

**A BUSINESS PLAN FOR WHEAT STATE
DISTILLING**

by

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ABSTRACT

This thesis was written as a business plan for the purpose of securing funds for a new micro distillery.

Wheat State Distilling is an artisan distillery, manufacturing and selling premium hand-crafted spirits from the regions finest ingredients. I plan to distill premium vodka, whisky, bourbon, rum, gin and liqueurs as well as a luxury line of reserve products. Kansas established a micro-distillery license in July 2012 that opens up the market to this new type of business. The micro-distillery trend is growing across the U.S. and I plan to establish myself as a key player in the region. I will be entering the market early in the industry's life cycle when consumer interest and demand are high.

The proposed location in Wichita Kansas takes advantage of the largest city in Kansas with a metro area population of 630,721 in 2011. The location has visible signage from Interstate 135. The distillery will offer tours and a tasting room. We are able to give customers free samples and sell cocktails to induce purchase. We will use direct sales as well as restaurant and liquor store sales thru distributors.

I will be marketing my premium products to upper-middle class and wealthy consumers. My extensive product line will allow marketing to a wide age range and to both sexes. We will focus on online and social media as well as distributor incentives and in-store promotions. Participation in local and regional events for sampling and advertising will increase brand awareness.

Analysis of monthly production levels of each of the proposed product has been completed to maximize profits considering time and equipment constraints, cost of inputs

and sale price. Regression analysis has been completed examining many factors that contribute to the selling price of micro distilled spirits.

Financial models for years one through ten with risk analysis are included. If I reach my sales goals of 25,000 cases per year by year five, which is equal to my closest competition, High Plains Distilling, there is a potential for \$548,500 or more per year in profit.

I am seeking a loan for \$300,000.

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CHAPTER I: EXECUTIVE SUMMARY

Wheat State Distilling is an artisan distillery, manufacturing and selling premium hand-crafted spirits from the regions finest ingredients. I plan to distill premium vodka, whisky, bourbon, rum, gin and liqueurs as well as a luxury line of reserve products. Kansas established a micro-distillery license in July 2012 that opens up the market to this new type of business. The micro-distillery trend is growing across the U.S. and I plan to establish myself as a key player in the region. I will be entering the market early in the industry's life cycle when consumer interest and demand are high.

The proposed location in Wichita, KS takes advantage of the largest city in Kansas with a metro area population of 630,721 in 2011. The location has visible signage from Interstate 135. The distillery will offer tours and a tasting room. We are able to give customers free samples and sell cocktails to induce purchase. We will use direct sales as well as restaurant and liquor store sales thru distributors.

I will be marketing my premium products to upper-middle class and wealthy consumers. My extensive product line will allow marketing to a wide age range and to both sexes. We will focus on online and social media as well as distributor incentives and in-store promotions. Participation in local and regional events for sampling and advertising will increase brand awareness.

If I reach my sales goals of 25,000 cases a year by year five, which is equal to my closest competition, High Plains Distilling, there is a potential for \$548,500 or more per year in profit.

I am seeking a loan for \$300,000, interest only for the first 18 months. I will contribute \$40,000. I will hold back \$30,000 in cash for unanticipated expenses.

CHAPTER II: GENERAL COMPANY DESCRIPTION

2.1 Mission Statement

To create a profitable brand and product line that I am proud to put my name on. My products will use only the highest quality, regionally sourced ingredients.

2.2 Company Goals

My Goal is to be the largest brand of craft distilled spirits. My goal is to sell 1,000 cases in the first year, 10,000 cases a year in the first three years. The five year goal is to sell 25,000 cases a year and to be available in ten states and turn a micro-distillery into a major producer.

2.3 Marketing Overview

My marketing play will be broad spectrum. I plan to market my products to upper-middle class and wealthy individuals. Some products will be targeted at the 21 to 35 demographic, some to the 35 and up demographic. While some products will be targeted at both sexes, other will have a female target in mind. We will focus on online and social media as well as distributor incentives and in-store promotions. Participation in local and regional events for sampling and advertising will increase brand awareness.

2.4 Industry

The craft distilling is both a new and old industry. The small craft distilling market has seen a reemergence within the last ten years. It is currently a growth industry with double digit growth in market share. Small craft brands are constantly chipping away at the large manufactures. Consumers are actively seeking out craft and premium brands and paying more for them. Whether the economy is up or down, this industry continues to grow.

2.5 Core Competencies

I am one of the main strengths of this company due to an intimate knowledge of the ingredients involved in the products, specifically the grains. I also have extensive business experience, including start-up experience. My education in food manufacturing with my experience in commercial retail production gives me a strong foundation for this new venture.

Additional strengths of this company include that there is limited close competition. There is also a current customer trend to buy local and natural products in general. We plan to take the field-to-plate movement and incorporate it into our field-to-bottle idea. Micro-distilleries as well as Micro-brewers and micro-wineries have been thriving on this across the country.

2.6 Legal Form

Wheat State Distilling will be a Limited Liability Corporation. This will allow for growth and make it easier to raise money in the future. I will be able to issue new shares, new stock classifications, and buy back shares.

CHAPTER III: PRODUCTS

3.1 Potential Products

3.1.1 Sweet Wheat Vodka

Premium Vodka

Wheat State Distilling Sweet Wheat Vodka starts by our master distiller hand selecting only the best Kansas Soft Red Winter Wheat for milling into whole grain flour for our grain-in distillation process. The Wheat mash is then distilled 21 times in our all copper stills. The Vodka is then filtered 21 times through activated charcoal. The final product has a very clean crisp neutral taste with a very slight hint of sweetness. The Vodka is then blended with pure spring water before bottling.

3.1.2 Sweet Wheat Whiskey

Organic White Wheat Whiskey, American White Oak Cask Aged

Wheat State Distilling Sweet Wheat Whiskey starts by hand selecting the best corn, barley and wheat. The grain is milled into whole grain flour for our grain-in process that yields a more flavorful product. During fermentation, the yeast produces congeners that give the spirit its distinctive flavor. Sweet Wheat Whisky is distilled five times, one batch at a time in, our all copper pot-column combination still. The spirit is then slow aged in seasoned Kentucky Bourbon, seasoned sherry, and Madeira or port barrels. During maturation, flavor and aroma of vanilla and caramel develop to make a very complex spirit.

3.1.3 Pepper Pot Vodka

Spicy Infused Vodka

Wheat State Distilling Pepper Pot Vodka is made by infusing our premium Sweet Wheat Vodka. Cyan, habanero, and black pepper add a nice kick that is balanced by the

coriander and cinnamon in the flavor and aroma of Pepper Pot. This unique vodka works great in Bloody Mary's or a fun way to spice up your favorite cocktail.

3.1.4 Lemon Blossom Vodka

Citric Infused Vodka

Wheat State Distilling Lemon Blossom Vodka is made by infusing our premium Sweet Wheat Vodka With lemon, lime and orange. This vodka is primarily for mixing premium cocktails.

3.1.5 Flapper Speak Easy Gin

London Dry Gin

Wheat State Distilling Flapper Speak Easy Gin is made by infusing our premium Sweet Wheat Vodka with junipers and 6 other spices. This Spirit makes an exceptional Manhattan or Gin and Tonic.

3.1.6 Honey Hibiscus

Honey Infused Vodka

Wheat State Distilling Honey Hibiscus is made by infusing our Sweet Wheat Vodka with organic honey and flower petals. The spirit is an excellent mixer for sweet cocktails.

3.1.7 Rumbustions

Dark Spiced Rum, Oak Cask Aged

Wheat State Distilling Rumbustion Dark Spiced Rum starts with refiners' grade molasses specially formulated for premium rum with a rich sweet taste and is naturally gluten free. During distillation, the rum is infused with spices like coriander, rosehip, nutmeg, and cinnamon. The rum is then aged in used charred American Kentucky Bourbon and Napa Valley wine barrels. During barrel maturation, the rum develops flavors

and aroma like burnt sugar and nutty chocolate and fine wine. The final product is smooth and flavorful perfect for sipping over ice or adding a nice kick to your favorite cocktails.

3.1.8 Rumbullions

Golden Rum, Oak Cask Aged

Wheat State Distilling Rumbullion Gold Rum Starts with fine Evaporated Sugar Cane Juice distilled six times to produce a very clean and smooth spirit. As the rum is aged in charred American Oak barrels, it matures to develop aromas of spice and oak and a light flavor with a hint of brown sugar and caramel that develops during the aging process.

Rumbullion Gold Rum will be bottled at 80 proof.

3.1.9 Slow Ryed

Slow Aged Rye Whisky

Wheat State Distilling Slow Ryed, Slow Aged Rye Whisky, is made by hand selecting the highest grade plump Minnesota Six Row Barley, Iowa Yellow Corn and Kansas Soft Red Winter Wheat. The grain is milled into whole grain flour for our grain-in distillation process, which yields a more flavorful product. During fermentation, the yeast produces congeners that give the spirit its distinctive flavor. Slow Ryed is distilled one batch at a time in our all copper pot-column combination still. The spirit is then slow aged in seasoned Kentucky Bourbon barrels. During maturation, flavor and aroma of vanilla and caramel develop to add to Slow Ryed signature balanced flavor. The final whisky has the characteristics of the sweetness of corn countered by the spice of rye and wheat. Bold rich flavor make this an excellent sipping whisky on ice or works great in your favorite cocktail.

3.1.10 Whiskey Rebellion

Single Malt

American Oak Cask Aged

3.1.11 Rose Peddle Vodka

Premium Infused Vodka

3.2 Pricing Structure

The spirits will be priced at the upper range of the other offerings, ranging from \$18 to \$55 retail price with future reserve products that could be as high as \$100, depending on the product and age. Tasting room sales are projected to be 10 percent of total sales. The rest of the product will be sold through distribution channels. In this case, the profit will be only 50 percent of the retail sales price. Approximately 25 percent of the sales price goes to the distributor, 25 percent to the retailer.

CHAPTER IV: MARKETING PLAN

4.1 Industry Overview

Distilled spirits account for approximately 30 percent of the U.S. alcohol market, which totaled more than \$385 billion annually in 2010. Despite the recession, sales of distilled spirits for home use rose for the twelfth year in a row. Of the distilled spirits consumed, 60 percent were domestic products. The craft distilling market is exploding, growing from 24 craft distilleries in 2000 to 234 in 2011.

