Technical Report
UCED 2006/07-13

LOCALLY PRODUCED LIVESTOCK PROCESSING AND MARKETING FEASIBILITY ASSESSMENT

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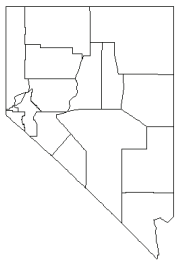

UNIVERSITY OF NEVADA, RENO

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February 2007

This publication, ***Locally Produced Livestock Processing and Marketing Feasibility Assessment,*** was published by the University Center for Economic Development in the Department of Resource Economics at the University of Nevada, Reno. Funds for this publication were provided by the USDA Rural Development Agency and the Nevada Agricultural Experiment Station. This publication's statements, findings, conclusions, recommendations, and/or data represent solely the findings and views of the authors and do not necessarily represent the views of the USDA-RD Agency or the University of Nevada, Reno, or any reference sources used or quoted by this study. Reference to research projects, programs, books, magazines, or newspaper articles does not imply an endorsement or recommendation by the authors unless otherwise stated. Correspondence regarding this document should be sent to:

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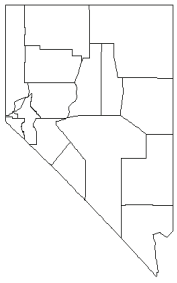

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EXECUTIVE SUMMARY

This study was requested by a group of livestock producers in the Gardnerville, NV area, now called the Local Livestock Marketing Group, in an effort to increase the producer share of product revenues through a business entity that is focused on processing and marketing local meat products under a brand name. The creation of a locally produced meat brand offers producers the ability to charge higher prices while maintaining higher quality over non-branded, non-certified products. Branding is a way to differentiate a product and provide higher value through guarantees and simplicity in purchasing. Hence, the purpose of this study is to evaluate the economic feasibility of a producer-owned entity to slaughter, process, and market locally grown, grass-fed meat products in Nevada, as well as gage the interest level of ranchers in northwestern Nevada in forming a business entity to slaughter, process, and market their livestock.

A mail survey of livestock producers was conducted during the fall of 2005, in which 153 producers responded. The results indicate that just over 60% of surveyed livestock producers would be willing to invest money, time, or both in this venture, meaning the business entity may have 91 producer members at its inception. Overall the producer interest in this business and the willingness to invest start-up capital in the business is exciting. There is definitely enough demand for the services of the business to generate the necessary supply of livestock for the business to operate profitably. The location of potential member ranches based on producer survey results indicate that the processing facility should be located in a central location, such as Silver Springs, Nevada,

During the summer of 2006, a survey of residents in Nevada was conducted to gain an understanding of consumer perception and purchasing behavior for meat

products. Survey respondents rated freshness and taste/flavor as the most important factors in their decision-making process as it pertains to meat purchases. However, 55% of the respondents rated natural grown as extremely or very important meat product attribute, and 36% of respondents rated locally grown as extremely or very important. These individuals constitute a niche market for Nevada grown natural meat products. The highest premiums the consumers in this study were willing to pay centered on high-grade beef products, but all products bearing a grass-fed and locally grown label received high premiums (ranging from $.02/lb to $4.33/lb). Across all products the results of this study seem to indicate that the target market for the specialty meat products constitutes younger aged adults (22-35), primarily male, with a higher education level (college graduate) living in northern Nevada. Additionally, the existence of children was important for locally grown labeled products. All product packing, promotion, and distribution decisions should be made with the target market in mind.

