 percent of the total wine revenue while only representing 23 percent of the volume. Furthermore, the ultra-premium segment (over \$14 per bottle) represents 25 percent of the total revenues and only seven percent of the volume.

Estimated 1999 California Table Wine Shipments by Price Segment

Retail Price per Bottle	Price Segment	Estimated nine liter cases sold (millions)	Percent Change from 1998 to 1999	Percent of Total Volume	Estimated Winery Sales Revenues (millions)	Percent of Total Revenue
Over \$14	Ultra-Premium	10.1	11%	7%	\$ 1,330	25%
\$7-\$14	Super-Premium	24.5	15%	16%	\$ 1,420	27%
	High Premium and Above	34.6	14%	23%	\$ 2,750	52%
\$3-\$7	Popular Premium	49.5	4%	33%	\$ 1,650	31%
	Subtotal of all Premium	84.0	8%	56%	\$ 4,400	83%
Below \$3	Jug Wine	65.7	-3%	44%	\$ 920	17%
	Total Table Wine	149.7	3%	100%	\$ 5,320	100%

Source: Gomberg, Fredrickson & Associates in *Wines & Vines*, May 2000

The “Super luxury” wine segment (not shown in the table), those priced at over \$40 a bottle, grew 24 percent by volume and 30 percent in dollars between 1998 and 1999. This lucrative segment represents a mere 0.4 percent of the market by volume, but an influential 4 percent of its value (Walker, 2000).

Red wines are steadily increasing in market share at the expense of white and rose wines. In 1991, 15.7 percent of the table wine shipped from California was red; by 1999 this had grown to 33.7 percent (Adams Business Media, 2000).

Demographic trends

Experts attribute the growth in the premium wine market to the aging baby boomers. Baby boomers are entering their prime drinking age and this group of consumers is expected to increase premium wine consumption for a number of years. Every day in the US, 10,000 people celebrate their 50th birthday and 50-59 year olds drink 16.4 bottles of wine per year vs. 6.6 bottles per year for the 21-29 year old category (Walker, 2001). Many of these baby boomers have accumulated significant wealth over their lifetime and can afford to spend their money on luxury items such as wine (Barclay, 2000).

Legal/taxation regulations

As an alcoholic beverage, wine is highly regulated by the federal government. In order to produce and sell wine an individual must apply for a special license. Requesting this license is a time consuming, expensive, and tedious process that generally requires the help of experienced lawyers. Production facilities, storage facilities and prospective wine labels must all be approved prior to production. Wineries must pay federal excise taxes of \$1.07 per gallon sold, but farm wineries in New York qualify for a \$.90 per gallon tax credit which makes the effective federal excise tax \$.17 per gallon. In addition, there are state excise taxes, which are \$.05 per liter sold in New York. Small wineries applying for a Farm winery permit must pay a one time \$175 farm winery license fee along with a \$500 annual small business tax that all small businesses in New York must pay (Heferun, 2000).

Out of state wine shipments

Out-of-state wine shipments are complicated, controversial, and highly regulated. The 21st amendment to the US constitution, which repealed prohibition, stipulated that each state would determine how to regulate the importation and transportation of alcoholic beverages. Most states established what is commonly referred to as “the three tier” distribution system with suppliers on one end, retail sellers on the other, and wholesalers in the middle. This “three tier” distribution system prevents wineries from directly selling wine to consumers out of state.

“Reciprocity” is a legislative concept among various states that allow a direct shipment of wines among the “reciprocal” states. Only thirteen states have reciprocity agreements, and New York is not one of them. In order to reach out of state customers NY vintners must sell their wine to a wholesaler who then sells the wine to various out of state retailers who sell to end consumers. This “three tier” distribution system makes distributing wine out of state difficult and expensive <http://www.wineinstitute.org/shipwine/>.

Environmental regulations

Environmental regulations also play a role in the grape growing and winemaking process. Wineries produce large amounts of wastewater, and the disposal of this water is tightly regulated.

Competitor Analysis

The wine industry is highly fragmented and very competitive. A small premium winery can expect competition from local, domestic, and international producers. However, most Finger Lakes wineries are somewhat insulated from competitors outside the region because the majority of their sales are made out of the tasting room. Thus, the proposed winery's direct competitors will be other small Finger Lakes wineries.

Recent increases in domestic wine consumption have enabled wineries to expand their volume and product offerings. The growth of the premium wine market has encouraged a number of producers to move up the quality ladder into the premium wine market where there are larger profit margins and double digit growth rates (Rachman, 1999). A number of new wineries are also entering the market and the number of new wineries will continue to increase with current consumption trends.

Names of competitors

A complete listing of Finger Lakes wineries is available on the uncork NY website at <http://www.uncorkny.com/>. Further information on each winery's product mix, production volume, year founded, and principals is available from the Wines & Vines annual Buyer's Guide.

General description of competitors

The proposed winery is located in the Finger Lakes and produces high quality, small lots of Pinot Noir, Cabernet Franc, Chardonnay, and Riesling. The distribution strategy stipulates that the majority of wine is sold locally through the tasting room. Therefore, core competitors are going to be small Finger Lakes wineries producing premium wines from the same varieties used in the study.

In 1999, there were 67 wineries located in the Finger Lakes region (www.uncorkny.com) and five of these wineries were eliminated as competitors because their annual production was far greater than the proposed winery's. Ten additional wineries were eliminated as competitors because their product mix did not match that of the proposed winery. These ten wineries produced only native varieties and French American hybrids. Seven additional wineries were unable to be contacted, and it was concluded that since they did not answer the phone or return repeated calls, they did not place a high priority on customer service and were eliminated as competitors. Forty-five wineries remained in the Finger Lakes region that could be considered core competitors to the model winery: annual production was less than 50,000 cases, wine was sold from the tasting room, they were able to be contacted, and their product mix included at least one of the varieties used in the study. The tables below compare the product offerings and prices of the 45 Finger Lakes wineries with those produced by the model winery.

Current Retail Bottle Prices among Finger Lakes Competitors

	Chard- onnay	Reserve Chard- onnay	Riesling	Reserve Riesling	Pinot Noir	Reserve Pinot Noir	Cab. Franc	Reserve Cab. Franc
High Price	\$19.00	\$29.99	\$15.00	\$12.00	\$23.99	\$24.99	\$24.95	
Low Price	\$7.95	\$9.99	\$7.99	\$12.00	\$10.00	\$17.99	\$12.95	
Median Price	\$11.50	\$13.99	\$9.99	\$12.00	\$14.99	\$19.99	\$14.99	
Mean Price	\$11.78	\$15.42	\$10.44	\$12.00	\$14.90	\$20.59	\$16.08	
Number of Wineries	43	22	39	1	34	5	24	0

Source: Phone Interviews and WebPages

Number of Finger Lakes Wineries that Produce the Same Varietals as proposed winery

Product	Number of Wineries that Produce the Wine N=45
Chardonnay	43
Reserve Chardonnay	22
Riesling	39
Reserve Riesling	1
Pinot Noir	34
Reserve Pinot Noir	5
Cabernet Franc	24
Reserve Cabernet Franc	0

Source: Phone Interviews and WebPages

Extent of Product Offering of Finger Lakes Wineries Match the Model Winery

Category	Number of Wineries N=45
Produce all four varietals	18
Produce three of the four varietals	18
Produce two of the four varietals	8
Produce one of the four varietals	1

Source: Phone Interviews and WebPages

A further look at these Finger Lakes competitors' product mix showed the diversification of their wine selection. The median number of different labels offered was 15 with the high being 41 and the low being seven. The median annual production among the 45 competitors was 7,000 cases with the largest winery producing 40,000 cases and the smallest producing 1,000 cases annually.

Looking outside of New York, there are a number of wineries in the domestic market. In 1989, there were 1,573 wineries in the United States and in 1998 that number had increased to 2,338 wineries. This amounts to an average of 76 new wineries entering the market each year for the past 10 years. California is home to 51 percent of the nation's wineries, and these Californian wineries produce an astonishing 91 percent of US production (www.wineinstitute.org).

Number of Bonded Wineries in California, New York, and the United States, 1989- 1999

Year	California	New York	United States
1989	799	95	1,573
1990	807	107	1,610
1991	827	107	1,623
1992	845	103	1,648
1993	866	107	1,683
1994	922	106	1,772
1995	944	108	1,820
1996	877	109	1,755
1997	1,011	113	1,988
1998	1,185	119	2,338
1999		126	

Source: www.wineinstitute.org , *Wines and Vines Buyers Guide 1990-2000*.

Sustainable competitive advantage

The proposed winery's sustainable competitive advantage is its dedication to producing premium vinifera wines from the top vineyards in the Finger Lakes region. Unlike other Finger Lakes producers, the proposed winery will focus only on vinifera varieties, and will position itself as a high quality vinifera wine producer. The winery will produce higher quality wines than its competitors by purchasing the best grapes and investing in the highest quality wine making equipment.

We will also emphasize a strategy that is more focused (having fewer products) and in the longer term, utilizing other distribution channels (high end restaurants and wine shops). We will rely less on tasting room sales since this will enable us to reinforce our ultra premium strategy.