4.2 Market

My initial market is the approximately 762 retail liquor stores in Kansas and 2312 on-premise license holders, restaurants and bars. My initial goal is to be in 10 percent of these locations, getting to at least 20 percent within three years.

4.3 Trends

In the spirits market, the current trends are towards flavored and infused products, organic products, and small batch high quality, premium products, and bourbon. Mixology, the study of preparing mixed drinks, has brought a new audience to distilled spirits. Females are an increasingly important part of the market due to the explosion of mixed drink offerings.

Seasonal trends also occur in the spirits business. Thirty percent of liquor sales are made between Thanksgiving and New Year's Day. In distribution, the key months are October, November and December. New products must be at the distributor by October 1st to be available for distribution that holiday season.

4.4 Barriers to Entry

There are many barriers to entry in the distilling market, which is an advantage to my business. The major barriers are high cost of capital to be an in-house producer and high production costs. The alcohol industry is highly regulated. From licensing to background checks to monthly reporting, the regulations stop many from attempting to enter the market. Many home distillers are not capable of fulfilling the requirements involved in operating a full-scale distillery.

My education and business experience set me apart from the common start-ups. I have the knowledge and experience needed to navigate the financial and regulatory side of the business.

4.5 Competitive Advantage

The farm-to-bottle model will give my products an advantage over the mass produced counterparts. I will use top-shelf ingredients to create top-shelf products giving me an advantage over Most Wanted, my closest competition. While I may use some Neutral Grain Spirits for blending, the products will be natural, some even organic. I will also use unique branding to set the product apart.

4.6 Customers

The variety of product offered will be marketed to different consumers. Bourbon, Whiskey and Gin are traditionally male products marketed towards the 35 years and up age range. As the current market is changing to include women and younger consumers as targets, I will also spend some of my marketing budget to attract these new groups. Vodka and its flavored counterparts hold a much broader appeal and will be marketed towards a younger 21-35 year old consumer, with some flavored products like our Rose Petal Vodka, and Hummingbird Honeysuckle Vodka marketed directly to women.

The products pricing will be on the high side, comparable to other mass produced brands. This will have our marketing targeted toward those willing to pay more for quality products, upper-middle class and wealthy income brackets.

4.7 Competition

My products will be in competition with the major name brands. In addition, they will compete with craft brands from other states.

Price can be seen as a competitive weakness with the major brands. We will not be able to compete with their price points. However, the customer perception of price as it relates to quality will serve as my advantage. Higher priced products are perceived as higher quality. I will use my marketing position to reinforce the quality/value aspects of my products, making the price feel suitable. The tasting room and local connection will also add value.

High Plains Distillery is in Atchison Kansas. They produce Most Wanted, a line of Vodka, Gin, Whiskey, Bourbon, and Tequila, as well as Fox Vodka. They sold 25,000 cases in 2010 and are in 7 states. The quality of our products and price will differentiate us from their Most Wanted line. Our tasting room and tours, which they do not offer, will give us an advantage in appearance and reputation, as well as allowing us direct sales.

Dark Horse Distillery in Lenexa Kansas, founded in 2010, produces Rider Vodka and Long Shot Whiskey. These products are available in the Kansas City market. They create premium products similar to my own products, but are not selling outside of the Kansas City area. Their facility also serves as an event space with 20,000 square feet. My tasting room and tours will also be an advantage here, however, their event space, used mostly for wedding, gives them the advantage of visibility to new potential consumers. I

will have the advantage of a larger selection of products over their two offerings. Their Kansas City location gives them a large potential customer base.

Good Spirits Distilling in Olathe Kansas produces Clear 10 Vodka. It is a super-premium product available in four states. They do not distill the product themselves. It is a redistilled GNS (Grain Neutral Spirit) product and therefore is not considered a handmade craft artisan product. Their facilities are not open to the public. My selection, quality and customer interaction will give my products a competitive advantage.

4.8 Niche

Wheat State Distilling will be unique by being one of the few distilleries in our region. I will focus on being an artisan producer, made with high quality, locally sourced ingredients. The comprehensive equipment package I will have in place will allow for multiple product lines and the ability to react quickly to changes in customer demands or preferences as well as produce new and seasonal products.

4.9 Strategy/ Promotion

The key to my marketing will be to utilize online and social media. In store and event marketing will be used. In addition, more traditional strategies of billboards and newspaper will be implemented.

Social media is key to how consumers get information today. Facebook and Twitter rule the marketing world. Four Square and Urban Spoon are additional sites as well as many new up and coming sites. Creating a strong online presence will help the process of getting our name out there. The consumer driven side to these sites will lead to an expansion of our online presence. Using online promotions like Groupon or Living Social is an avenue for mass marketing that has worked well for other distilleries. Actively maintaining these sites and pushing new marketing out thru them reaches much of our

target audiences. Upper middle class and wealthy consumers are already active and participating in this form of marketing. An e-mail fan club will also be established that customers can sign up for to receive news and promotions.

Kansas passed legislation in July 2012 that allows us to offer tasting both on site and in liquor stores. I plan to use liquor store tasting as much as possible when releasing new products.

The distillery tours will be important in marketing. Getting customers in the door for free tours will be a great way to increase brand awareness and make in store sales. We will offer free tasting with the tour as well. The ability to taste the product is a great sales advantage. The distillery tours and tastings will be well-choreographed performances by me or my staff to insure the consumer has positive experience that will add perceived value to the product. I will work to get the distillery tours onto tourism sites both at the local and state levels. When traveling, or having out of town guest's visit, many people now turn to online sites and tourism boards to plan their activities. I will actively pursue these advertising options.

I plan to teach classes and short courses on distilling history, distilling techniques, liquor infusions, mixology, and governmental regulations and compliance. These classes will draw in additional income and help strengthen brand awareness.

The tasting room will hold regular tours as well as special events. I also plan to actively participate in local and regional events. Festivals and events commonly offer food and drink options. I will be able to offer free samples at a booth and sell cocktails. Zoobilee at the Sedgwick County Zoo and Autumn and Art at Bradley Fair are examples of Wichita events I could use.

I plan to compete in various tasting contests. Winning awards for our products will gain the distillery publicity and recognition, in addition to being great for product advertising and labeling.

I plan to offer press releases to local and regional newspapers. I have had great success in the past with this form of free advertising. I will use this for the opening of the distillery as well as the release of new products, awards and tours.

The location of the distillery is important for visibility. The location I am planning to use is visible from I-135 in Wichita. The average 24 hour traffic count for the location was 61,200 for I-135, taken in 2009. The location is at the intersection of Hydraulic and 37th Street North, with a corner 24 hour traffic count averaging 7000 in 2011. I have negotiated a billboard sign to be placed facing the highway, in addition to signage on the front of the building. I can also place temporary banners on the building that are visible from the highway and intersection.

I plan to offer for sale branded swag in addition to my core products. Products like T-shirts, coasters, flasks, glasses and hats will be offered for sale in the tasting room and online.

4.10 Budget

The startup budget for advertising is \$10,000 for signage, web design, logo and bottle design development.

The operational budget for advertising and marketing is \$2 a bottle. This will go towards in store advertising and promotions in liquor stores and restaurants and pay incentives for the distribution route managers.

CHAPTER V: INDUSTRY ANALYSIS – BOURBON PRICING

I am interested in what factors determine the selling price for a 750ml bottle of micro distilled bourbon. Micro distilleries often referred to as “craft” or “artisan” distilleries are those that produce less than 50,000 gallons a year. Micro distilleries have been popping up around the country as each state changes the laws to allow them. I am interested in the best ways to increase the selling price of my own bourbon.

5.1 Regression Analysis of Micro Distilled Bourbon

The average selling price of a 750ml bottle of micro distilled bourbon is the dependent variable in my model. The average price in the model is \$48.16. Micro distilled products sell for substantially more than the major brands. Jim Beam, the number one selling bourbon in the world, sells for around \$14.99 for a 750ml bottle.

The sample size is small, only 25 observation. This is because the micro distillery industry is new and there are not many products on the market yet. Bourbon is an aged product. Most massed produced bourbons are aged at least 4 years in 53 gallon barrels. In micro distilling, sometimes smaller barrels are used to reduce the time, as short as three months. Many of the new micro distillers have made bourbon, but it is still aging and not yet available for sale. As more products become available, I will add them to the model. Because of the small sample size, I have few statically significant variables. As my sample size increases, so will the accuracy of my model.

The independent variables that influence the price of a 750ml bottle of micro distilled bourbon include two categories, product quality and appearance. In quality are age of the bourbon, awards received, and proof. In appearance are label, bottle and origin. The age is measured in the number of years the bourbon aged in a barrel. In

products blended from multiple barrels, it is the age of the youngest barrel. The average age in the data is 2.95 years. I hypothesized the relationship would be positive, showing that an older product would cost more. The awards are measured by the number of nationally recognized awards received by the product. The average number of awards is less than one. Each distillery has to choose and pay to enter each competition. If you do not believe your product can win, there is no sense in paying to enter. I hypothesized the relationship to be positive. More awards should bring a higher price. Proof is measured by the percent of alcohol in the bottle times two. The average proof in the data is 92, which is higher than the massed produced bourbon that average 80 proof. I hypothesized the relationship will be positive. The label is a dummy variable representing the type of label used on the bottle, 0 for a paper sticker label, 1 for a screen-printed label. I hypothesized that the relationship is positive. The paper sticker labels are less expensive and I believe that there is more perceived value in the more expensive, screen-printed label and the price should be higher because of cost of goods. The bottle is a dummy variable, representing the shape of bottle used, 0 for round bottles, and 1 for non-round shapes (oval, square, and rectangle). I hypothesize that it will be positive. The round bottles are the most common in the liquor business. They are less expensive themselves and also less expensive to label. The price should be higher because of cost of goods and I think that there is more perceived value in a product in a different or unique bottle. The origin is measured by a dummy variable, 1 if the product was produced in Kentucky, 0 if it was produced somewhere else. I hypothesize that it will be positive. Many consumers believe that bourbon must be made in Bourbon County, Kentucky. This is a common

misconception. I think that consumers may see more value in a product from Kentucky than from other locations.