The New Generation Cooperative (NGC) seems to provide the most optimal legal situation for the business, as its investment options, distribution of owner's equity, and marketing options best fit the current needs of the livestock producers in Nevada. Using the stock option of ownership in an NGC, each member invests a start-up amount equal to the amount of livestock they plan to provide to the cooperative for slaughter, processing, and marketing. This livestock is purchased at market value, with sales revenues repaying the cost of the livestock, plus a percentage share in the profits at the end of each season paid out to each member. This ensures adequate livestock inputs to maximize production capabilities and provide an initial investment based on ownership, providing an adequate cash flow for start-up operations. Although loans on the entire

start-up capital requirements were used in the feasibility analysis, it is recommended that the cooperative collect 30% ($575,843.70) of all start-up costs through the distribution of common stock to the initial investors based on their marketing contacts (their usage of the cooperative's services).

For the first five years, it is recommended that the cooperative focus on retaining its earnings (profits) and establish a cash reserve to weather possible negative economic conditions. These retained earnings offer additional ownership to members, based on the number of shares purchased at the cooperative inception.

I. INTRODUCTION

Livestock Industry Overview

The livestock industry in Nevada and surrounding states is currently very unstable as a result of market uncertainties. The instability of the livestock industry is occurring at a time when public land management agencies are beginning to recognize the importance of livestock production systems in natural resource management. Livestock continues to be a highly efficient means of harvesting rangeland grasses, which reduces the number and severity of rangeland fires. Livestock production in Nevada constitutes 64.2% (USDA-NASS, 2004) of total agricultural value (cash receipts). Additionally, there are currently 2989 farms operating in the State of Nevada, with at least 1600 of these farms producing cattle, and at least 300 producing sheep. Hence, at least 64% of all farms in Nevada raise livestock. Livestock operations are a very important component of Nevada agriculture and it is imperative that these industries are maintained in rural Nevada; from 1994 to 2003, the number of farms with cattle decreased by 6%, while during that same period, the number of farms with sheep decreased by 14% (USDA-NASS, 2004).

Although nationwide livestock prices have rebounded in the past two to three years, Nevada livestock producers are aware of some basic facts: 1) Livestock prices have fluctuated wildly over the past ten years, with prices below break-even levels in four of those years, as detailed in Table 1.01; 2) Without exception, Nevada livestock prices are lower than those in neighboring states due to the states distance from slaughter and processing plants; and 3) The market for wholesale and retail beef and lamb products has been very stable for the last ten years. In order to combat some of these issues, it will be

necessary for livestock producers to take advantage of value-added production by including processing and branding in their operations.

Currently, the majority of Nevada livestock producers are forced to process their meats out of state or sell their livestock prior to slaughter. The large distances that must be traveled for out of state processing incur high transportation costs and may lead to animal stress, causing weight loss and meat quality deterioration. Currently, there are two processors (Mori Wholesale and York/Lahontan Valley Meats) in Fallon, NV, 80 miles from Gardnerville, NV. These facilities have limited space for aging and storage and are not currently inspected for retail sales. Due to the limited capacity and travel distance it is not currently profitable for livestock producers in the Carson, Smith, and Mason Valley regions to use these facilities.

Table 1.01: August Prices Received By Product (Dollars Per Cwt.)

Year	Steers and Heifers	Calves
1999	$77.00	$92.5
2000	$85.10	$111.90
2001	$86.20	$103.40
2002	$74.20	$96.30
2003	$88.10	$108.30

Source: USDA-NASS, 2004.

According to the U.S. Department of Agriculture (USDA), value is added to a product when its market segment is expanded and the producer is allowed a greater share of revenue from the marketing, processing, or physical segregation of the product. Nevada livestock producers may increase their share of product revenues through a business entity that is focused on processing and marketing local meat products under a brand. Many consumers are willing to pay more for a product with a brand name they

can identify because they associate that name with quality or trust. A study by Giddens and Hofmann (2001) found that products with brand identification were priced as much as 40% over the price of similar non-branded products. The creation of a locally produced meat brand offers producers the ability to charge higher prices while maintaining higher quality over non-branded, non-certified products. Branding is a way to differentiate a product and provide higher value through guarantees and simplicity in purchasing.