Marketing Plan

Target Market

The proposed winery is targeting end consumers who are wealthy, college-educated baby boomers. These ideal customers are highly wine-educated, enjoy dining out, and regularly entertain friends or business associates. Consumers typically become wine-educated through a combination of classes, books, and just drinking wine.

The model winery's second target market consists of various business groups; the first being wholesale distributors. Distributors are responsible for selling wine to premier restaurants and wine shops located throughout the nation.

The second targeted business group is in-state restaurant managers and sommeliers. The winery is looking for gourmet restaurants that carry a variety of premium wines.

The final business group the winery is targeting is in state wine shop owners. The winery is looking for specialty wine shops that focus on carrying premium wine.

Product

Varietals

Four vinifera varieties, two white and two red, were selected for the final product mix. The varieties were Chardonnay, Riesling, Pinot Noir, and Cabernet Franc. All four varieties are well suited for the cool climate found in the Finger Lakes region.

Production Volumes

It was determined that for the proposed winery production volumes in year one will start at 1,850 cases and increase as the winery builds its reputation and customer base. However, in order to preserve its small winery status, production will reach a peak of 9,250 cases in year five. (Note: exact annual production volumes are affected by the size of the stainless steel fermentation vats used to ferment the Pinot Noir, Cabernet Franc, and Riesling. Wines foam during fermentation, and we are assuming wine volume increases 25 percent during fermentation (Vine, 1997).)

Table 4.16: Annual Case Production Volumes for the Model Winery

Variety	Year 1	Year 2	Year 3	Year 4	Year 5+
Chardonnay	500	1,000	1,500	2,000	2,500
Riesling	400	800	1,200	1,600	2,000
Total White	900	1,800	2,700	3,600	4,500
Pinot Noir	475	950	1,425	1,900	2,375
Cabernet Franc	475	950	1,425	1,900	2,375
Total Red	950	1,900	2,850	3,800	4,750
Total Wine	1,850	3,700	5,550	7,400	9,250

Two label strategy

The proposed winery will produce a “first label” or “reserve” wine and a “second label” for each varietal. Higher quality wines are set aside for the first label. The marketing plan stipulates that 15 percent of the wine will be set aside for the first label and 85 percent of the wine will be bottled under the second label. This two label strategy will enable the proposed winery to market lower quality wines under the second label without bringing down the first label's reputation for quality.

Packaging decisions

Packaging decisions are another important element of a product's offering. Any item, regardless of its value, is far more exciting when wrapped in an attractive package. Winemakers must decide on labels, text on the labels, bottles, corks, capsules, and boxes. Each of these elements contributes to an individual's consumption experience, and these packaging decisions reveal a great deal of information about the quality of wine inside the bottle.

Wine label

The wine label is typically the first thing consumers notice on a bottle, and many wine marketers believe that a label is almost as important as the product inside. Labels should be inviting, esthetically appealing, informative, and reflect the winery's identity. For these reasons the proposed winery will hire a professional to design the label.

Bottles

Wineries from around the world generally follow European tradition when selecting bottles. Burgundy bottles, with sloping sides, are used for Pinot Noir and Chardonnay. Bordeaux style bottles, bottles with shoulders, are green and used for Cabernet Franc. Rhine bottles, tall and skinny, are green or amber and used for Riesling. The proposed winery will bottle its wines in the standard 750-ml bottle and follow traditional European bottle shapes and colors. Thus, Pinot Noir (in antique green) and Chardonnay (in dead leaf green) will be bottled in Burgundy bottles. Cabernet Franc will be bottled in dead leaf green Bordeaux bottles. Riesling will be bottled in amber Riesling bottles.

Corks

A winery must decide whether to use a traditional cork or a synthetic cork (made of thermo plastic material) when sealing its wines. Synthetic corks are increasing in popularity and manufacturers of synthetic corks state that their corks eliminate leakage, off flavors, evaporation, and do not crumble or disintegrate. However, natural cork is the traditional sealing material and many consumers prefer natural corks because it allows them to smell the cork, adding to the romance and sophistication of the wine drinking experience. Natural cork follows with European wine tradition and consumers have become accustomed to this sealing material. For these reasons the proposed winery will use natural 2" long cork when sealing its bottles (Hartung, 1999).

Capsules

Capsules complete the package and help to add a professional look to the bottle. Since capsules are purely cosmetic, care should be taken to ensure the capsule complements the label and packaging theme. Wineries can choose between sealing wax, newer plastic capsules, and traditional foil capsules. Foil capsules are traditional and the standard in premium wine; therefore, the model winery will be using the traditional foil capsules (Hartung, 1999).

Box

Type of box and number of bottles to include in each box are the final elements of the packaging decision. Wines can be packaged in a variety of boxes including: cardboard twelve bottle cases, cardboard six packs, wooden twelve bottle cases, wooden six packs, cardboard three bottle sampler packs. Cardboard twelve bottle cases are the standard in the wine industry and will be used to package the wine.

Additional Products

In addition to its basic product of wine, the winery will offer customers a number of other activities intended to create a “winery experience.” Wine tastings will be offered each day to encourage customers to visit the winery and try the various wines. Educational winery tours will be offered on weekends to introduce customers to the grape growing and winemaking process. A monthly wine tasting class will be led by the winemaker to introduce consumers to new wines and help develop their palate. Further entertainment such as harvest parties, live bands, and B-B-Q’s will be offered on special occasions (Vine, 1997).

Price

The proposed winery will adopt a high price/ high quality pricing strategy. Prestige pricing will be used to inform customers of the high quality product being sold.

The following table lists the proposed retail bottle prices for the winery. The prices were determined by looking at competitor’s prices and through discussions with the Research Committee of the Finger Lakes Pinot Noir Alliance.

Wine	1 st Label Price	2 nd Label Price
Chardonnay	\$17	\$12
Riesling	\$13	\$ 8
Pinot Noir	\$22	\$15
Cabernet Franc	\$19	\$12

During the competitor analysis we noticed that prices in the Finger Lakes region were far lower than prices in other grape growing regions. Traditionally, Finger Lakes wineries have produced lower priced wines from native varieties and French American hybrids. Consequently, local consumers have grown accustomed to lighter, fruity, sweet wines. Local customers may not yet be willing to pay higher prices for the more complex vinifera wines. This reliance on tasting room sales also places a cap on what Finger Lake producers may charge for their wines. However, research shows that over time,

consumer's taste preferences shift from lighter, sweeter wines to drier, more complex wines (Barclay, 1999). This may present Finger Lakes producers' with an opportunity to increase prices in the future. Recently, a number of Finger Lakes wineries have shifted their focus to producing high quality vinifera wines. These producers' wines are being well received, yet consumers are not paying prices comparable with those from other wine regions. Finger Lakes producers should look at these competitor's prices as a guide for potential future prices once the region's vineyard managers and wine makers gain more experience producing vinifera varieties.

Distribution channels have a large influence on the price a winery receives for its wine. Wholesaler and distributor discounts are well established, and these discounts significantly reduce a producer's profit margin. Tasting room and in-state direct mail sales are the only outlets where the winery sells directly to end consumers and receives retail prices. Direct sales to restaurants and wine shops are made at wholesale prices, which are two-thirds of the retail price. Sales made through distributors are at FOB prices, which are one-half of the retail price.

Promotion

Producers may use a combination of advertising, personal selling, sales promotion, public relations, and direct marketing tools to communicate with current and prospective customers.

The proposed winery's promotion goal will be one of differentiation, and all promotion activities will help reinforce the winery's premium positioning status. Promotion activities will be targeted at both end consumers and middlemen. End consumer promotion events will be intended to bring customers to the winery for fun, non-commercial activities. These events include crush and bottling parties, dances, food pairings, tastings, home winemaking seminars, barrel tastings, and winery and vineyard tours. Additionally, the winery will participate in the appropriate successful Finger Lakes wine trail program. Events targeting middlemen will focus on building relationships and reestablishing contact. These events include regularly visiting restaurants and wine shops, having special dinners and barrel tastings at the winery for top accounts, and regularly sending free wine samples to these accounts. A large focus of the promotion campaign will be developing good public relations among customers and the community.

A significant percentage of wine will be used for promotional purposes, and the following table shows how much wine will be used for promotional purposes.

Percentage of Wine Withheld for Promotional Uses	
Promotional use	% Withheld
Poured in tasting room	10.0%
Given to staff/investors/owners	2.0%
Reserved for library program	1.0%
Distributed to media/fairs/tastings	0.5%
Given to charity	0.5%
Total volume not sold	14.0%

Source: Finger Lakes Panel

The New York Wine & Grape Foundation is a promotional organization for the New York wine industry and membership dues are on a sliding scale where the winery's annual dues correspond to the winery's annual production in gallons. The New York Wine & Grape Foundation Membership schedule is listed in the following table.