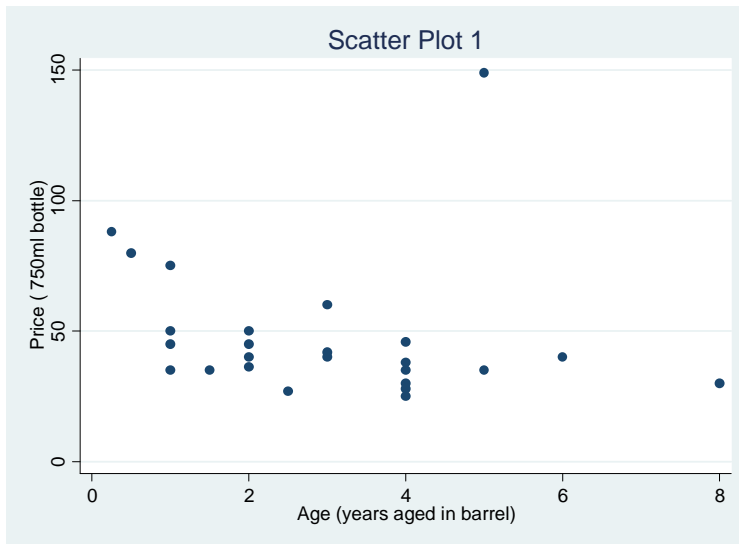
I collected data on other variables; however I made the decision before running the regression analysis not to include them. My decision was based on a reconsideration of the theory behind what would really affect the selling price of the bourbon. That data included the years the distillery had been open, the number of states the product was distributed to, the total number of products the distillery produces, and whether the distillery offers tours. I believe these variables will be relevant to a model analyzing the number of units sold, but that they are not a determining factor of the price of the unit.

The data was collected from each distiller’s website, online liquor distributors, and “Micro-Distilleries in the U.S. and Canada, 2nd Addition.” (Sr. 2011)

Table 5.1: Factors contributing the average selling price of a 750ml bottle of Bourbon

Observation (Sample of 5 from the complete data set)	Price \$ per 750ml Bottle	Age	# of Awards	Proof	Label (Paper sticker=0, Screen- print=1)	Bottle (Round=0, Not Round =1)	Origin (From Kentucky=1, From other state=0)
1	\$40.00	2	5	86	1	0	0
8	\$34.99	1.5	1	80	0	0	0
14	\$88.00	.25	1	92	0	0	0
18	\$75.00	1	2	91	1	1	0
24	\$26.99	2.5	0	92	0	0	0
			Full Sample	Statistics	(N=25)		
Mean	\$48.16	2.95	.84	92.37	.28	.28	.16
St. Dev.	26.52	1.87	1.28	9.09	.46	.46	.27
Min	\$25.00	.25	0	80	0	0	0
Max	\$149.00	8	5	123.7	1	1	1

Figure 5.1: Price and Age of 750ML Bottles of Bourbon



Price=-117.94-

4.13(age)+2.31(awards)+1.84(proof)+7.69(label)+12.34(bottle)+2.87(fromKY)+ ϵ

- Age: For every additional year the bourbon ages in the barrel, the price per bottle decreases by \$4.13, holding all else constant.
- Awards: For each national recognized award a bourbon received, the price per bottle increases by 2.51, holding all else constant.
- Proof: For each additional unit of proof, price per bottle increases by \$1.84, holding all else constant.
- Label: The price for a bottle that has a screen printed label is \$7.69 more than the price for a bottle that has a paper sticker label, holding all else constant.
- Bottle: The price for a bottle that is not round is \$12.34 more than the price for a bottle that is round, holding all else constant.
- Origin: The price for a bottle that is produced in Kentucky is \$2.87 more than the price of a bottle that is produced elsewhere, holding all else constant.

The results of the regression show a low adjusted R^2 of .44, meaning that only 44% of the variation in price is explained by the variables in the model. Proof is the only variable that is statically significant to the 5% level. Age is significant at the 10% level. I feel that with a larger sample size gained over time, those significance levels will

improve as will the R^2 . The bottle is not currently statically significant, but it may be at a larger sample size. I found that number of awards, label, and origin are not statically significant. The signs of the coefecents were as expected except for age.

When reviewing the results, the most surprising issue was the negative coefficient on age (See Figure 5.1). After working thru the common problems with unexpected signs and accounting for the small sample size, I believe that the regression is correct and that my theory was wrong. My error has to do with understanding this new micro distillery trend. It is the newest distilleries that are producing the youngest product, which are selling for the higher prices. There is high consumer interest in this micro distillery trend, and new products are highly desired, allowing for the high sales price. The prices for products that have been available longer are lower. I think that over time, as the age of the product gets higher, the prices will begin to increases again. Ten-, 15-, and 20-year bourbons are highly prized in the mass produced bourbon market. I think that when micro distillers have these products available, they will bring a higher price. I would want to look and see if a quadratic model may fit better when there is more data available.

I ran a regression on price as a function on only age, proof and bottle. The adjusted R^2 was .48 and proof was significant at the 1% level and both age and bottle were significant at the 10% level. The sign and magnitude of the coefficients was similar in both models. I chose not to use this model because of the theory of what should affect price and I believe they all should be included at least until the sample size gets larger and better determinations can be made.

5.2 Industry Conclusions

This model will be used in my distillery to make production decision like the amount of time to age my spirits and what proof to bottle at to meet the price points I desire. In addition, it gives me good information when sourcing glass bottles and labels on the added value of the more expensive options. I plan to continually update this model as more products come onto the market to use in future product development decisions.

CHAPTER VI: OPERATIONAL PLAN

6.1 General Production

Initially, all grains will be received in 50-lb sacks until we can move to receiving some materials in 2,500-lb totes. Our future plan is to purchase a hammer mill and process the grains onsite. The molasses will be received in 300-gallon totes. We will utilize common freight carries unless the materials are sourced locally. There will be 4-5 mash bills, recipes relating to the proportions of grains used, that create 10 of our products.

The production of spirits starts with the mashing process. Grain or sugar is mixed with water in our 500-gallon mash-tun where the mixture is heated by steam and cooled by glycol in the same vessel. A grain mash takes approximated 2.5 hours to process, including heating, holding temperature for starch to gelatinize and cooling. During this process, three different enzymes are added to help break down starch into fermentable sugars. A sugar mash takes only the time to heat for sufficient sanitation. Once the mash is cool, the yeast is added and is transferred to 600-gallon HDPE fermentation tanks. After a 3-5 day fermentation period the mash is now distillers beer 10% abv. The beer is then transferred to our Vendome 500 gallon all copper hybrid pot-column 4 plate still for distillation. High proof spirits like vodka then go thru our Vendome 16 plate all copper column to produce a total of 21 possible distillations at once. All spirits will be produced in a single pass. At this point, the spirits will be ready for bottling flavor infusions or barreling for aging.

The production of vodka utilizes both our copper hybrid still as well as our column. This vodka will be sold as its own product and also serves as a base for the flavor infused vodkas and the gin. The flavored vodkas and gin will be created in our stainless steel infusion stills. All clear spirits like vodka, infused vodka, and gin will be available for immediate sale.

The whisky and rum will utilize our hybrid still only. All of our aged products will be split between 15, 30 and 50 gallon maturation barrels. Spirits age faster in smaller barrels due to the higher surface area to volume ratio, allowing us get an aged product to the market in less than a year. Utilizing different sizes of barrels and possible blending with GNS gives us elasticity in our supply chain by allowing us to get a larger quantity of products to the market in a shorter period. Some of these barrels will be stored longer to create our reserve and single barrel products for high-end consumers.

Initially we plan to use a manual bottling line consisting of a cold plate filter, vacuum operated bottling machine. The corking, labeling, boxing, and palletizing will all be done by hand. As our business expands, one of the first capital investments to consider is a rotary bottling and labeling machine to save on labor. We may also consider using an outside contractor.

6.2 Analysis of Production levels

We need to maximize the total present value of profit of our proposed micro-distillery, given estimated demand, storage and equipment constraints, by determining the optimal quantities of each product to produce in a monthly timeframe. We are considering the production of 10 different products. The products have varying inputs and outputs, and different equipment and time requirements. The cost to produce, sales price, and estimated demand are different as well.

6.2.1 Decision Variables

The decision variables are the 10 different proposed products; corn vodka, wheat vodka, neutral grain spirit(NGS) vodka, 3 year bourbon, 7 year bourbon, 3 year light rum, 7 year light rum, 3 year dark rum, 7 year dark rum, and 2 year whiskey. They are measured

by the number of batches produced. Each batch is mashed from one ton of raw ingredients and 1180 gallons of water. The output produced from one batch of each product varies.

6.2.2 Objective Function

The objective function is to maximize the present value of the total profit. This is based on a monthly time frame, working 2, 6-hour shifts a day. This is the sum product of the number of batches produced of each product and the present value of each batches profit. We use the present value of the profits, at 3% opportunity cost of capital, because not all of the products are available for immediate sales. This compensates for the aging of some products.

6.2.3 Constraints

There are three equipment constraints, the mash ton, the fermenter and the still. The products must be made in whole batches, so these decision variables must be integers.

The mash tun usage is measured in hours per product batch. We will use a 450 gallon mash tun, which is limited to 400 gallon batches. Each product batch produced, which starts as 1 ton of raw ingredients and 1180 gallons of water, will require 4 smaller batches in the mash tun to cycle all of the raw ingredients through. The different products also require different amounts of time in the mash tun due to heating and cooling requirements. We are limited to 360 hours a month while working two shifts a day.

The products move from the mash tun into the fermenters. The fermenter usage is measured in days. We will use 6, 1800 gallon fermentation vessels, which are limited to 1600 gallon batches, and produce 945 gallons of wash. One product batch fits into each fermentation vessel. Each product requires a different number of days in the fermenter. With 6 vessels, we will have 180 days of fermentation time available. The fermentation

vessels can run 24 hours a day, regardless of how many shifts are being worked, because they have automated aeration.