Study Purpose

Early in 2005 Lisa Lekumberry, Carson Valley rancher and restaurateur, contacted the University of Nevada Cooperative Extension Office in Douglas County. Lisa was inspired to further investigate an enterprise she had learned about at an agricultural conference she attended. The topic of interest was a USDA inspected mobile processing unit to slaughter large animals for small scale producers. Extension Educator, Steve Lewis, made contact with Bruce Dunlop, Lopez Island, Washington rancher and principal in a local producer's cooperative. Arrangements were made for Bruce to travel to Carson Valley to discuss this enterprise and help ranchers determine if mobile processing was a good fit for the local agricultural business condition and direction. Mr. Dunlop was not interested in selling the idea to Carson Valley producers, but rather his mission was to help local ranchers articulate a vision for their respective operations.

Lisa was primarily interested in capturing the livestock production profits that currently go to the middlemen, provide local consumers with what they want – a locally produced food product, provide meat for their restaurant, and help keep agriculture alive

as well. Cooperative Extension recognized these agricultural needs and issues and thus packaged the mobile processing presentation with other relevant topics in a day-long educational program called Niche Livestock Marketing. Other topics included niche livestock sales and marketing, local livestock processing resources and support industries, and innovative saleable livestock byproducts. Forty livestock producers attended the program and expressed interest in attending a follow-up meeting to discuss next actions.

A representative from USDA Rural Development was invited to the second subsequent planning meeting. The collection of ranchers, now known as the Local Livestock Marketing Group, became interested in taking a scientific approach to determining the feasibility of developing a local meat processing and marketing operation. The Rural Business Enterprise Grant (RBEG) was identified as an appropriate funding source for evaluating feasibility of a local livestock slaughter and processing facility and crafting a business plan. Drs. Kynda Curtis and Thomas Harris of the Department of Resource Economics at the University of Nevada, Reno applied for and received the RBEG grant to conduct the study.

Study Components

This study is subdivided into four major sections, including the production and slaughter demand assessment (section II), a market assessment (section III), a business operations plan (section IV), and a marketing recommendations section (section V). Finally, the results are summarized in the summary and recommendations section (section VI).

The demand assessment looks at the interest and commitment level of livestock producers in developing a production/slaughter facility in the geographic area of study. The two issues of primary importance are the number of livestock local producers wish to send through the facility, and their commitment to the facility in terms of start-up capital investment. This section also discusses the preferred location of the potential slaughter/production facility, the types of business services livestock producers would like the facility to provide, and their current ranch marketing plan. This assessment will provide an overview of the production needs of the business, the services to be offered, and the business structure best suited to potential member ranch owners.

The marketing assessment evaluates consumer demand for meat products in Nevada. This includes consumer preferences for cut types, meat characteristics and quantity demanded, as well as consumer perceptions of specialty meats, including natural and grass-fed. Additionally, consumer willingness to pay estimates, provide pricing information for grass-fed and locally grown labeled meat products. Finally, consumer demographics are analyzed to determine target consumers and/or markets for specialty meat products.

The business plans uses projected production, operation costs, and sales revenues from the production and marketing assessments to compute profit projections, operational budgets, and the start-up capital required for the business. The business plan also provides the necessary information for business ownership establishment, including start-up and investment capital requirements.

II. LIVESTOCK PRODUCER INTEREST

Producer Survey Description

A mail survey of agricultural producers was conducted during the fall of 2005. One hundred fifty-three of the 800 surveys mailed were returned and considered complete and usable for an overall response rate of 20%; however, this figure represents nearly 70% of total livestock producers in Northern Nevada.

The first section of the survey sought to determine the organizational structure of the respondent's operation, and to ascertain the size and scope of livestock production. This section requested information such as the respondent's title within the organization, and the location of the farm/ranch, as well as various questions relating to the livestock production and marketing structure within the organization. Respondents were asked to provide information related to the type of livestock produced, annual production quantities, specific breeds used, production methods, etc.