Table 5.11: New York 2001 Wine & Grape Foundation Membership Schedule

Production (in gallons)	Baseline fee +	Cents per gallon	Maximum Fee in Category
0-5,000	\$ 300		\$ 300
5,000-10,000	\$ 300	\$.05	\$ 500
10,000-20,000	\$ 500	\$.05	\$ 1,000
20,000-50,000	\$ 1,000	\$.05	\$ 2,500
50,000-100,000	\$ 2,500	\$.05	\$ 5,000
100,000-200,000	\$ 5,000	\$.05	\$ 10,000
200,000-500,000	\$ 10,000		\$ 10,000
Over 500,000	\$ 22,500		\$ 22,500

Source: New York Wine & Grape Foundation

Place or Distribution

The first and most preferred wine marketing channel is direct sales to customers. Wineries favor direct sales because it allows them to collect retail prices for their wines. The most common form of direct sales in the Finger Lakes region is tasting room sales. The Finger Lakes region has very successful wine trail programs, and small wineries are able to sell the majority of their wine through the tasting room.

The second marketing channel consists of direct sales to in-state retailers. Vintners may obtain a wholesalers permit and operate as an in-house distributor selling wines directly to liquor stores, restaurants, and wine shops. An advantage of selling directly to retail outlets is higher margins, self-representation, and the ability to develop a relationship with retail customers. However, selling to retail outlets can be very time consuming because of the need to regularly visit and service these accounts.

The third marketing channel involves selling to distributors. Distributors are necessary for reaching restaurants and wine markets located throughout the nation. Regularly visiting retailers in different geographic regions is expensive and time consuming. Reputable distributors visit and service these retail outlets for the winery. Distributors with their vast contacts are also able to place wines in select restaurants and wine shops (Vine, 1997).

The following table summarizes the distribution strategy for the proposed winery.

Base Case Distribution Strategy for the Proposed Winery

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7+
Number of Cases Sold	0	344	1,935	3,526	5,375	6,708	7,955
Percent of Sales Directly to Customers	N/A	100%	100%	100%	90%	80%	80%
Percent of Sales Directly to Retailers	N/A	0%	0%	0%	10%	10%	10%
Percent of Sales Directly to Distributors	N/A	0%	0%	0%	0%	10%	10%
Totals	N/A	100%	100%	100%	100%	100%	100%

Marketing Budget

The proposed winery will spend \$5 per case for marketing their wines. This marketing budget covers the cost of promotion activities, but does not include labor. Marketing labor requirements are summarized in the plan of operations and included under labor expense and not marketing expense. In addition to the \$5 per case figure, \$10,000 is dedicated to the marketing budget in year one to develop a webpage and billboards, and \$1,000 is added to the marketing budget each year to cover website hosting and maintenance.

Financial Plan

The following table summarizes the amount of money needed each year to establish the proposed small, premium winery. The money will be used to construct the winery and tasting room, purchase the necessary winemaking equipment, and cover the annual operating expenses. A more detailed look at the disposition of funds is provided in the financial section.

Year	Amount of money needed
Year 0	\$ 690,042
Year 1	\$ 630,150
Year 2	\$ 267,818
Year 3	\$ 154,257
Year 4	\$ 1,545
Total over four years	\$ 1,734,812

The financial section begins by projecting annual revenues, capital asset purchases, operating expenses, and cash flow projections for the small premium winery. A detailed description of the capital asset requirements and operating expenses are then provided.

Wineries are capital intensive and the cash flow analysis showed that the winery does not attain a positive cash flow until year five; thus, an investor could not expect to withdraw any funds prior to the fifth year of operation.

Revenue, Capital Asset, Operating Expense, and Cash Flow Projections for a Small Premium Winery

Projected Revenues

Revenue	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7+
Direct Sales to Customers		\$37,222	\$293,954	\$574,781	\$808,787	\$ 943,024	\$1,171,477
Direct Sales to Retailers		\$ 0	\$ 0	\$ 0	\$ 59,311	\$ 77,799	\$ 96,647
Sales to Distributors		\$ 0	\$ 0	\$ 0	\$ 0	\$ 58,939	\$ 73,217
Total Revenue from Wine Sales		\$37,222	\$293,954	\$574,781	\$868,098	\$1,079,763	\$1,341,341

Projected Capital Asset Purchases (see appendix for detailed analysis)

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Receiving Equipment	\$ 93,740					
Fermentation/Storage	\$ 34,231		\$ 21,748	\$ 22,411	\$ 23,095	\$ 23,799
Cooperage	\$ 16,307		\$ 21,855	\$ 28,909	\$ 35,831	\$ 43,517
Cellar Equipment	\$ 37,358					
Lab Equipment	\$ 11,152					
Refrigeration	\$ 12,628		\$ 1,272	\$ 1,311	\$ 1,350	\$ 13,620
Bottling line		\$ 122,400		\$ 425		\$ 451
Winery, office, and vehicles	\$ 484,625					
Tasting Room & landscaping		\$ 331,250				
Annual Investment	\$ 690,042	\$ 453,650	\$ 44,874	\$ 53,056	\$ 60,276	\$ 81,387

Projected Operating Costs (see appendix for detailed analysis)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7+
Grapes	\$ 41,488	\$ 85,507	\$ 132,173	\$ 181,606	\$ 233,931	\$ 241,065	\$ 248,418
Labor	\$ 73,700	\$ 85,635	\$ 123,768	\$ 160,170	\$ 223,197	\$ 232,096	\$ 251,630
Packaging	\$ 0	\$ 30,783	\$ 50,047	\$ 77,360	\$ 106,293	\$ 135,875	\$ 141,094
Marketing	\$ 10,000	\$ 2,772	\$ 11,274	\$ 20,293	\$ 31,307	\$ 39,977	\$ 48,632
Utilities	\$ 8,500	\$ 10,500	\$ 14,000	\$ 15,000	\$ 16,000	\$ 16,488	\$ 16,991
Professional fees	\$ 6,000	\$ 3,500	\$ 4,061	\$ 4,624	\$ 5,189	\$ 5,347	\$ 5,510
Supplies	\$ 1,890	\$ 3,280	\$ 4,970	\$ 6,560	\$ 7,950	\$ 8,192	\$ 8,442
Gasoline, fuel, oil	\$ 750	\$ 1,500	\$ 1,750	\$ 2,000	\$ 2,250	\$ 2,319	\$ 2,389
Insurance	\$ 9,000	\$ 9,275	\$ 12,000	\$ 12,366	\$ 12,743	\$ 13,132	\$ 13,532
Interest	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Taxes	\$ 9,735	\$ 10,528	\$ 12,696	\$ 15,053	\$ 17,542	\$ 19,914	\$ 22,005
Rent/leases	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Repairs& maintenance	\$ 11,437	\$ 11,886	\$ 12,416	\$ 13,019	\$ 13,833	\$ 14,260	\$ 14,705
Depreciation	\$ 80,154	\$ 152,595	\$ 140,542	\$ 136,490	\$ 145,259	\$ 146,175	\$ 141,144
Miscellaneous	\$ 4,000	\$ 5,000	\$ 7,000	\$ 8,000	\$ 9,000	\$ 9,275	\$ 9,557
Total	\$256,655	\$ 412,761	\$ 526,697	\$ 652,540	\$ 824,493	\$ 884,115	\$ 924,050