The product then moves to the still. We will use a 1000 gallon still, which is limited to batch sizes of 945 gallons. The still usage is measured in number of complete runs, which take 6 hours each. The products require different numbers of distillations. At two shifts a day, we are limited to 60 distillations.

6.2.4 Bounds

We assume production cannot be negative. We have also placed a minimum and maximum numbers of batches to be produced, based on estimated demand and storage space available. Our demand is estimated based off average sales levels from other micro-distilleries in our region and across the US. The storage space available is based on the square footage of our proposed warehouse of 2,000 square feet with a 20 foot ceiling height.

We have currently placed the NGS Vodka at zero production level. This is because the current craft industry does not consider this a craft product. It's considered a lowbrow product. We plan to market ourselves as a premium brand, requiring us to make corn or wheat Vodka. The NGS Vodka is included for analysis of potential profits and the future use of the spreadsheet.

6.2.5 Representation of the Model

We used the Risk Solver Platform, running the Standard LSGRG Nonlinear Engine to solve our integer linear problem. We assumed non negativity and automatic scaling.

The data in our model comes from our data sheet in Excel. The costs and profits are calculated there. Using our recipes for each product, we calculated the cost of the raw

ingredients and the output produced. The output must be adjusted by adding water to get to the proper strength for barreling and then bottling. The Angels Share must also be accounted for. This is the evaporation loss in the barrels over the aging time, usually around 10% a year. From this we come up with the total number of liters available for sale. We then include variable costs of water, sewer, electricity, cost of barrels, cost of bottles, marketing, federal and state excise taxes, and wholesale and retail margins. Our sales prices per 750ml bottle are based off of current prices of similar products. The model calculates the profit for each batch of product by multiplying the sale price per bottle by the total number of bottles produced and subtracting the costs. Because the products are aged, we use the present value since they are not available for immediate sale. Additional information is included, number of barrels to be stored, total bottles produced, gross profit in current month, and sales in current month. This model does not include fixed costs.

6.2.6 Spreadsheet

Figure 6.1: One Month Production, 2-6 hour shifts a day

	Vodka Corn	Vodka wheat	Vodka NGS	Bourbon 3yr	Bourbon 7yr	Light Rum 3yr	Light Rum 7yr	Dark Rum 3yr	Dark Rum 7yr	Whiskey 2yr	Barrels in warehouse	
Batches to Produce, 945 gal	0	9	0	5	2	2	2	0	0	2	38.23	Rate
Cost per Batch	\$ 14,088.79	\$ 26,251.05	\$ 55,698.87	\$ 19,991.89	\$ 20,370.20	\$ 14,288.54	\$ 15,700.73	\$ 14,289.82	\$ 15,702.01	\$ 23,276.65	Total bottles made	3%
Sale Price per Bottle, 750ml	\$18	\$24	\$18	\$29	\$35	\$18	\$25	\$18	\$25	\$25	26340	
Bottles per Batch, 750ml	963	1500	3823	980	867	967	856	967	856	1280	Total Sales	
Sale Price Per Batch	\$17,340	\$36,000	\$68,819	\$28,408	\$30,353	\$17,414	\$21,412	\$17,414	\$21,412	\$31,991	\$668,381	
Profit Per batch	\$3,251.21	\$9,748.95	\$13,119.93	\$8,416.58	\$9,983.02	\$3,125.26	\$5,710.82	\$3,123.98	\$5,709.54	\$8,713.95	Total Costs	
Barrels in warehouse	0	0	0	14.18	5.67	5.60	5.60	0.00	0.00	7.18	\$ 483,491.10	
Total Bottles Made	0	13500	0	4898	1734	1935	1713	0	0	2559	Total Profit Present Value	
Years Aged	0	0	0	3	7	3	7	3	7	2	\$ 173,921.03	
Present Value of Profit per Batch	\$3,251.21	\$9,748.95	\$13,119.93	\$7,702.36	\$8,117.11	\$2,860.06	\$4,643.42	\$2,858.88	\$4,642.38	\$8,213.73	Gross Profit, 1month	Sales in c
											\$ 87,740.58	
Minimum production	0	6	0	2	2	2	2	0	0	2		
Maximum Production	9	9	0	6	6	5	4	4	4	6	Available	
	Vodka Corn	Vodka wheat	Vodka NGS	Bourbon 3yr	Bourbon 7yr	Light Rum 3yr	Light Rum 7yr	Dark Rum 3yr	Dark Rum 7yr	Whiskey 2yr	Per Month	Used
Distillation Runs(6hours, 1000 gal still, 945 gal)	3	3	1	3	3	2	2	2	2	2	60	60
Mash Ton Hours(450gal Mash ton, 400gal still)	8	8	0	12	12	4	4	4	4	8	360	188
Fermenter days(using 6, 1800gal units, 1600 gal)	3.5	3.5	0	3.5	3.5	1	1	21	21	3.5	180	67

6.2.7 Model Solution

Given the bounds and constraints, solver found the maximum total profit at present value to be \$101,085.71 as shown in Table 6.1. We would be producing the maximum 9 batches of wheat Vodka, along with 5 batches of 3 year Bourbon, and the minimums of 2 batches of 7 year Bourbon, 2 of 3 year light Rum, 2 of 7 year light Rum, and 2 of Whiskey. We would produce no dark Rum, corn Vodka or NGS Vodka. With these production levels, we would use all 60 available still runs, 188 of our 360 mash tun hours, and 67 of our 180 available fermentation days. In addition, the solution shows a gross profit for the month at \$60,740.58. This gross profit is from the products available for immediate sale, wheat vodka, representing our cash flow for the month before the fixed costs and labor. Of the constraints, the still is the limiting factor.

Table 6.1: Model Scenario Solution

	Vodka Corn	wheat Vodka	Vodka NGS	Bourbon 3yr	Bourbon 7 yr.	Light Rum 3yr	Light Rum 7yr	Dark Rum 3yr	Dark Rum 7yr	Whiskey 2yr	
No.Batches	0	9	0	5	2	2	2	0	0	2	
Total Profit Present Value						Available					
\$ 101,085.71						Per Month		Used			
Gross Profit, one month						Distillation Runs		60 60			
\$ 60,740.58						Mash Ton Hours		360 188			
						Fermenter days		180 67			

6.2.8 Model Sensitivity Analysis

We looked at several aspects that would affect our results. We examined the effects of running 24 hours a day in four 6-hour shifts. That would increase the available distillation runs to 120 a month and the mash tun time to 720. As shown in Table 6.2, you can increase your profit, but then you will have unused distillation, mash ton and fermenter

time. That would not be efficient. However, if the maximum production constraints were raised, due to increased demand or storage capacity, running 24 hours a day may be more feasible.

Table 6.2: Model Sensitivity Analysis: Running 24 hours a day

Vodka Corn	Vodka wheat	Vodka NGS	Bourbon 3yr	Bourbon 7 yr.	Light Rum 3yr	Light Rum 7yr	Dark Rum 3yr	Dark Rum 7yr	Whiskey 2yr
0	9	0	6	6	5	4	0	3	6
Total Profit Present Value					Available				
\$ 141,285.51					Per Month	Used			
Gross Profit, one month			Distillation Runs		120	99			
\$ 60,740.58			Mash Ton Hours		720	312			
			Fermenter days		180	166.5			

We also examined running only one 6-hour shift a day as shown in Table 6.3. That would cut our distillation time down to 30 runs available and mash tun time down to 180 hours. There was not a feasible solution. We then lowered our minimum production levels to obtain a solution that would work in one shift a day while still producing the same minimum wheat vodka level, needed to maintain cash flow.

Table 6.3: Model Sensitivity Analysis: One 6-Hour shift a day

Vodka Corn	Vodka wheat	Vodka NGS	Bourbon 3yr	Bourbon 7 yr.	Light Rum 3yr	Light Rum 7yr	Dark Rum 3yr	Dark Rum 7yr	Whiskey 2yr
0	6	0	1	1	1	1	0	0	1
Min production 0	6	0	1	1	1	1	0	0	1
Total Profit Present Value					Available				
\$ 53,754.20					Per Month	Used			
Gross Profit, one month			Distillation Runs		30	30			
\$ 40,493.72			Mash Ton Hours		180	88			
			Fermenter days		180	33.5			

We then examined what would happen if there were no minimum required amounts as shown in Table 6.4. This would represent the case of carrying every product we had previously desired, but only the most profitable, up to the limits of our demand and storage. This would cause us to produce no Rum or Whiskey. The total profit would increase, but we would have products available in fewer categories.

Table 6.4: Model Sensitivity Analysis: No Minimum Production Levels

Vodka Corn	Vodka wheat	Vodka NGS	Bourbon 3yr	Bourbon 7 yr.	Light Rum 3yr	Light Rum 7yr	Dark Rum 3yr	Dark Rum 7yr	Whiskey 2yr	
0	9	0	6	5	0	0	0	0	0	
Total Profit Present Value \$ 107,230.24					Available					
Gross Profit, one month \$60,740.58					Per Month Used					
					Distillation Runs	60	60			
					Mash Ton Hours	360	204			
					Fermenter days	180	70			

We examined what would happen if there were a change in price in some of the raw ingredients as shown in Table 6.5. An increase in the price of wheat from \$289 to \$489 per ton would keep the production variable the same, but would slightly lower the profit. The price of corn dropping 75%, and removing the other vodka minimums would not change the solution as shown in Table 6.6. The wheat vodka would still be more profitable than corn. The ingredient costs are such a minimal part of the overall profit, even large changes in prices do not affect the solution very much.