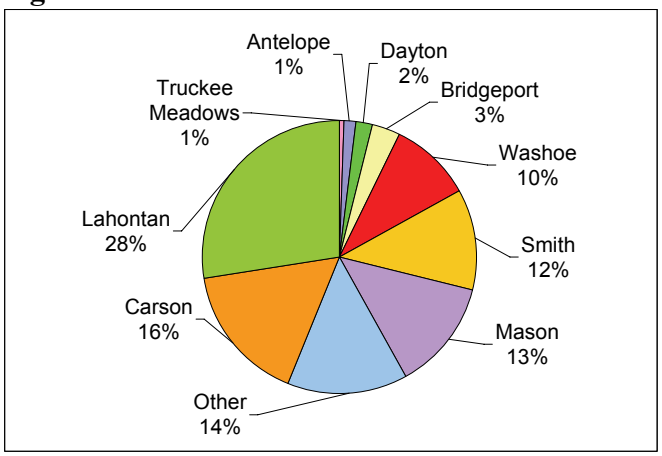
The third section of the survey was concerned with the organization's impression of cooperatives, whether the organization would be willing to become involved with one and if so, how much it would be willing to invest in terms of time and money. This section also listed several perceived functions of a producer cooperative and asked the respondents to select the functions they would like to see a potential cooperative perform. The final question of the survey asked respondents to describe the University of Nevada Cooperative Extension educational topics they felt would be most beneficial to their operation in the form of future Extension programming. A copy of the survey can be found in Appendix D.

Producer Survey Results

Demographics

Respondents were asked to describe the area of Northern Nevada where their operation is located (Figure 2.01). Twenty-eight percent (42) of respondents said their operation was located in the Lahontan Valley, 16% (25) indicated the Carson Valley, 13% (20) were in the Mason Valley, 12% (18) were in the Smith Valley, 10% (15) were in the Washoe Valley, 3% (5) said their operation is in Bridgeport, 2% (3) said they were located in Dayton, 1% (2) were in Antelope Valley, and 1% (1) were in the Truckee Meadows. Fourteen percent (22) of respondents did not specify their location. Of the 153 respondents, ninety-five percent (145) were owners/operators, 73% (112) had been in business twenty-one or more years, and 12% (18) had been in business eleven to twenty years. The completed surveys represented a total of 4,317,870 active acres.

Figure 2.01: Livestock Producer Locations



Production and Buyers

Respondents were asked to list how many and what type of animals they produce annually (Table 2.01). Total estimates came to 36,529 head beef/cattle per year, 8,933

head sheep/lamb per year, 355 head goat per year, 166 head pork per year, and 65 head ostrich per year.

Table 2.01: Livestock Produced per Year

Livestock Type	Head Produced/Year
Beef/Cattle	36,529
Sheep/Lamb	8,933
Goat	355
Pork	166
Ostrich	65

Respondents were also asked to list in which season calving generally took place (Figures 2.02 and 2.03). Eighty-two percent (93 respondents; 32,590 animals) of respondents who raise cattle said their cattle calve in the spring, 16% (17 respondents; 5,961 animals) specified fall, and the remaining 2% (3 respondents; 794 animals) said their cattle calve in the winter. Sixty percent (11 respondents; 5,390 animals) of respondents who raise sheep said their sheep calve in the spring, 36% (7 respondents; 3,233 animals) specified winter, and the remaining 4% (1 respondent; 360 animals) said their sheep calve in the fall.