Projected Cash Flows

<i>Revenues</i>	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Wine sales- Retail		\$0	\$37,222	\$293,954	\$574,781	\$808,787	\$943,024	\$1,171,477	\$1,207,207	\$1,244,027	\$1,281,970
Wine sales- Wholesale		\$0	\$0	\$0	\$0	\$59,311	\$77,799	\$96,647	\$99,595	\$102,632	\$105,763
Wine sales- Distributor		\$0	\$0	\$0	\$0	\$0	\$58,939	\$73,217	\$75,450	\$77,752	\$80,123
<i>Total Revenues</i>		\$0	\$37,222	\$293,954	\$574,781	\$868,098	\$1,079,763	\$1,341,341	\$1,382,252	\$1,424,411	\$1,467,855
<i>Expenses</i>											
Grapes		\$41,488	\$85,507	\$132,173	\$181,606	\$233,931	\$241,065	\$248,418	\$255,995	\$263,803	\$271,849
Labor		\$73,700	\$85,635	\$123,768	\$160,170	\$223,197	\$232,096	\$251,630	\$259,304	\$267,213	\$275,363
Packaging		\$0	\$30,783	\$50,047	\$77,360	\$106,293	\$135,875	\$141,094	\$145,398	\$149,832	\$154,402
Marketing		\$10,000	\$2,772	\$11,274	\$20,293	\$31,307	\$39,977	\$48,632	\$50,115	\$51,644	\$53,219
Utilities		\$8,500	\$10,500	\$14,000	\$15,000	\$16,000	\$16,488	\$16,991	\$17,509	\$18,043	\$18,593
Professional fees		\$6,000	\$3,500	\$4,061	\$4,624	\$5,189	\$5,347	\$5,510	\$5,678	\$5,851	\$6,030
Supplies		\$1,890	\$3,280	\$4,970	\$6,560	\$7,950	\$8,192	\$8,442	\$8,700	\$8,965	\$9,239
Gasoline, fuel, oil		\$750	\$1,500	\$1,750	\$2,000	\$2,250	\$2,319	\$2,389	\$2,462	\$2,537	\$2,615
Insurance		\$9,000	\$9,275	\$12,000	\$12,366	\$12,743	\$13,132	\$13,532	\$13,945	\$14,370	\$14,809
Interest		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Taxes		\$9,735	\$10,528	\$12,696	\$15,053	\$17,542	\$19,914	\$22,005	\$22,676	\$23,368	\$24,080
Rent/leases		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Repairs & maintenance		\$11,437	\$11,886	\$12,416	\$13,019	\$13,833	\$14,260	\$14,705	\$15,153	\$15,615	\$16,092
Depreciation		\$80,154	\$152,595	\$140,542	\$136,490	\$145,259	\$146,175	\$141,144	\$113,521	\$86,660	\$84,919
Miscellaneous		\$4,000	\$5,000	\$7,000	\$8,000	\$9,000	\$9,275	\$9,557	\$9,849	\$10,149	\$10,459
<i>Total Expenses</i>		\$256,655	\$412,761	\$526,697	\$652,540	\$824,493	\$884,115	\$924,050	\$920,305	\$918,051	\$941,667
Taxable											
Income		(\$256,655)	(\$375,539)	(\$232,743)	(\$77,759)	\$43,604	\$195,648	\$417,291	\$461,947	\$506,359	\$526,188
Loss Carry Forward		(\$256,655)	(\$632,193)	(\$864,936)	(\$942,695)	(\$899,091)	(\$703,443)	(\$286,152)			
Income Tax @ 40%									(\$237,235)	(\$202,544)	(\$210,475)
Net Income		(\$256,655)	(\$375,539)	(\$232,743)	(\$77,759)	\$43,604	\$195,648	\$417,291	\$224,712	\$303,816	\$315,713
Capital Purchases	(\$690,042)	(\$453,650)	(\$44,874)	(\$53,056)	(\$60,276)	(\$81,387)	(\$42,700)	(\$44,481)	(\$45,345)	(\$47,236)	(\$48,153)
Depreciation		\$80,154	\$152,595	\$140,542	\$136,490	\$145,259	\$146,175	\$141,144	\$113,521	\$86,660	\$84,919
Cash Flow	(\$690,042)	(\$630,150)	(\$267,818)	(\$145,257)	(\$1,545)	\$107,476	\$299,123	\$513,954	\$292,889	\$343,240	\$352,479

Financial Assumptions:

Inflation: 3.05%

Press yield

- 1 ton of grapes yields 150 gallons of finished wine

Product mix

- Pinot Noir, Cabernet Franc, Riesling, and Chardonnay

Fermentation

- Pinot Noir: fermented in 1,400 gal. ss jacketed opentop fermenters
- Cabernet Franc: fermented in 1,400 gal. ss jacketed opentop fermenters
- Riesling: fermented in 1,200 gal ss jacketed fermenters
- Chardonnay: barrel fermented

Oak

- 20% new French oak
- 80% old French oak

Aging periods

- Pinot Noir: 12 months in oak, 6 months in bottle, then sold
- Cabernet Franc: 12 months in oak, 6 months in bottle, then sold
- Chardonnay: 12 months in oak, 6 months in bottle, then sold
- Riesling: 6 months in ss tanks, 6 months in bottle, then sold

First and second allocations

- 15% of volume for the 1st label
- 85% of volume for the 2nd label

Percentage of wine not sold

- 14% of the wine is used for promotional purposes (not sold)

Marketing channel margins

- Direct sales to customers- retail prices
- Direct sales to retailers- wholesale prices (2/3 of retail)
- Sales to distributors- FOB prices (1/2 of retail)

Financial analysis

- All equity financing
- Tax rate: 40%
- Carrying forward loses to reduce future taxes
- Cost of capital: 7.37%

Growth Assumptions

	Year 1	Year 2	Year 3	Year 4	Year 5+
Annual Production Volume	1,850	3,700	5,550	7,400	9,250

Retail Bottle Price Assumptions:

Wine	1 st Label Price	2 nd Label Price
Pinot Noir	\$22	\$15
Cabernet Franc	\$19	\$12
Chardonnay	\$17	\$12
Riesling	\$13	\$ 8

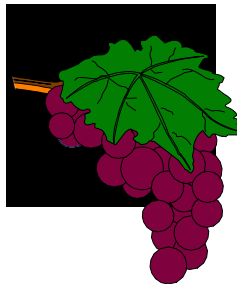
Grape price assumptions (10% increase to Finger Lakes 5 year ave.)

Chardonnay	Riesling	Pinot Noir	Cabernet Franc
\$1,277	\$1,263	\$1,481	\$1,621

Source: *Finger Lakes Vineyard Notes*, 1996-2000

Distribution & Production Assumptions

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7+
Annual Production Volume	1,850	3,700	5,550	7,400	9,250	9,250	9,250
Annual Sales Volume	0	344	1,935	3,526	5,375	6,708	7,955
Percent of Sales Directly to Customers		100%	100%	100%	90%	80%	80%
Percent of Sales Directly to Retailers		0%	0%	0%	10%	10%	10%
Percent of Sales to Distributors		0%	0%	0%	0%	10%	10%

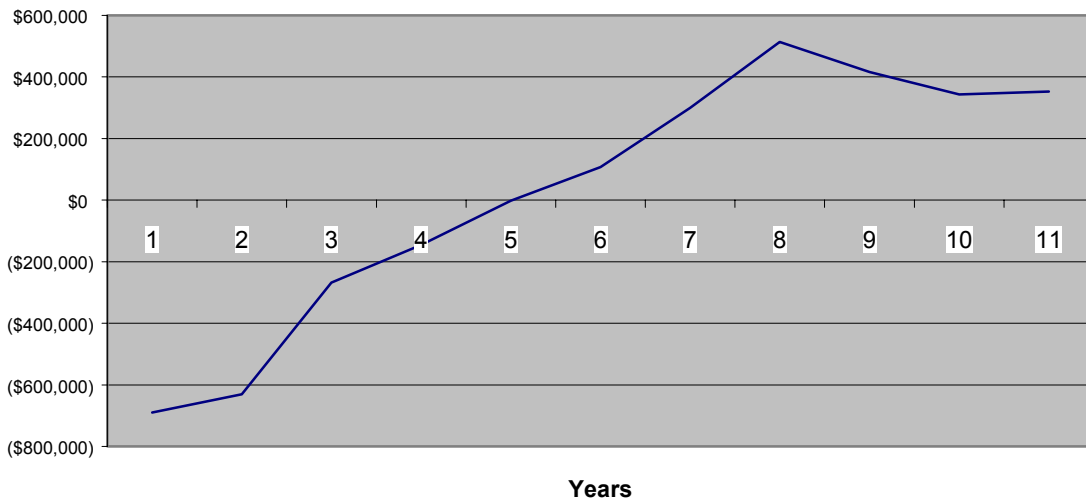


Break Even Analysis

The following graph shows that the proposed winery reaches a positive cash flow in year 5. After year 5 the winery is then able to cover all its expenses and capital asset purchases. Purchases of capital assets represent the majority of the cash outlays in the first year. The winery must spend \$690,042 in year 0 on winemaking equipment, winery construction, and other capital assets. Then during the first year of operation the winery must build the tasting room, purchase a bottling line, and cover operating expenses which leads to a negative cash flow of \$630,150.

There is significant increase in revenues in year 3 because that is the first year all four varietals of wine are released; in year 2 only Riesling is sold. Cash flow declines in year 8 because that is the year the tax loss carry forward ends and the winery must begin paying income taxes. Cash flow in year 10 is \$352,479 and is assumed to remain at this level through the project's life.

10 Year Cash Flow Projection



Sources and Use of Funds

The funds will be used to construct the winery and tasting room, purchase the necessary winemaking equipment, and cover the annual operating expenses. For a more detailed listing of how the funds will be used, see the projected operating expenses and projected capital asset costs in appendix.

Year	Amount of money needed
Year 0	\$ 690,042
Year 1	\$ 630,150
Year 2	\$ 267,818
Year 3	\$ 154,257
Year 4	\$ 1,545
Total over four years	\$ 1,734,812

Sensitivity Analysis

Sensitivity analysis was performed to determine which variables had the largest impact on the winery's profitability. The sensitivity analysis adjusted investment costs, operating costs, bottle prices, terminal values, cost of capital, and marketing channels. Each variable was individually adjusted by +10%, -10%, +20%, -20%, +30%, and -30% and the affect on the projects profitability was recorded. The results of the sensitivity analysis showed the project's profitability was most affected by bottle prices. The next most important variable were operating expenses.