Table 6.5: Model Sensitivity Analysis: Price of Wheat changing from \$289 to \$489 per ton

Vodka Corn	Vodka wheat	Vodka NGS	Bourbon 3yr	Bourbon 7 yr.	Light Rum 3yr	Light Rum 7yr	Dark Rum 3yr	Dark Rum 7yr	Whiskey 2yr	
0	9	0	5	2	2	2	0	0	2	
Total Profit Present Value \$99,288.32					Per Month Used					
Gross Profit, one month \$58,943.19					Per Month Used					
					Distillation Runs	60	60			
					Mash Ton Hours	360	188			
					Fermenter days	180	67			

Table 6.6: Model Sensitivity Analysis: Price of corn dropping 75%, removing minimum on wheat vodka

Vodka Corn	vodka wheat	Vodka NGS	Bourbon 3yr	Bourbon 7 yr.	Light Rum 3yr	Light Rum 7yr	Dark Rum 3yr	Dark Rum 7yr	Whiskey 2yr
0	9	0	5	2	2	2	0	0	2
Total Profit Present Value									
\$102,043.92					Per Month Available	Used			
Gross Profit, one month			Distillation Runs		60	60			
\$60,740.58			Mash Ton Hours		360	188			
			Fermenter days		180	67			

We also examined what would happen if I did decide to make NGS Vodka in place of the wheat Vodka as shown in Table 6.7. Four batches of NGS Vodka would produce approximately the same number of bottles of finished product as the nine batches of the wheat Vodka. This would meet our expected Vodka demand. While the present value of the total profit is still at an acceptable level, the gross profit is almost a third lower, and would not provide enough income to operation. This is due to the lower sales price per bottle for the product reflecting consumer perception of the value of a NGS product.

Table 6.7: Model Sensitivity Analysis: Adding a production a max of 4 batches of NGS Vodka

Vodka Corn	Vodka wheat	Vodka NGS	Bourbon 3yr	Bourbon 7yr	Light Rum 3yr	Light Rum 7yr	Dark Rum 3yr	Dark Rum 7yr	Whiskey 2yr
0	0	4	6	6	2	2	0	0	6
Total Profit Present Value					Available				
\$91,242.57					Per Month	Used			
Gross Profit, one month			Distillation Runs		60	60			
\$21,893.60			Mash Ton Hours		360	208			
			Fermenter days		180	67			

6.2.9 Discussion of Model

There are dozens of different stills that can create hundreds of distillery combinations. The production outputs are modeled after other micro-distilleries using similar equipment to our plan. The actual yield may vary slightly. The only way to get accurate outcomes for this spreadsheet is to test our own equipment with the actual ingredients being used and rerun the solver. This model limitation to this cannot be solved until production has begun. We will have to work off these production levels until a more accurate model can be created.

We assume that the demand for our products will be similar to that of other micro-distilleries. We also assume that the current pricing for the products we plan to age will stay constant. Any large swings in prices would have caused a change in our current production. If prices increase largely for those aged products, we will regret not working more shifts or making more of those products. That is a major risk you take with products you cannot sell for 3 or 7 years.

We have assumed an opportunity cost of capital at 3%. We have also assumed that 50% of the sale price will go to the wholesaler and retailer. This is based off information from other micro-distillers. We may be able to negotiate a better deal.

6.2.10 Discussion of Solution

The solution is to produce nine batches, the maximum amount of wheat vodka, two batches, the minimum amount of light rum, whiskey, and seven year bourbon, two batches

each, and five batches of three year bourbon. This solution, shown in Table 6, uses all of the distillation time available to maximize the present value of the profit.

The solution makes sense as a guideline to begin production with the given assumptions. As mentioned before, the solution will not be accurate until the actual equipment and ingredients are tested. The demand levels will also be adjusted as the products start selling and we can better gauge our own demand. This may be higher or lower than our estimates due to the consumer response to our product as well as changes in the market. It is clear that the model will get more and more accurate over time.

This model uses the present value the aged products in their profit values. Other models may be needed in order to more closely examine the effect of the aging on production levels.

6.1.11 Discussion of Sensitivity

We found that cost of the raw ingredients in the model has very little impact on the solution. This was unexpected and led to a change in the quality of ingredients we planned to use. The use of ultra-premium ingredients is great for your marketing and affects the bottom line a minimal amount. The other costs of taxes, marketing, bottles, barrels, and wholesale and retail are what really affect your costs.

We had planned originally to model this based on running 24 hours a day. After analyzing the data, we found that for our estimated demand did not require this. Running only two, 6-hour shifts would meet demand. We also found that we could feasibly operate and maintain cash flow at only one shift a day if we lowered our minimum production levels on everything but vodka. This is good to know since we initially plan to operate

with only myself working in production. If the hours are too much, we will have the choice of lowering the shifts per day or hiring employees.

In looking at NGS vodka, we found that the current sale price customers are willing to pay for a craft NGS product is too low to make it a viable option. To stay with our ultra-premium marketing plan, we need to make the vodka from raw ingredients.

6.2 Location

The distillery will require a 3,000 to 5,000 square feet concrete or steel construction location. The ceiling needs to have 20 feet of clearance in at least one location. Because of the storage requirements, full height 20 foot ceilings would be preferred. 3 phase power, water, and natural gas will be required. The current zoning requirements are industrial, but also could be commercial/retail with an appropriate variance. Access requirements include 12 foot garage door, customer parking, and ability to receive deliveries from large trucks. Visibility of signage is important.

I am currently negotiating on a location that meets these requirements in the 37th Street Business Park in Wichita Kansas. The location is a concrete building, industrial zoned, 3,000 square feet with 20 foot continuous ceiling height. The building will require the movement of a floor drain and the addition of a ventilation system to meet my needs. The lease is \$1400 per month industrial gross. The lease includes everything but the electricity, however, I will most likely have to install a separate water meter and pay for water because of the volume required.

The average 24 hour traffic count for the location was 61,200 for I-135, taken in 2009. The location is at the intersection of Hydraulic and 37th Street North, with a corner 24 hour traffic count averaging 7000 in 2011.

6.3 Legal Environment

Distillation is highly regulated by both the federal and state government. The Tabaco Tax Bureau, TTB, requires a Distilled Spirits Plant permit. The permit process is extensive and currently takes an average of 62 days to gain approval. The state of Kansas requires a Kansas Spirits Manufacturing license. A city license will also be required. \$18,000 in Surety Bonds will also be required. Operational bonds needed include a distilling bond, a warehousing and a bottling bond at \$5,000 per bond. A withdraw bond is also required. We are estimating an annual premium of \$1,000.

Depending on production levels, monthly or quarterly production reporting and gallonage tax will be due to the TTB and the state.

I will obtain a general commercial umbrella coverage insurance policy for the business.

I will be trademarking the business name, logos, product names, bottle designs, t-shirt designs, and advertising.

6.4 Personnel

To begin with, I will be the only main production employee. Kim Bahre, my wife, will be responsible for bookkeeping, reporting and taxes to the state and TTB.

As production increases, I will need at least one part-time employee to help with bottling and production. The position will require unskilled labor, and will have on-the-job training by myself. I have a target wage of \$10.00 an hour and I already have a few prospects interested in the position.

6.5 Inventory

The beginning inventory investment will be approximately \$10,000. This includes pallets and or bags of raw ingredients and enzymes, empty barrels, bottles, and corks, and T-shirts and other branded swag for sale in the tasting room.

From the beginning inventory, I will start immediately to put back barrels of products for aging. I will also start bottling vodka products and storing finished cases.

If I decide to contract out some of the starting inventory of products from another distillery, I will have those products in inventory as well, at an additional cost to the beginning inventory.

The finished product inventories will initially be large in order to ensure demand is met. As demand becomes more predictable, I will move to just-in-time inventory. Distributors will be contracted to hold minimum inventory levels on hand to ensure no store shelves are empty.

6.6 Suppliers

The grain ingredients required for production are readily available. It can all be purchased from a local mill or COOP. A broker could also be used. Heartland Mills in Kansas is a leading supplier of grains and organic grains to micro distillers. MGP Ingredients is a local supplier of NGS. Many companies, like Ultra-Pure, provide finished aged products for repackaging. Several of the big liquor producers in Kentucky also wholesale finished products.

Bottle supplies and labeling are still being researched as are barrel and cork suppliers. The Independent Stave Company and The Barrel Mill will most likely be the barrel suppliers. Bottling options vary from stock bottle options to custom designs and I am looking at a Bruni Glass stock bottle. I may have them screen print the bottles.

With all suppliers, I anticipate starting with no credit terms and being COD. This has been accounted for in the capital requirements.

6.7 Credit Policies

The laws are different in every state, but I will most likely have to give 30 day credit terms to my distributors. For the first two years while cash flow will be important, my terms will be 5% net 30 or 1.65% per month over 60. This will act as an incentive for prompt payment. Payment collection from distributors is a known problem within the industry. Background checks, investigation and references will be key in choosing distributors that will pay on time. We will not offer credit on tasting room sales.

CHAPTER VII: MANAGEMENT AND ORGANIZATION

7.1 Management

I will manage the business on a day to day basis. This will include production and sales. I am one of the main strengths of this company. I have an intimate knowledge of the ingredients involved in the products, grain. My degree is from the Department of Grain Science and Industry with a BS in Milling Science Management Administration from Kansas State University and I am currently in my third term of a master's degree in Agribusiness from KSU as well. I have a thorough knowledge of the distilling process. I have attended two distilling schools for training and visited 15 distilleries. I have built a professional support network.

I also have extensive business experience, including start-up experience. I started my own company in 2000; Bahre Investment Inc. I have owned and operated three Gambino's Pizza restaurants for the last 12 years as well as the purchase and selling of other restaurants and equipment.

I am experienced in all aspects of business including safety, OSHA, HASAP, GMP's, insurance and liability, risk management, contract negotiation, accounting and finance. My education in food manufacturing with my experience in commercial retail production give me a strong starting point for this new venture.

Kim Bahre will do bookkeeping functions and state and TTB fillings. She has held this position in my other company for years.

For a continuation plan if I am incapacitated or unable to run production for any reason, Kim Bahre will be trained in all aspects of production and sales. A few other key individuals and family members will also be trained in production to allow for time off and out of state sales travel.

7.2 Board of Directors

David Bahre will fill all Board of Directors positions.