Figure 2.02: Beef Calving by Season

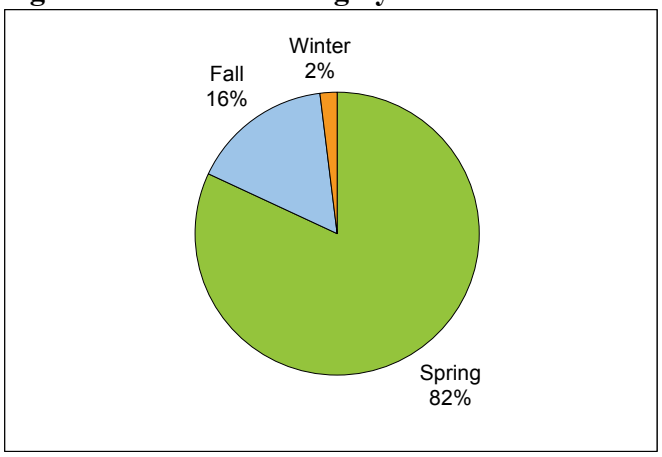
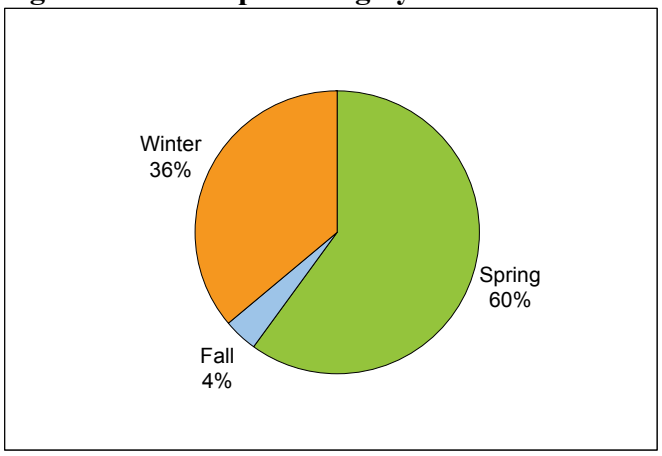
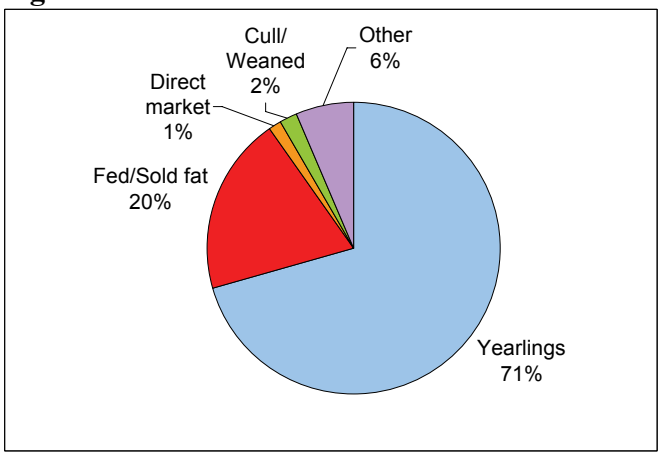


Figure 2.03: Sheep Calving by Season



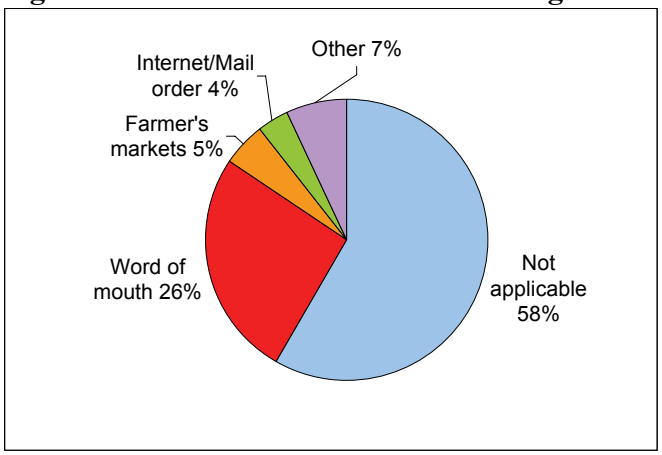
Respondents were then asked how they market their livestock products, and how many animals they market per each option (Figure 2.04). Seventy-one percent (7,512 animals) of animals are sold as yearlings, 20% (2,106 animals) of animals are fed and sold fat, 2% (200 animals) of animals are sold as culls or weaned, 1% (153) of animals are direct marketed to consumers, less than 1% (52 animals) of animals are packaged and sold as small cuts (not shown), and less than 1% (15 animals) of animals are sold at auction (not shown). Six percent (674 animals) of animals are sold using another method, with this method not specified by the respondent.