Appendix

Appendix Table 1: Projected Year 0 Capital Investment Expenses

Winery Equipment	Description/Capacity/Supplier	Number Needed	\$/unit	shipping	Total Cost
<i>Receiving Equipment</i>					
Fork lift	Reconditioned Electric Clark Model ECS-20	1	\$ 15,000	n/a	\$ 15,000
Pallet jack	Blue Giant Model MTS 2000	1	\$ 650	n/a	\$ 650
Rotator attachment	dumps grapes out of bins onto conveyor	1	\$ 2,750	n/a	\$ 2,750
Sort table with conveyor		1	\$ 18,000	\$ 200	\$ 18,200
Crusher/Destemmer	Delta E2 DeStemmer (12 tons/hr)	1	\$ 16,000	\$ 1,100	\$ 17,100
Press	Bucher Model PRF-022-2	1	\$ 37,000	\$ 2,000	\$ 39,000
Scale	Series 3200 Platform Scales	1	\$ 1,000	\$ 40	\$ 1,040
					\$ 93,740
<i>Total Receiving Equipment</i>					
<i>Fermentation/Storage</i>					
Tanks					
	1,400 gal ss jacketed opentop fermenters with stand (for reds)	2	\$ 7,500	\$ 300	\$ 15,732
	1,200 gal ss jacked fermenters with stand (for Riesling)	1	\$ 7,050	\$ 300	\$ 7,282
	1,200 gal ss jacked blending tank with stand	1	\$ 7,050	\$ 300	\$ 7,350
Glass carboys	5 gallon glass	15	\$ 12	\$ 6	\$ 270
Kegs- 15 gallon ss		3	\$ 242	\$ 27	\$ 807
55 gallon ss drums	3 tighthead w/ bung & 3 w/ removable lid	6	\$ 285	\$ 180	\$ 2,790
					\$ 34,231
<i>Total Storage Equipment</i>					

Appendix Table 1 continued

Winery Equipment	Description/Capacity/Supplier	Number Needed	\$/unit	shipping	Total Cost
<i>Cooperage</i>					
Cooperage- Reds (12 mo in oak)					
	New French oak 20%	8	\$ 600	\$ 20	\$ 4,668
	Old French oak 80%	30	\$ 110	\$ 20	\$ 3,915
Cooperage- Chardonnay (12 mo in oak)					
	New French oak 20%	4	\$ 600	\$ 20	\$ 2,680
	Old French oak 80%	17	\$ 110	\$ 20	\$ 2,248
	Barrel washer	1	\$ 675	\$ 25	\$ 700
	Barrel racks	30	\$ 53.75	\$ 7	\$ 1,800
	Bungs Silicone solid bungs (Riesling will not touch oak)	69	\$ 3.85	\$ 0.41	\$ 295
	<i>Total Cooperage</i>				\$ 16,307
 <i>Refrigeration</i>					
	Glycol refrigeration & heating unit 5 hp pump, thermostat, and reservoir tank	1	\$ 10,000	n/a	\$ 10,000
	Thermostat and valves for tanks	3	\$ 200	n/a	\$ 602
	Pipes from the chilling unit to the tanks	3	\$ 500	n/a	\$ 1,504
	Glycol diluted 50/50 with water	55	\$ 9.50	n/a	\$ 523
	<i>Total Refrigeration equipment</i>				\$ 12,628

Appendix Table 1 continued

Winery Equipment	Description/Capacity/Supplier	Number Needed	\$/unit	shipping	Total Cost
<i>Cellar Equipment</i>					
Transfer pump	20 gal/min, variable speed, w/ remote control	1	\$ 3,000	\$ 250	\$ 3,250
Must pump		1	\$ 4,000	\$ 250	\$ 4,250
Transfer hose	Kanaline FW- 200' of 1 1/2"	200	\$ 4.83	\$ 0.25	\$ 1,016
Transfer hose	Kanaline FW- 200' of 1"	200	\$ 4.83	\$ 0.25	\$ 1,016
Must hose	Kanaline FW- 150' of 3"	150	\$ 9.14	\$ 0.40	\$ 1,431
Clamps & fittings	triclover	various	\$ 1,500	\$ 100	\$ 1,600
fittings board	homemade- wood, nails, holders, etc.	1	\$ 300	n/a	\$ 300
Bulldog pup		1	\$ 600	\$ 30	\$ 630
Punchdown device- ss pole w/ foot		2	\$ 150	n/a	\$ 300
Stirring rod		1	\$ 28	\$ 7.50	\$ 35
SS hopper for dumping pomace into press		1	\$ 5,000	\$ 200	\$ 5,200
SS sump and screen		1	\$ 5,000	\$ 200	\$ 5,200
Plate & frame and lees filter	XL 2000 40 cm	1	\$ 11,000	\$ 300	\$ 11,300
Buckets	5 gallon plastic	10	\$ 6	n/a	\$ 60
Carts		2	\$ 175	n/a	\$ 350
Food grade shovels		2	\$ 45	n/a	\$ 90
Water hose	100' 7/8 diameter	3	\$ 30	n/a	\$ 90
SO2 dispenser	canister	1	\$ 300	\$ 25	\$ 325
Flashlights		3	\$ 30	n/a	\$ 90
Funnels		3	\$ 10	\$ 2.0	\$ 36
Tools	various	1	\$ 750	n/a	\$ 750
Siphon hoses	1" Kanaline	30	\$ 1.21	\$ 0.10	\$ 39
<i>Total Cellar Equipment</i>					\$ 37,358

Appendix Table 1 continued

Winery Equipment	Description/Capacity/Supplier	Number Needed	\$/unit	shipping	Total Cost
Lab equipment					
pH meter	Orion 525 AO w/ ATC probe& electrode	1	\$ 1,383	\$ 25	\$ 1,408
Microscope		1	\$ 3,500	\$ 25	\$ 3,525
Spectrometer		1	\$ 3,000	\$ 25	\$ 3,025
Gast vacuum pump and vacushield membrane		1	\$ 357	\$ 25	\$ 382
SO2 testing apparatus	A-O setup #2	1	\$ 315	\$ 25	\$ 340
Incubator		1	\$ 50	n/a	\$ 50
Small pressurized lab filter		1	\$ 50	\$ 7	\$ 57
Magnetic stirrer and bars		1	\$ 160	\$ 7	\$ 167
Refractometer	Handheld Brix model 45-02	1	\$ 161	\$ 5	\$ 166
Hydrometer	Narrow Range -5-5,0-8,8-16,16-24 Brix	8	\$ 12	\$ 7	\$ 150
Thermometer		2	\$ 4	\$ 5	\$ 19
Balance	0.01g to 200 g	1	\$ 325	\$ 25	\$ 350
Ebulliometer	electric	1	\$ 925	\$ 25	\$ 950
Stirrer		1	\$ 16	\$ 6	\$ 22
Glassware	various*	1	\$ 328	\$ 50	\$ 378
Burettes		1	\$ 82	\$ 6	\$ 88
Dispensing Burettes		1	\$ 25	\$ 6	\$ 31
Thief	glass18"	1	\$ 44	\$ 6	\$ 44
Total Lab Equipment					\$ 11,152

Appendix Table 1 continued

Winery Equipment	Description/Capacity/Supplier	Number Needed	\$/unit	shipping	Total Cost
<i>Winery, Office, and vehicles</i>					
Winery- sq. ft.		6,000	\$ 60	n/a	\$ 360,000
Air conditioning system		1	\$ 15,000	n/a	\$ 15,000
Heating system		1	\$ 15,000	n/a	\$ 15,000
Land- acres	land, sewer, and roads	3	\$ 5,000	n/a	\$ 15,000
Waste water disposal & sewer		1	\$ 30,000	n/a	\$ 30,000
General office equipment	fax, copier, telephone, etc	Various	\$ 2,000	n/a	\$ 2,000
Computer & software	computer, printer, MS office	2	\$ 2,500	n/a	\$ 5,000
Furnishings	desks, chairs, etc	Various	\$ 5,000	n/a	\$ 5,000
Truck		1	\$ 21,500	n/a	\$ 21,500
Car		1	\$ 16,125	n/a	\$ 16,125
<i>Total winery, office, and vehicles</i>					\$ 484,625
<i>Total Investment</i>					\$ 690,042

Appendix Table 2: Projected Year 1 Capital Investment Expenses

Winery Equipment	Description/Capacity/Supplier	#	\$/unit	shipping	Total Cost
<i>Receiving Equipment</i>					\$ 0
<i>Fermentation/Storage</i>					\$ 0
<i>Cooperage</i>					\$ 0
<i>Cellar Equipment</i>					\$ 0
<i>Lab Equipment</i>					\$ 0
<i>Refrigeration</i>					\$ 0
<i>Bottling</i>					
Bottling line	filler, corker, labeler	1	\$ 120,000	\$1,000	\$ 121,000
Housing unit for membrane filter		1	\$ 1,000	n/a	\$ 1,000
Membrane filter		1	\$ 400	n/a	\$ 400
<i>Total Bottling</i>					\$ 122,400
<i>Tasting Room</i>					
Tasting Room- sq. ft.		2250	\$ 125	n/a	\$ 281,250
Tasting Room Furnishings		various	\$ 10,000	n/a	\$ 10,000
Landscaping, roads, parking lot		various	\$ 40,000	n/a	\$ 40,000
<i>Total Tasting Room</i>					\$ 331,250
<i>Total Investment</i>					\$453,650