Table 7.1: Outside Companies and Consultants

Position	Company	Individual
Attorney	Duncan Law Firm	Robert E Duncan, II
Accountant	Reese & Novelly, P.A. CPA	Nick Novelly
Bookkeeping	Wheat State Distilling	Kim Bahre
Insurance	Gross Insurance	Brooke Stiner
Banker	To be determined	To be determined
Consultant	Koval Distillery	Robert Birnecker, PhD
Consultant	TRICOR Insurance	Chuck Andracchio
Consultant	Tabaco Tax Bureau	Jim Neely
Consultant	Hum Spirits	Adam Seger

CHAPTER VIII: FINANCIAL PLAN

8.1 Startup Expenses and Capitalization

Table 8.1: Startup Expenses and Capitalization

Item	Projected Cost
Still 500 gal	\$136,000
Agitator for still	\$ 6,300
Reflux onion for still	\$4,800
Vodka Column 16ft	\$41,700
6 HDPE fermentation tanks 600 gal	\$9,000
Mash Tun 500 gal	\$25,000
Mash Pump	\$1,000
Alcohol Pump	\$1,000
3 Stainless steel Receiving tanks 250 gal totes	\$2,000
Boiler 1.5mill btu natural gas	\$30,000
Fire wall instillation (if required)	\$10,000
Fork Lift	\$5,000
Ventilation and plumbing	\$10,000
Inventory	\$10,000
Tax Bond premium	\$1,000
Legal and professional	\$1,000
Water filter	\$1,000
Cold plate alcohol filter and chest freezer	\$2,000
First 1.5 years operating expenses	\$37,8000
Startup advertising expenses, graphic design, trademark registration	\$10,000
Tasting room copper bar sales counter and iPad	\$500
Total	\$339,600

8.2 Financial Models

The financial models were built with the assumption of an average bottle price of \$25. We honestly feel that many if not all of the products will sell for a higher price, more in line with the other premium artisan products on the market. Our bourbon and rye whisky could sell as high as \$50, our reserve products as high as \$75. See appendix for spreadsheets.

The distillery production analysis spreadsheet demonstrates the theoretical maximum output for the distillery with a few upgrades. The included sensitivity analysis demonstrates the effect of changes in production schedules and input prices on overall profit. Included is a detailed analysis of variable costs.

8.2.1 Year One

In the first six months of year one there will be no production. We will be setting up the distillery and waiting for the rest of the equipment to be manufactured. In the second six months of year one, we will manufacture and sell vodka, infused vodkas and gin. Our sales goal is 1,000 cases in year one, and we be negotiating with distributors. During this time we will manufacture and barrel whisky, rum and bourbon for future sales in 15, 30, 50 gallon barrels. We will incur a loss during year one including operating expenses, interest and depreciation. Estimated year one, (\$35,400) as indicated in Appendix A.

8.2.2 Year Two

During the first six months of year two, we will continue to manufacture and sell vodka, infused vodkas and gin and manufacture and barrel whisky, rum and bourbon for future sales. In the second six months of year two, we will begin to sell all small barrel aged products. We will continue to produce all products. Our sales goal is 2000 cases in

year two. Additional income during this period will come from instructional classes and short courses. Estimated year two, \$13,800 as indicated in Appendix B.

8.2.3 Year Three

In year three, we will continue to manufacture and sell all products. We will begin to blend our large barrel products into the supply chain. Half way through year three, we will begin to sell our bourbon and reserve label product. Our sales goal is 10,000 cases in year three. Estimated year three, \$273,200 as indicated in Appendix C.

8.2.4 Year Four

In year four, we will continue to manufacture and sell all products. Our sales goal is 15,000 cases in year four. Estimated year four, \$434,400 as indicated in Appendix D.

8.2.5 Year Five

In year five, we will continue to manufacture and sell all products. Our sales goal is 25,000 cases in year five. Estimated year five, \$548,500 as indicated in Appendix E.

8.2.6 Year Ten

Estimated year ten, \$1,128,800 as indicated in Appendix F. Buy-out or IPO.

8.3 Risk Assessment

The risk assessment demonstrates the profit probabilities with varying sales levels with a standard deviation of 20% of projected sales goals as indicated in Appendix G.

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APPENDIX A

Distillery														
NET INCOME AND SALES PROJECTIONS YR1 1,000 cases														
Account Description	Input	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Wholesale sales								\$ 22,500	\$ 22,500	\$ 22,500	\$ 22,500	\$ 22,500	\$ 22,500	\$ 135,000
cost of wholesale sales	0.73	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,425	\$ 16,425	\$ 16,425	\$ 16,425	\$ 16,425	\$ 16,425	\$ 98,550
Gross profit wholesale		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,075	\$ 6,075	\$ 6,075	\$ 6,075	\$ 6,075	\$ 6,075	\$ 36,450
Retail sales								\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 15,000
cost of retail sales	0.23	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 3,450
gross profit retail		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 11,550
Total Monthly sales	n/a							\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 150,000
Average Cost of sales		0	0	0	0	0	0	0.68	0.68	0.68	0.68	0.68	0.68	
Gross profit -sales		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 48,000
Operating expenses:														
CEO salary	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wages - store labor	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
FICA & medicare tax	0.0765	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Unemployment tax	0.018	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other fringe benefits/insurance	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal salary & benefits	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building maint. & repair	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Utilities (elec, gas, water, trash)	550	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 3,300
Building rent	1400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 16,800
Building depreciation	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Real estate taxes	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Equipment repair & maint.	100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 1,200
Equipment depreciation	3571	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 21,426
Equipment rental	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Personal property taxes	400	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 2,400
Subtotal bldg. & equip.	n/a	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 6,021	\$ 6,021	\$ 6,021	\$ 6,021	\$ 6,021	\$ 6,021	\$ 45,126
Commercial package ins.	500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 6,000
Workers comp insurance	0.028	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal insurance	n/a	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 6,000
Accounting fees	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Consultants Fees	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Marketing expense	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Advertising fund	0.08	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 12,000
Legal/license fees	0	\$ 607	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 607
Bank service charge fees	20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 240
Subtotal other fees	n/a	\$ 627	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 2,020	\$ 2,020	\$ 2,020	\$ 2,020	\$ 2,020	\$ 2,020	\$ 12,847
Office supplies/postage	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating / Maintance Supplies	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Uniforms	20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 240
Telephone expense	100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 1,200
Travel & entertainment	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Dues & subscriptions	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Delivery expenses	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bad check expense	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cash short	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest expense (bank)	1500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 18,000
Miscellaneous expense	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal other expenses	n/a	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 19,440
Other income:														
Classes/Short Course	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Swag Sales	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous income	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal other income	n/a	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NET INCOME	n/a	\$ (4,247)	\$ (3,640)	\$ (3,640)	\$ (3,640)	\$ (3,640)	\$ (3,640)	\$ (2,161)	\$ (2,161)	\$ (2,161)	\$ (2,161)	\$ (2,161)	\$ (2,161)	\$ (35,413)
PROJECT.XLS		(These projected financial numbers are estimates only and may vary from actual performance)												

APPENDIX B

Distillery														
NET INCOME AND SALES PROJECTIONS YR2 2,000 cases														
Account Description	Input	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Wholesale sales		\$ 22,500	\$ 22,500	\$ 22,500	\$ 22,500	\$ 22,500	\$ 22,500	\$ 47,500	\$ 47,500	\$ 47,500	\$ 47,500	\$ 47,500	\$ 47,500	\$ 420,000
cost of wholesale sales	0.73	\$ 16,425	\$ 16,425	\$ 16,425	\$ 16,425	\$ 16,425	\$ 16,425	\$ 34,675	\$ 34,675	\$ 34,675	\$ 34,675	\$ 34,675	\$ 34,675	\$ 306,600
Gross profit wholesale		\$ 6,075	\$ 6,075	\$ 6,075	\$ 6,075	\$ 6,075	\$ 6,075	\$ 12,825	\$ 12,825	\$ 12,825	\$ 12,825	\$ 12,825	\$ 12,825	\$ 113,400
Retail sales	2500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 30,000
cost of retail sales	0.23	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 6,900
gross profit retail		\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 23,100
Total Monthly sales	n/a	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 450,000
Average Cost of sales		0.68	0.68	0.68	0.68	0.68	0.68	0.705	0.705	0.705	0.705	0.705	0.705	0.6925
Gross profit -sales		\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 14,750	\$ 14,750	\$ 14,750	\$ 14,750	\$ 14,750	\$ 14,750	\$ 136,500
Operating expenses:														
CEO salary														
Wages - store labor		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
FICA & medicare tax	0.0765	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Unemployment tax	0.018	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other fringe benefits/insurance		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal salary & benefits	0.025276	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Building maint. & repair		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Utilities (elec. gas, water, trash)	550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 6,600
Building rent	1400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 16,800
Building depreciation		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Real estate taxes		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Equipment repair & maint.	100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 1,200
Equipment depreciation	3571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 42,852
Equipment rental		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Personal property taxes	400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 4,800
Subtotal bldg. & equip.	n/a	\$ 6,021	\$ 6,021	\$ 6,021	\$ 6,021	\$ 6,021	\$ 6,021	\$ 6,021	\$ 6,021	\$ 6,021	\$ 6,021	\$ 6,021	\$ 6,021	\$ 72,252
Commercial package ins.	500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 6,000
Workers comp insurance	0.028	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal insurance	n/a	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 6,291
Accounting fees		\$ -	\$ -	\$ 1,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500
Consultants Fees		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Marketing expense		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Advertising fund	0.08	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 36,000
Legal/license fees		\$ 207	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 207
Bank service charge fees	20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 240
Subtotal other fees	n/a	\$ 2,227	\$ 2,020	\$ 3,520	\$ 2,020	\$ 2,020	\$ 2,020	\$ 4,020	\$ 4,020	\$ 4,020	\$ 4,020	\$ 4,020	\$ 4,020	\$ 37,947
PROJECT.XLS (These projected financial numbers are estimates only and may vary from actual performance)														
Page 1														
Office supplies/postage		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating / Maintance Supplies		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Uniforms	20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 240
Telephone expense	100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 1,200
Travel & entertainment		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Dues & subscriptions		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Delivery expenses		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bad check expense		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cash short		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest expense (bank)	1500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 18,000
Miscellaneous expense		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal other expenses	n/a	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 19,440
Other Income:														
Classes/Short Course	2000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 24,000
Swag Sales	50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 600
Miscellaneous income		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal other income	n/a	\$ 2,050	\$ 2,050	\$ 2,050	\$ 2,050	\$								