Figure 2.04: Current Livestock Product Marketing



Respondents were also asked to list the outlets used when marketing livestock products directly to the consumer (Figure 2.05). Fifty-eight percent (88) of respondents either do not use direct marketing or did not specify a method, 26% (40) of respondents use word –of mouth as a direct marketing technique, 5% (8) of respondents use marketing at farmer's markets, and 4% (6) of respondents use the Internet or mail. Another 7% (11) of respondents use other methods, such as booths at fairs and rodeos, advertisements in trade magazines, and marketing at auctions or through a broker.

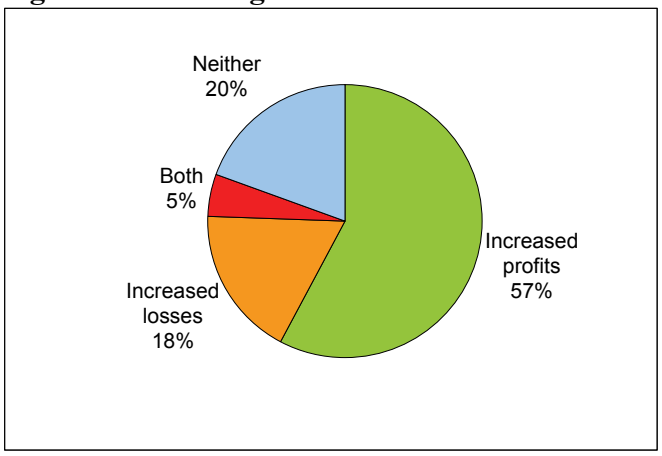
Figure 2.05: Consumer Direct Marketing Methods



Earnings and Profit Margins

To gain an understanding of the current financial climate among respondents, respondents were asked to give information relating to whether their organization has seen increased profits or increased losses in the last five years (Figure 2.06). One hundred twenty-three respondents gave information relating to their profits/losses in the last five years. Fifty-seven percent (71) of respondents said they have seen increased profits, 18% (22) said they have only seen increased losses, 5% (6) said they have seen increased profits and increased losses, and 20% (24) said they have seen neither increased profits nor losses.

Figure 2.06: Change in Profit Over Past Five Years



Slaughtering Unit and Cooperative Impressions

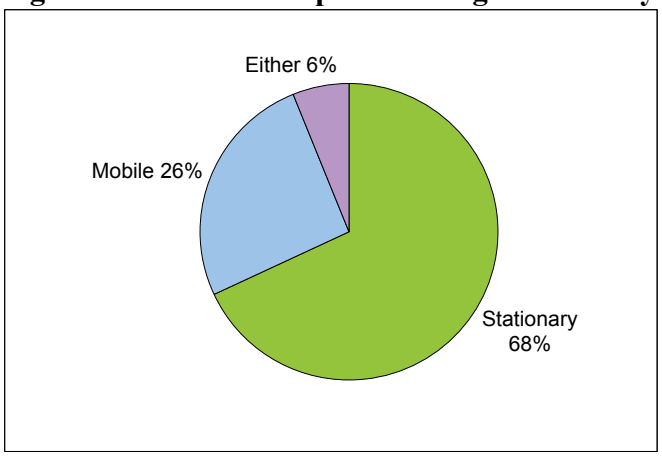
The final section of the survey presented respondents with several questions relating to their preferences for and receptivity of a future processing/slaughtering unit and/or cooperative. This section also asked respondents some questions relating to the perceived benefits of cooperatives. Respondents were asked to list the types of animals their farm or ranch would want to slaughter and/or process if a slaughtering/processing unit were available. Respondents were also asked to estimate how many pounds of each type of animal they would consider sending to the unit (Table 2.02). Total estimates came to 3,243,750 lbs. of beef/cattle, or 4,055 cattle at 800 lbs./head; 1,068,250 lbs. of sheep/lamb, or 7,122 sheep at 150 lbs./head; 24,000 lbs. of goat, or 120 goats at 200 lbs./head; 45,400 lbs. of pork, or 227 pigs at 200 lbs./head; 6,000 lbs. of ostrich, or 24 ostriches at 250 lbs./head; and 1,000 lbs. of poultry, or 250 chickens at 4 lbs/head.