Appendix Table 3: Projected Year 2 Capital Investment Expenses

Winery Equipment	Description/Capacity/Supplier	#	\$/unit	shipping	Total Cost
Receiving Equipment					\$ 0
Fermentation/Storage					
Tanks					
	1400 gal ss jacketed opentop fermenters with stand (for reds)	2	\$ 7,729	\$ 309	\$ 14,858
	1200 gal ss jacked fermenters with stand (for Riesling)	1	\$ 7,265	\$ 309	\$ 6,890
Total Fermentation/Storage					\$ 21,748
Cooperage					
Cooperage- Reds					
	New French Oak 20%	15	\$ 618	\$ 21	\$ 9,622
	Old French Oak 80%	23	\$ 113	\$ 21	\$ 3,026
Cooperage- Chardonnay					
	New French Oak 20%	9	\$ 618	\$ 21	\$ 5,524
	Old French Oak 80%	13	\$ 113	\$ 21	\$ 1,738
Barrel racks		30	\$ 55.39	\$ 7.21	\$ 1,641
Bungs	Silicone solid bungs	69	\$ 3.97	\$ 0.42	\$ 304
Total Cooperage					\$21,854.81
Cellar Equipment					\$ 0
Lab Equipment					\$ 0
Refrigeration					
	thermostat and valves for tanks	3	\$ 206		\$ 575
	pipes from chilling unit to the tanks	3	\$ 250		\$ 697
Total Refrigeration					\$ 1,272
Bottling					\$ 0
Total Investment					\$ 44,874

Appendix Table 4: Projected Year 3 Capital Investment Expenses

Winery Equipment	Description/Capacity/Supplier	#	\$/unit	shipping	Total Cost
Receiving Equipment					\$ 0
Fermentation/Storage					
Tanks					
	1400 gal ss jacketed opentop fermenters with stand (for reds)	2	\$ 7,964	\$ 319	\$ 15,311
	1200 gal ss jacketed fermenters with stand (for Riesling)	1	\$ 7,487	\$ 319	\$ 7,100
<i>Total Fermentation/storage</i>					\$ 22,411
Cooperage					
Cooperage- Reds will be 18 mo in oak					
	New French Oak 20%	23	\$ 637	\$ 21.24	\$ 14,872.59
	Old French Oak 80%	15	\$ 117	\$ 21.24	\$ 2,078.96
Cooperage- Chardonnay will be 12 mo in oak					
	New French Oak 20%	13	\$ 637	\$ 21.24	\$ 8,539.29
	Old French Oak 80%	9	\$ 117	\$ 21.24	\$ 1,193.66
Barrel racks		30	\$ 57.08	\$ 7.43	\$ 1,911.66
Bungs	Silicone solid bungs	69	\$ 4.09	\$ 0.43	\$ 313.14
<i>Total Cooperage</i>					\$ 28,909
Cellar Equipment					\$ 0
Lab equipment					\$ 0
Refrigeration					
	thermostat and valves for tanks	3	\$ 212		\$ 592.19
	pipes from chilling unit to the tanks	3	\$ 258		\$ 718.32
<i>Total Refrigeration</i>					\$ 1,311
Bottling					
	Membrane Filter	1	\$ 425		\$ 425
Total Investment					\$ 53,056

Appendix Table 5: Projected Year 1 Cash Operating Expenses

Item	Number Needed	\$/unit	shipping Total Cost
<i>Variable Costs</i>			
Pinot Noir Grapes	7.53	\$ 1,481	\$ 11,153
Cabernet Franc Grapes	7.53	\$ 1,621	\$ 12,205
Chardonnay Grapes	7.93	\$ 1,277	\$ 10,122
Riesling Grapes	6.34	\$ 1,263	\$ 8,007
<i>Total Grapes</i>			<u>\$ 41,488</u>
Lab Supplies			\$ 890
Full Time Labor			\$ 68,500
Part Time Labor			\$ 5,200
Marketing	0	\$ 5	\$ 10,000
Office supplies	1	\$ 1,000	\$ 1,000
Utilities	1	\$ 7,000	\$ 7,000
Phone-office & cellular	1	\$ 1,500	\$ 1,500
Fuel for vehicle	1	\$ 750	\$ 750
Federal excise Tax	0	\$ 0.17	\$ 0
New York State Tax	0	\$ 0.05	\$ 0
Winery license fee (Farm Winery)	1	\$ 175	\$ 175
SOT- small business tax	1	\$ 500	\$ 500
Uncork New York membership fee	4,399		\$ 300
Legal fees	1	\$ 5,000	\$ 5,000
Tax/accounting fees	1	\$ 1,000	\$ 1,000
Miscellaneous	1	\$ 4,000	\$ 4,000
Total Variable Costs			<u>\$ 147,303</u>
<i>Fixed Costs</i>			
Property & liability insurance	1	\$ 9,000	\$ 9,000
Property tax	360	\$ 5.81	\$ 2,093
School tax	360	\$ 18.52	\$ 6,667
Repairs & maintenance	1,143,692	1%	\$ 11,437
Total Fixed Costs			<u>\$ 29,197</u>
Total Cash Operating Expenses			<u>\$ 176,500</u>

Appendix Table 6: Projected Year 2 Cash Operating Expenses

Item		Number Needed	\$/unit	shipping	Total Cost
Variable Costs					
Packaging Items- (Bottling wine from year 1)					
Bottles	12 bottle cases	1,850	\$ 7.21		\$ 13,345
Corks	1,000 corks per unit/bag	23	\$ 250	\$ 8.00	\$ 5,966
Capsules	1,000 capsules per unit	23	\$ 101	\$ 6.00	\$ 2,474
Label design		1	\$ 6,000		\$ 6,000
Initial label printing charges		1	\$ 500		\$ 500
Label printing		24,975	\$ 0.10		\$ 2,498
<i>Total Packaging Expenses</i>					\$ 30,783
Pinot Noir Grapes		15.06	\$ 1,526		\$ 22,987
Cabernet Franc Grapes		15.06	\$ 1,670		\$ 25,155
Chardonnay Grapes		15.85	\$ 1,316		\$ 20,862
Riesling Grapes		12.68	\$ 1,301		\$ 16,503
<i>Total grapes</i>					\$ 85,507
Lab Supplies					\$ 1,780
Full Time Labor					\$ 70,589
Part Time Labor					\$ 15,045
Marketing		344	\$ 5.15		\$ 2,772
Office supplies		1	\$ 1,500		\$ 1,500
Utilities		1	\$ 7,500		\$ 7,500
Phone-office & cellular		1	\$ 3,000		\$ 3,000
Fuel for vehicle		1	\$ 1,500		\$ 1,500
Federal excise Tax		951	\$ 0.175		\$ 167
New York State Tax		3,600	\$ 0.052		\$ 186
Winery license fee		1	\$ 180		\$ 180
SOT- small business tax		1	\$ 515		\$ 515
Uncork New York membership fee		8,798	\$ 0.05		\$ 453
Legal fees		1	\$ 2,000		\$ 2,000
Tax/Accounting fees		1	\$ 1,500		\$ 1,500
Miscellaneous		1	\$ 5,000		\$ 5,000
Total Variable Costs					\$ 229,978
Fixed Costs					
Property & liability insurance		1	\$ 9,275		\$ 9,275
Property tax		360	\$ 5.99		\$ 2,157
School tax		360	\$ 19.08		\$ 6,871
Repairs & maintenance		1,188,566	1%		\$ 11,886
Total Fixed Costs					\$ 30,188
Total Cash Operating Expenses					\$ 260,166

Appendix Table 7: Projected Year 3 Cash Operating Expenses

Item		Number Needed	\$/unit	shipping	Total Cost
Variable Costs					
Packaging Items (bottling wine from year 2)					
Bottles	12 bottle cases	3,700	\$ 7.43		\$ 27,504
Corks	1,000 corks per unit/bag	46	\$ 258	\$ 8.24	\$ 12,296
Capsules	1,000 capsules per unit	46	\$ 104	\$ 6.18	\$ 5,099
Label printing		49,950	\$ 0.10		\$ 5,147
<i>Total Packaging Expenses</i>					<u>\$ 50,047</u>
Pinot Noir Grapes		22.59	\$ 1,573		\$ 35,533
Cabernet Franc Grapes		22.59	\$ 1,721		\$ 38,884
Chardonnay Grapes		23.78	\$ 1,356		\$ 32,248
Riesling Grapes		19.02	\$ 1,341		\$ 25,509
<i>Total Grapes and Hauling</i>					<u>\$ 132,173</u>
Lab Supplies					\$ 2,670
Full Time Labor					\$ 102,742
Part Time Labor					\$ 21,026
Marketing		1,935	\$ 5.31		\$ 11,274
Office supplies		1	\$ 2,300		\$ 2,300
Utilities		1	\$ 9,000		\$ 9,000
Phone-office & cellular		1	\$ 5,000		\$ 5,000
Fuel for vehicle		1	\$ 1,750		\$ 1,750
Federal excise Tax		5,350	\$ 0.181		\$ 966
New York State Tax		20,252	\$ 0.053		\$ 1,075
Winery license fee		1	\$ 186		\$ 186
SOT- small business tax		1	\$ 531		\$ 531
Uncork New York membership fee		13,197			\$ 701
Legal fees		1	\$ 2,061		\$ 2,061
Tax/Accounting fees		1	\$ 2,000		\$ 2,000
Miscellaneous		1	\$ 7,000		\$ 7,000
Total Variable Costs					\$ 352,502
Fixed Costs					
Property & liability insurance		1	\$ 12,000		\$ 12,000
Property tax		360	\$ 5.99		\$ 2,157
School tax		360	\$ 19.67		\$ 7,080
Repairs & maintenance		1,241,622	1%		\$ 12,416
Total Fixed Costs					\$ 33,653
Total Cash Operating Expenses					\$ 386,155