APPENDIX C

Distillery														
NET INCOME AND SALES PROJECTIONS YR3 10,000 cases														
Account Description	Input	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Wholesale sales		\$ 122,500	\$ 122,500	\$ 122,500	\$ 122,500	\$ 122,500	\$ 122,500	\$ 122,500	\$ 122,500	\$ 122,500	\$ 122,500	\$ 122,500	\$ 122,500	\$ 1,470,000
cost of wholesale sales	0.73	\$ 89,425	\$ 89,425	\$ 89,425	\$ 89,425	\$ 89,425	\$ 89,425	\$ 89,425	\$ 89,425	\$ 89,425	\$ 89,425	\$ 89,425	\$ 89,425	\$ 1,073,100
Gross profit wholesale		\$ 33,075	\$ 33,075	\$ 33,075	\$ 33,075	\$ 33,075	\$ 33,075	\$ 33,075	\$ 33,075	\$ 33,075	\$ 33,075	\$ 33,075	\$ 33,075	\$ 396,900
Retail sales	2500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 30,000
cost of retail sales	0.23	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 6,900
gross profit retail		\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 23,100
Total Monthly sales	n/a	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 1,500,000
Average Cost of sales		0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Gross profit -sales		\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 420,000
Operating expenses:														
CEO salary	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wages - store labor	1732	\$ 1,732	\$ 1,732	\$ 1,732	\$ 1,732	\$ 1,732	\$ 1,732	\$ 1,732	\$ 1,732	\$ 1,732	\$ 1,732	\$ 1,732	\$ 1,732	\$ 20,784
FICA & medicare tax	0.0765	\$ 132	\$ 132	\$ 132	\$ 132	\$ 132	\$ 132	\$ 132	\$ 132	\$ 132	\$ 132	\$ 132	\$ 132	\$ 1,590
Unemployment tax	0.018	\$ 31	\$ 31	\$ 31	\$ 31	\$ 31	\$ 31	\$ 31	\$ 31	\$ 31	\$ 31	\$ 31	\$ 31	\$ 374
Other fringe benefits/insurance	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal salary & benefits	0.015165	\$ 1,896	\$ 1,896	\$ 1,896	\$ 1,896	\$ 1,896	\$ 1,896	\$ 1,896	\$ 1,896	\$ 1,896	\$ 1,896	\$ 1,896	\$ 1,896	\$ 22,748
Building maint. & repair	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Utilities (elec, gas, water, trash)	550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 6,600
Building rent	1400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 16,800
Building depreciation	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Real estate taxes	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Equipment repair & maint.	200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 2,400
Equipment depreciation	3571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 42,852
Equipment rental	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Personal property taxes	400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 4,800
Subtotal bldg. & equip.	n/a	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 73,452
Commercial package ins.	500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 6,000
Workers comp insurance	0.028	\$ 48	\$ 48	\$ 48	\$ 48	\$ 48	\$ 48	\$ 48	\$ 48	\$ 48	\$ 48	\$ 48	\$ 48	\$ 582
Subtotal insurance	n/a	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 548	\$ 6,582
Accounting fees	0	\$ -	\$ -	\$ 1,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500
Consultants Fees	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Marketing expense	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Advertising fund	0.025	\$ 3,125	\$ 3,125	\$ 3,125	\$ 3,125	\$ 3,125	\$ 3,125	\$ 3,125	\$ 3,125	\$ 3,125	\$ 3,125	\$ 3,125	\$ 3,125	\$ 37,500
Legal/license fees	0	\$ 607	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 607
Bank service charge fees	20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 240
Subtotal other fees	n/a	\$ 3,752	\$ 3,145	\$ 4,645	\$ 3,145	\$ 3,145	\$ 3,145	\$ 3,145	\$ 3,145	\$ 3,145	\$ 3,145	\$ 3,145	\$ 3,145	\$ 39,847
Office supplies/postage	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating / Maintance Supplies	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Uniforms	20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 240
Telephone expense	100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 1,200
Travel & entertainment	800	\$ 800	\$ 800	\$ 800	\$ 800	\$ 800	\$ 800	\$ 800	\$ 800	\$ 800	\$ 800	\$ 800	\$ 800	\$ 9,600
Dues & subscriptions	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Delivery expenses	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bad check expense	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cash short	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest expense (bank)	1500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 18,000
Miscellaneous expense	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal other expenses	n/a	\$ 2,420	\$ 2,420	\$ 2,420	\$ 2,420	\$ 2,420	\$ 2,420	\$ 2,420	\$ 2,420	\$ 2,420	\$ 2,420	\$ 2,420	\$ 2,420	\$ 29,040
Other income:														
Classes/Short Course	2000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 24,000
Swag Sales	75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 900
Miscellaneous income	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal other income	n/a	\$ 2,075	\$ 2,075	\$ 2,075	\$ 2,075	\$ 2,075	\$ 2,075	\$ 2,075	\$ 2,075	\$ 2,075	\$ 2,075	\$ 2,075	\$ 2,075	\$ 24,900
NET INCOME	n/a	\$ 22,338	\$ 22,945	\$ 21,445	\$ 22,945	\$ 22,945	\$ 22,945	\$ 22,945	\$ 22,945	\$ 22,945	\$ 22,945	\$ 22,945	\$ 22,945	\$ 273,231
PROJECT.XLS		(These projected financial numbers are estimates only and may vary from actual performance)												

APPENDIX D

Distillery														
NET INCOME AND SALES PROJECTIONS YR4, 15,000 cases														
Account Description	Input	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Wholesale sales		\$ 185,000	\$ 185,000	\$ 185,000	\$ 185,000	\$ 185,000	\$ 185,000	\$ 185,000	\$ 185,000	\$ 185,000	\$ 185,000	\$ 185,000	\$ 185,000	\$ 2,220,000
cost of wholesale sales	0.73	\$ 135,050	\$ 135,050	\$ 135,050	\$ 135,050	\$ 135,050	\$ 135,050	\$ 135,050	\$ 135,050	\$ 135,050	\$ 135,050	\$ 135,050	\$ 135,050	\$ 1,620,600
Gross profit wholesale		\$ 49,950	\$ 49,950	\$ 49,950	\$ 49,950	\$ 49,950	\$ 49,950	\$ 49,950	\$ 49,950	\$ 49,950	\$ 49,950	\$ 49,950	\$ 49,950	\$ 599,400
Retail sales	2500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 30,000
cost of retail sales	0.23	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 6,900
gross profit retail		\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 23,100
Total Monthly sales	n/a	\$ 187,500	\$ 187,500	\$ 187,500	\$ 187,500	\$ 187,500	\$ 187,500	\$ 187,500	\$ 187,500	\$ 187,500	\$ 187,500	\$ 187,500	\$ 187,500	\$ 2,250,000
Average Cost of sales		0.72333333	0.72333333	0.72333333	0.72333333	0.72333333	0.72333333	0.72333333	0.72333333	0.72333333	0.72333333	0.72333333	0.72333333	\$ 9
Gross profit -sales		\$ 51,875	\$ 51,875	\$ 51,875	\$ 51,875	\$ 51,875	\$ 51,875	\$ 51,875	\$ 51,875	\$ 51,875	\$ 51,875	\$ 51,875	\$ 51,875	\$ 622,500
Operating expenses:														
CEO salary	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wages - store labor	3464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 3,464	\$ 41,568
FICA & medicare tax	0.0765	\$ 265	\$ 265	\$ 265	\$ 265	\$ 265	\$ 265	\$ 265	\$ 265	\$ 265	\$ 265	\$ 265	\$ 265	\$ 3,180
Unemployment tax	0.018	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 62	\$ 748
Other fringe benefits/insurance	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal salary & benefits	0.020221	\$ 3,791	\$ 3,791	\$ 3,791	\$ 3,791	\$ 3,791	\$ 3,791	\$ 3,791	\$ 3,791	\$ 3,791	\$ 3,791	\$ 3,791	\$ 3,791	\$ 45,496
Building maint. & repair	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Utilities (elec, gas, water, trash)	550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 6,600
Building rent	1400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 16,800
Building depreciation	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Real estate taxes	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Equipment repair & maint.	200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 2,400
Equipment depreciation	3571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 42,852
Equipment rental	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Personal property taxes	400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 4,800
Subtotal bldg. & equip.	n/a	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 73,452
Commercial package ins.	500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 6,000
Workers comp insurance	0.028	\$ 97	\$ 97	\$ 97	\$ 97	\$ 97	\$ 97	\$ 97	\$ 97	\$ 97	\$ 97	\$ 97	\$ 97	\$ 1,164
Subtotal insurance	n/a	\$ 597	\$ 597	\$ 597	\$ 597	\$ 597	\$ 597	\$ 597	\$ 597	\$ 597	\$ 597	\$ 597	\$ 597	\$ 7,164
Accounting fees	0	\$ -	\$ -	\$ 1,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,500
Consultants Fees	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Marketing expense	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Advertising fund	0.025	\$ 4,688	\$ 4,688	\$ 4,688	\$ 4,688	\$ 4,688	\$ 4,688	\$ 4,688	\$ 4,688	\$ 4,688	\$ 4,688	\$ 4,688	\$ 4,688	\$ 56,250
Legal/license fees	0	\$ 207	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 207
Bank service charge fees	20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 240
Subtotal other fees	n/a	\$ 4,915	\$ 4,708	\$ 6,208	\$ 4,708	\$ 4,708	\$ 4,708	\$ 4,708	\$ 4,708	\$ 4,708	\$ 4,708	\$ 4,708	\$ 4,708	\$ 58,197
Office supplies/postage	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating / Maintance Supplies	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Uniforms	20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 240
Telephone expense	100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 1,200
Travel & entertainment	800	\$ 800	\$ 800	\$ 800	\$ 800	\$ 800	\$ 800	\$ 800	\$ 800	\$ 800	\$ 800	\$ 800	\$ 800	\$ 9,600
Dues & subscriptions	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Delivery expenses	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bad check expense	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cash short	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest expense (bank)	1500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 18,000
Miscellaneous expense	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal other expenses	n/a	\$ 2,420	\$ 2,420	\$ 2,420	\$ 2,420	\$ 2,420	\$ 2,420	\$ 2,420	\$ 2,420	\$ 2,420	\$ 2,420	\$ 2,420	\$ 2,420	\$ 29,040
Other Income:														
Classes/Short Course	2000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 24,000
Swag Sales	100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 1,200
Miscellaneous income	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal other income	n/a	\$ 2,100	\$ 2,100	\$ 2,100	\$ 2,100	\$ 2,100	\$ 2,100	\$ 2,100	\$ 2,100	\$ 2,100	\$ 2,100	\$ 2,100	\$ 2,100	\$ 25,200
NET INCOME	n/a	\$ 36,131	\$ 36,338	\$ 34,838	\$ 36,338	\$ 36,338	\$ 36,338	\$ 36,338	\$ 36,338	\$ 36,338	\$ 36,338	\$ 36,338	\$ 36,338	\$ 434,351
PROJECT.XLS		(These projected financial numbers are estimates only and may vary from actual performance)												