Additional tables you may want to use:

Capital Asset checklist for starting a small premium winery

	Estimated Cost per unit	Your Estimated Cost per unit	Estimated Number of units	Total Estimated Cost
Receiving Equipment				
Fork lift	\$ 15,000	_____	_____	_____
Pallet jack	\$ 650	_____	_____	_____
Rotator attachment	\$ 2,750	_____	_____	_____
Sort table with conveyer	\$ 18,200	_____	_____	_____
Crusher/Destemmer	\$ 17,100	_____	_____	_____
Press	\$ 39,000	_____	_____	_____
Scale	\$ 1,040	_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
<i>Total Receiving Equipment</i>				_____
Fermentation/Storage				
Tanks				
1,400 gal ss jacketed opentop fermenters	\$ 7,800	_____	_____	_____
1,200 gal ss jacked fermenters with stand	\$ 7,350	_____	_____	_____
1,200 gal ss jacked blending tank with stand	\$ 7,350	_____	_____	_____
Glass carboys	\$ 18	_____	_____	_____
Kegs- 15 gallon ss	\$ 269	_____	_____	_____
55 gallon ss drums	\$ 465	_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
<i>Total Fermentation/Storage</i>				_____
Cellar Equipment				
Transfer pump	\$ 3,000	_____	_____	_____
Must pump	\$ 4,000	_____	_____	_____
Transfer Hose (\$/ft. for 1 1/2 " hose)	\$ 5	_____	_____	_____
Transfer Hose (\$/ft for 1" hose)	\$ 5	_____	_____	_____
Must hose (\$/ft for 3" hose)	\$ 9	_____	_____	_____
Clamps & fittings	\$ 1,500	_____	_____	_____
Fittings board	\$ 300	_____	_____	_____
Bulldog pup	\$ 600	_____	_____	_____
Punchdown device- ss pole w/ foot	\$ 150	_____	_____	_____
Stirring rod	\$ 28	_____	_____	_____
SS hopper for dumping pumice into press	\$ 5,000	_____	_____	_____
SS sump and screen	\$ 5,000	_____	_____	_____
Plate & frame and lees filter	\$ 11,000	_____	_____	_____
Buckets	\$ 6	_____	_____	_____
Carts	\$ 175	_____	_____	_____
Food grade shovels	\$ 45	_____	_____	_____
Water hose	\$ 30	_____	_____	_____

	Estimated Cost per unit	Your Estimated Cost per unit	Estimated Number of units	Total Estimated Cost
SO2 dispenser	\$ 300	_____	_____	_____
Flashlights	\$ 30	_____	_____	_____
Funnels	\$ 10	_____	_____	_____
Tools	\$ 750	_____	_____	_____
Siphone hoses (\$/ft for 1" hose)	\$ 1	_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
<i>Total Cellar Equipment</i>				_____

Refrigeration

Glycol refrigeration & heating unit	\$ 10,000	_____	_____	_____
Thermostat and valves for tanks	\$ 200	_____	_____	_____
Pipes from the chilling unit to the tanks	\$ 500	_____	_____	_____
Glycol (\$/gal)	\$ 10	_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
<i>Total Refrigeration Equipment</i>				_____

Cooperage

New French Oak Barrels	\$ 620	_____	_____	_____
New American Oak Barrels	\$ 400	_____	_____	_____
Old French Oak Barrels	\$ 130	_____	_____	_____
Old American Oak Barrels	\$ 100	_____	_____	_____
Barrel washer	\$ 700	_____	_____	_____
Barrel racks	\$ 61	_____	_____	_____
Bungs	\$ 4	_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
<i>Total Cooperage</i>				_____

Lab equipment

pH meter	\$ 1,383	_____	_____	_____
Microscope	\$ 3,500	_____	_____	_____
Spectrometer	\$ 3,000	_____	_____	_____
Gast vacuum pump and vacushield membrane	\$ 357	_____	_____	_____
SO2 testing apparatus	\$ 315	_____	_____	_____
Incubator	\$ 50	_____	_____	_____
Small pressurized lab filter	\$ 50	_____	_____	_____
Magnetic stirrer and bars	\$ 160	_____	_____	_____
Refractometer	\$ 161	_____	_____	_____
Hydrometer	\$ 12	_____	_____	_____
Therometer	\$ 4	_____	_____	_____
Balance	\$ 325	_____	_____	_____
Ebulliometer	\$ 925	_____	_____	_____

	Estimated Cost per unit	Your Estimated Cost per unit	Estimated Number of units	Total Estimated Cost
Stirrer	\$ 16	_____	_____	_____
Assorted glassware	\$ 328	_____	_____	_____
Burettes	\$ 82	_____	_____	_____
Dispensing Burettes	\$ 25	_____	_____	_____
Thief	\$ 44	_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
<i>Total Lab Equipment</i>				_____

Bottling

Bottling line	\$ 120,000	_____	_____	_____
Housing unit for membrane filter	\$ 1,000	_____	_____	_____
Membrane filter	\$ 400	_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
<i>Total Bottling</i>				_____

Winery, Office & Vehicles

Winery- (\$/sq. ft.)	\$ 60	_____	_____	_____
Air conditioning system	\$ 15,000	_____	_____	_____
Heating system	\$ 15,000	_____	_____	_____
Land- acres	\$ 5,000	_____	_____	_____
Waste water disposal & sewer	\$ 30,000	_____	_____	_____
General office equipment	\$ 2,000	_____	_____	_____
Computer & software	\$ 2,500	_____	_____	_____
Furnishings	\$ 5,000	_____	_____	_____
Truck	\$ 21,500	_____	_____	_____
Car	\$ 16,125	_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
<i>Total Winery, Office & vehicles</i>				_____

Tasting Room & landscaping

Tasting room- (\$/sq. ft.)	\$ 125	_____	_____	_____
Landscaping and parking lot	\$ 40,000	_____	_____	_____
Tasting room furnishings	\$ 10,000	_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
<i>Total Tasting Room & landscaping</i>				_____

Operating Expenses Checklist for a Small Premium Winery

Expenses	Estimated Cost per unit	Your Estimated Cost per unit	Estimated Number of units	Total Estimated Cost
Grapes				
Pinot Noir grapes	\$ 1,481 ton	_____	_____	_____
Cabernet Franc grapes	\$ 1,621 ton	_____	_____	_____
Chardonnay grapes	\$ 1,277 ton	_____	_____	_____
Riesling grapes	\$ 1,263 ton	_____	_____	_____
Grape hauling expense		_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
Labor				
<i>Full time labor</i>				
General Manager	\$ 50,000 year	_____	_____	_____
Winemaker	\$ 42,500 year	_____	_____	_____
Assistant Winemaker	\$ 30,000 year	_____	_____	_____
Marketing/ Sales	\$ 40,000 year	_____	_____	_____
Tasting Room Manager	\$ 30,000 year	_____	_____	_____
Cellar Rat	\$ 26,000 year	_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
<i>Part time labor</i>				
Part time harvest worker at the winery	\$ 10 hour	_____	_____	_____
Part time bottling line worker	\$ 10 hour	_____	_____	_____
Part time clerical/ secretarial	\$ 10 hour	_____	_____	_____
Part time tasting room/ customer service	\$ 10 hour	_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
Packaging				
Bottles (12 bottle cases)	\$ 7 case	_____	_____	_____
Corks (1,000 corks per bag)	\$ 250 bag	_____	_____	_____
Capsules (1,000 capsules per box)	\$ 101 box	_____	_____	_____
Label design/artwork (one time expense)	\$ 6,000 label	_____	_____	_____
Start-up label printing charges (one time fee)	\$ 500 label	_____	_____	_____
Label printing	\$ 0.10 label	_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
Marketing				
Annual Marketing expense (\$/case)	\$ 5 case	_____	_____	_____
Webpage design (one time expense)	\$ 10,000 site	_____	_____	_____
Webpage upkeep	\$ 1,000 year	_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____

	Estimated Cost per unit	Your Estimated Cost per unit	Estimated Number of units	Total Estimated Cost
Utilities				
Telephone (office & cellular phones)		_____	_____	_____
Electricity		_____	_____	_____
Water & sewer		_____	_____	_____
Garbage		_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
Professional fees				
Accountant/ tax preparation	\$ 3,000 year	_____	_____	_____
Legal fees	\$ 2,000 year	_____	_____	_____
Wine consultant		_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
Supplies				
<i>Winemaking supplies (\$/ton)</i>				
Chemicals	\$ 1.70 ton	_____	_____	_____
ML bacteria	\$ 2.39 ton	_____	_____	_____
Yeast	\$ 1.70 ton	_____	_____	_____
Nutrient additives	\$ 3.41 ton	_____	_____	_____
Sanitizing chemicals	\$ 6.82 ton	_____	_____	_____
Nitrogen gas cylinders	\$ 1.36 ton	_____	_____	_____
Argon gas cylinders	\$ 2.73 ton	_____	_____	_____
Outside Lab Fees	\$ 6.82 ton	_____	_____	_____
Miscellaneous lab supplies	\$ 3.41 ton	_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
<i>Tasting room supplies</i>				
Crackers, snacks, and other food		_____	_____	_____
Napkins		_____	_____	_____
Soap, towels, toliet paper (for bathroom)		_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
<i>Office supplies</i>				
<i>Shop supplies</i>				
<i>Miscellaneous supplies</i>				
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
Gasoline, fuel, and oil				
Gasoline		_____	_____	_____
Diesel		_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____

	Estimated Cost per unit	Your Estimated Cost per unit	Estimated Number of units	Total Estimated Cost
Insurance (other than health)				
Property & liability insurance		_____	_____	_____
Auto insurance		_____	_____	_____
Workers compensation & disability insurance		_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
Interest expense				
Interest on operating capital		_____	_____	_____
Interest on term debt		_____	_____	_____
Finance charges		_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
Taxes				
Federal excise Tax	\$ 0.17 / gallon	_____	_____	_____
New York State excise Tax	\$ 0.05 / liter	_____	_____	_____
Winery license fee	\$ 175 / year	_____	_____	_____
SOT- small business tax	\$ 500 / year	_____	_____	_____
Uncork NY membership (\$300 + \$.05/gal. over 5,000 gal.)		_____	_____	_____
Property taxes (\$5.81 per \$1,000 of assessed value)		_____	_____	_____
School taxes (\$18.52 per \$1,000 of assessed value)		_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
Rental or lease expenses				
<i>Rental expenses</i>				
Machines		_____	_____	_____
Real estate		_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
<i>Lease expenses</i>				
Machines		_____	_____	_____
Real estate		_____	_____	_____
Barrels		_____	_____	_____
Fermentation tanks		_____	_____	_____
Vehicles		_____	_____	_____
Computers		_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
Repairs & maintenance				
Repairs & maintenance (1% of equip. & buildings)		_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____

	Estimated Cost per unit	Your Estimated Cost per unit	Estimated Number of units	Total Estimated Cost
Depreciation				
Equipment		_____	_____	_____
Barrels & tanks		_____	_____	_____
Machines		_____	_____	_____
Buildings		_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____
Miscellaneous				
Miscellaneous expenses		_____	_____	_____
Other: _____		_____	_____	_____
Other: _____		_____	_____	_____

References

- Adams Business Media. *2000 Wine handbook*. Adams Business Media, New York, 2000.
- Barclay, Veronica. "Taking a Closer Look at Your Customer-What Motivates Them to Buy?" *Vineyard and Winery Management*. January/February 1999.
- Barclay, Veronica. "Are You Marketing to the Affluent." *Vineyard and Winery Management*. January/February 2000.
- Bizplanit. www.bizplanit.com
- Bureau of Labor and Statistics. www.bls.gov
- Dillon, Carl, Carter Price, Justin Morris, and David Ward. "An appraisal of the economic feasibility of wine and juice production in Arkansas". University of Arkansas, Bulletin 942, June 1994.
- Folwell, Raymond and Bales, Timothy and Edwards, Charles. "Costs of Investment and Operation in Various Sizes of Premium Table Wine Wineries in Washington." Washington State University, Pullman 2000.
- Gomberg, Fredrickson, & Associates, *Wines and Vines*, May 2000.
- Grusenmeyer, David. *Mission, Visions, Values, & Goals*. Farm Business Study Unit. Cornell University, Ithaca, NY 2001.
- Hartung, Alexis. "Bottle Dressing-Packaging Your Wine." *American Wine Society Journal*. Summer, 1999.
- Heferun, John. *Personal Interview*, 2000
- Martinson, Tim. *Finger Lakes Vineyard Notes*. Cornell Cooperative Extension, Penn Yan, NY 1996-2000.
- Moorhead, Douglas. "Starting a Small Winery" *Wine East*. 1996 Buyers Guide.
- Motto, Kryla, and Fisher www.mkf.com
- New York Wine and Grape Foundation. *New York State Winery Handbook*. New York Wine and Grape Foundation. Penn Yan, NY 1989.
- Pisoni, Jeff. Series of *Personal Interviews*, 2001.
- Pisoni, Mark. *An Investment Analysis of Small Premium Finger Lakes Wineries*. MS thesis. Cornell University, Ithaca, NY 2001.
- Prosch, Allen, Douglas Jose, Ram Valluru, Jody Wichmann, Thomas Dorn, and Michelle Semerad. *Achieving Success With a Business Plan*. University of Nebraska Cooperative Extension, 2000.

- Rachman, Gideon. "The Globe in a Glass." *The Economist*, December 19, 1999.
- Storm, David. *Winery Utilities: Planning, Design, and Operation*. Chapman & Hall Publishing, New York, NY 1997.
- Tories, Nayada and Glen Israel. *Your Business Plan Workbook*. University of Florida Cooperative Extension, 1991.
- The United States Small Business Administration. <http://www.sba.gov/library/pubs.html>
- United States Department of Agriculture. www.nass.usda.gov/ny
- Uncork New York www.uncorkny.com
- Vine, Richard. *Winemaking from Grape Growing to Marketplace*. Chapman and Hall Publishing, New York, NY, 1997.
- Walker, Larry. "Price Points." *Wines & Vines*, April, 2000.
- Wine East Staff. *Wine East Buyers Guide 2001*. Lancaster, PA, 2001
- Wine institute. www.wineinstitute.org
- White, G. B. and M. E. Pisoni, *Cost of Establishment and Production of Vinifera Grapes in the Finger Lakes Region of New York-2001*. E.B. 2002-01, Department of Applied Economics and Management, Cornell University, Ithaca, NY, 2002.
- White, G. B. and Wen-fei Uva. *Developing a Strategic Marketing Plan for Horticultural Firms*. E.B. 2000-01, Department of Applied Economics and Management, Cornell University, Ithaca, NY, 2000.
- Wichmann, Jody, John Hanson and Thomas Dorn. *Grain Farm Business Plan Case Study*. University of Nebraska Cooperative Extension, 2000.
- Wines and Vines staff. *Wines & Vines 2001 Buyers Guide*. The Hiaring Company, San Francisco, CA 2001
- Wold, Cameron, Helen Sumner, Marilyn Schlake, J. Philip Gottwals. *Tilling the Soil of Opportunity. NXLEVEL Guide for Agricultural Entrepreneurs*. US West Foundation, 1999.
- Yamashita, Takaaki. *A Descriptive Study of Small Wineries in the Finger Lakes Region from the Marketing Viewpoint*. Cornell University, Ithaca 1991.
- Zoecklein, Bruce, Kenneth Fuglesang, Barry Gump, and Fred Nury. *Wine Analysis and Production*. Aspen Publishers, Inc., Gaithersburg, Maryland, 1999.

OTHER A.E.M. EXTENSION BULLETINS

EB No	Title	Fee (if applicable)	Author(s)
2002-06	Writing a Business Plan: A Guide for Small Premium Wineries		Pisoni, M. E. and G. B. White
2002-05	Estate and Succession Planning for Small Business Owners		Tauer, L. W. and D. A. Grossman
2002-04	Projecting Cash Flows on Dairy Farms		LaDue, E. L.
2002-03	New York Greenhouse Business Summary and Financial Analysis - 2000	(\$7.00)	Uva, W. and S. Richards
2002-02	The Organic Decision: Transitioning to Organic Dairy Production	(\$12.00)	Richards, S., S. Bulkley, C. Alexander, J. Degni, W. Knoblauch and D. Demaine
2002-01	Cost of Establishment and Production of Vinifera Grapes in the Finger Lakes Region of New York-2001	(\$10.00)	White, G.B. and M.E. Pisoni
2001-20	Why Conduct Research and Extension Programs for Small Farms		LaDue, E., and R. D. Smith
2001-19	Market Enhancement Programs Operated in New York's Key Competitor States and Provinces		Bills, N. L. and J. M. Scherer
2001-18	Agriculture-based Economic Development: Trends and Prospects for New York		Bills, N. L.
2001-17	A Compilation of <i>Smart Marketing</i> Articles, November 1999 – September 2001	(\$5.00)	Uva, W.
2001-16	New York Economic Handbook 2002	(\$7.00)	Extension Staff
2001-15	Income Tax Management and Reporting for Small Businesses and Farms		Cuykendall, C. H. and G. J. Bouchard
2001-14	Dairy Farm Business Summary: Eastern New York Renter Summary, 2000	(\$12.00)	Knoblauch, W. and L. D. Putnam

Paper copies are being replaced by electronic Portable Document Files (PDFs). To request PDFs of AEM publications, write to (be sure to include your e-mail address): Publications, Department of Applied Economics and Management, Warren Hall, Cornell University, Ithaca, NY 14853-7801. If a fee is indicated, please include a check or money order made payable to Cornell University for the amount of your purchase. Visit our Web site (<http://aem.cornell.edu/outreach/materials.htm>) for a more complete list of recent bulletins.