APPENDIX F

Distillery														
NET INCOME AND SALES PROJECTIONS YR10														
Account Description	Input	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Wholesale sales		\$ 622,500	\$ 622,500	\$ 622,500	\$ 622,500	\$ 622,500	\$ 622,500	\$ 622,500	\$ 622,500	\$ 622,500	\$ 622,500	\$ 622,500	\$ 622,500	\$ 7,470,000
cost of wholesale sales	0.73	\$ 454,425	\$ 454,425	\$ 454,425	\$ 454,425	\$ 454,425	\$ 454,425	\$ 454,425	\$ 454,425	\$ 454,425	\$ 454,425	\$ 454,425	\$ 454,425	\$ 5,453,100
Gross profit wholesale		\$ 168,075	\$ 168,075	\$ 168,075	\$ 168,075	\$ 168,075	\$ 168,075	\$ 168,075	\$ 168,075	\$ 168,075	\$ 168,075	\$ 168,075	\$ 168,075	\$ 2,016,900
Retail sales	2500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 30,000
cost of retail sales	0.23	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 575	\$ 6,900
gross profit retail		\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 1,925	\$ 23,100
Total Monthly sales	n/a	\$ 625,000	\$ 625,000	\$ 625,000	\$ 625,000	\$ 625,000	\$ 625,000	\$ 625,000	\$ 625,000	\$ 625,000	\$ 625,000	\$ 625,000	\$ 625,000	\$ 7,500,000
Average Cost of sales		0.728	0.728	0.728	0.728	0.728	0.728	0.728	0.728	0.728	0.728	0.728	0.728	9
Gross profit -sales		\$ 170,000	\$ 170,000	\$ 170,000	\$ 170,000	\$ 170,000	\$ 170,000	\$ 170,000	\$ 170,000	\$ 170,000	\$ 170,000	\$ 170,000	\$ 170,000	\$ 2,040,000
Operating expenses:														
CEO salary		0	-	-	-	-	-	-	-	-	-	-	-	-
Wages - store labor	15588	\$ 15,588	\$ 15,588	\$ 15,588	\$ 15,588	\$ 15,588	\$ 15,588	\$ 15,588	\$ 15,588	\$ 15,588	\$ 15,588	\$ 15,588	\$ 15,588	\$ 187,056
FICA & medicare tax	0.0765	\$ 1,192	\$ 1,192	\$ 1,192	\$ 1,192	\$ 1,192	\$ 1,192	\$ 1,192	\$ 1,192	\$ 1,192	\$ 1,192	\$ 1,192	\$ 1,192	\$ 14,310
Unemployment tax	0.018	\$ 281	\$ 281	\$ 281	\$ 281	\$ 281	\$ 281	\$ 281	\$ 281	\$ 281	\$ 281	\$ 281	\$ 281	\$ 3,367
Other fringe benefits/insurance	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal salary & benefits	0.027298	\$ 17,061	\$ 17,061	\$ 17,061	\$ 17,061	\$ 17,061	\$ 17,061	\$ 17,061	\$ 17,061	\$ 17,061	\$ 17,061	\$ 17,061	\$ 17,061	\$ 204,733
Building maint. & repair	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Utilities (elec, gas, water, trash)	550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 550	\$ 6,600
Building rent	1400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 1,400	\$ 16,800
Building depreciation	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Real estate taxes	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment repair & maint.	200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 2,400
Equipment depreciation	3571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 3,571	\$ 42,852
Equipment rental	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Personal property taxes	400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 400	\$ 4,800
Subtotal bldg. & equip.	n/a	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 6,121	\$ 73,452
Commercial package ins.	500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 6,000
Workers comp insurance	0.028	\$ 436	\$ 436	\$ 436	\$ 436	\$ 436	\$ 436	\$ 436	\$ 436	\$ 436	\$ 436	\$ 436	\$ 436	\$ 5,238
Subtotal insurance	n/a	\$ 936	\$ 936	\$ 936	\$ 936	\$ 936	\$ 936	\$ 936	\$ 936	\$ 936	\$ 936	\$ 936	\$ 936	\$ 11,238
Accounting fees	0	-	-	\$ 1,500	-	-	-	-	-	-	-	-	-	\$ 1,500
Consultants Fees	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Marketing expense	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Advertising fund	0.08	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 600,000
Legal/license fees	0	\$ 607	-	-	-	-	-	-	-	-	-	-	-	\$ 607
Bank service charge fees	20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 240
Subtotal other fees	n/a	\$ 50,627	\$ 50,020	\$ 51,520	\$ 50,020	\$ 50,020	\$ 50,020	\$ 50,020	\$ 50,020	\$ 50,020	\$ 50,020	\$ 50,020	\$ 50,020	\$ 602,347
Office supplies/postage	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Operating / Maintenance Supplies	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Uniforms	20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 240
Telephone expense	100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 1,200
Travel & entertainment	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Dues & subscriptions	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Delivery expenses	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Bad check expense	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Cash short	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest expense (bank)	1500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 18,000
Miscellaneous expense	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal other expenses	n/a	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 1,620	\$ 19,440
Other Income:														
Classes/Short Course	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Swag Sales	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous income	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal other income	n/a	-	-	-	-									

APPENDIX G

@RISK Detailed Statistics

Performed By: David

Date: Tuesday, December 11, 2012 12:29:58 AM

Name Description Cell	Year 1 Net Income Output year 1!O68	Year 2 Net Income Output year 2!O69	Year 3 Net Income Output year 3!O68	Year 4 Net Income Output year 4!O68	Year 5 Net Income Output year 5!O68	Year 10 Net Income Output year 10!O68
Minimum	\$ (44,680)	\$ (2,973)	\$ 185,307	\$ 400,475	\$ 410,461	\$ 862,156
Maximum	\$ (26,150)	\$ 35,911	\$ 333,549	\$ 463,162	\$ 670,405	\$ 1,427,861
Mean	\$ (35,413)	\$ 13,796	\$ 273,242	\$ 434,345	\$ 548,547	\$ 1,128,819
Std Deviation	\$ 3,003	\$ 5,256	\$ 22,152	\$ 9,190	\$ 41,062	\$ 83,161
Variance	9020284	27626240	490700500	84463240	1686067000	6915822000
Skewness	-0.03629289	-0.07095636	-0.2233064	-0.02031836	0.02003007	-0.07331868
Kurtosis	2.880001	3.32454	3.260234	3.009225	2.964164	2.946719
Errors	0	0	0	0	0	0
Mode	\$ (36,415)	\$ 13,858	\$ 287,501	\$ 434,006	\$ 526,975	\$ 1,104,693
5% Perc	\$ (40,305)	\$ 4,820	\$ 234,491	\$ 419,178	\$ 481,971	\$ 993,406
10% Perc	\$ (39,313)	\$ 6,995	\$ 245,140	\$ 422,574	\$ 496,719	\$ 1,027,368
15% Perc	\$ (38,555)	\$ 8,433	\$ 251,660	\$ 424,824	\$ 505,939	\$ 1,045,280
20% Perc	\$ (37,883)	\$ 9,376	\$ 255,982	\$ 426,610	\$ 513,197	\$ 1,058,047
25% Perc	\$ (37,433)	\$ 10,492	\$ 259,086	\$ 428,133	\$ 519,243	\$ 1,069,115
30% Perc	\$ (37,028)	\$ 11,183	\$ 261,935	\$ 429,526	\$ 526,696	\$ 1,082,742
35% Perc	\$ (36,641)	\$ 11,952	\$ 265,209	\$ 430,792	\$ 532,565	\$ 1,094,133
40% Perc	\$ (36,301)	\$ 12,541	\$ 268,068	\$ 432,016	\$ 537,222	\$ 1,104,194
45% Perc	\$ (35,836)	\$ 13,188	\$ 270,478	\$ 433,178	\$ 542,573	\$ 1,116,385
50% Perc	\$ (35,435)	\$ 13,871	\$ 273,567	\$ 434,343	\$ 548,710	\$ 1,128,151
55% Perc	\$ (35,007)	\$ 14,693	\$ 276,189	\$ 435,494	\$ 554,332	\$ 1,138,754
60% Perc	\$ (34,635)	\$ 15,365	\$ 279,816	\$ 436,673	\$ 559,145	\$ 1,152,791
65% Perc	\$ (34,175)	\$ 15,969	\$ 282,447	\$ 437,872	\$ 564,582	\$ 1,164,831
70% Perc	\$ (33,792)	\$ 16,514	\$ 285,435	\$ 439,168	\$ 569,583	\$ 1,177,283
75% Perc	\$ (33,333)	\$ 17,166	\$ 287,597	\$ 440,534	\$ 576,129	\$ 1,187,650
80% Perc	\$ (32,763)	\$ 18,140	\$ 291,312	\$ 442,054	\$ 583,017	\$ 1,201,937
85% Perc	\$ (32,271)	\$ 19,036	\$ 295,803	\$ 443,834	\$ 590,960	\$ 1,219,190
90% Perc	\$ (31,630)	\$ 20,304	\$ 301,517	\$ 446,112	\$ 600,596	\$ 1,237,451
95% Perc	\$ (30,393)	\$ 21,987	\$ 307,986	\$ 449,421	\$ 616,290	\$ 1,258,667