Table 2.02: Annual Slaughter/Processing Estimates

Livestock Type	Pounds/year	Head/year
Cattle	3,243,750	4,055
Sheep	1,068,250	7,122
Goat	24,000	120
Pork	45,400	227
Ostrich	6,000	24
Chickens	1,000	250

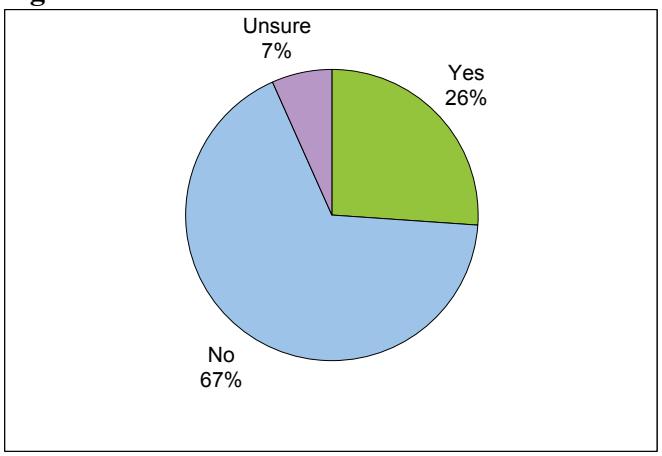
Respondents were asked if they would prefer the proposed slaughter facility be mobile or stationary (Figure 2.07). Sixty-eight percent (104) of respondents said they would prefer that the unit be stationary, 26% (40) of respondents would like it to be mobile, and 6% (9) of respondents have no preference between stationary or mobile.

Figure 2.07: USDA-Inspected Slaughter Facility Preferences



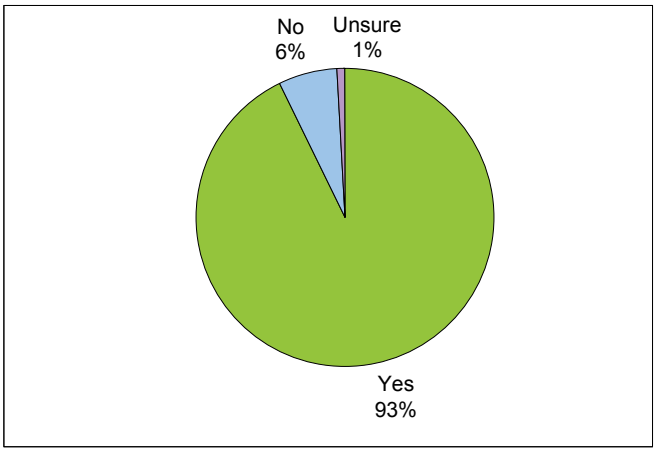
Because the nature of mobile slaughter units often requires holding animals in a corral, respondents were asked whether they have a temporary or permanent corral to secure animals (Figure 2.08). Sixty-seven percent (103) of respondents do not have on-site corral facilities, 26% (40) of respondents do have on-site corral facilities, and 7% (10) of respondents were not sure.

Figure 2.08: Farm/Ranch Has Corral Facilities



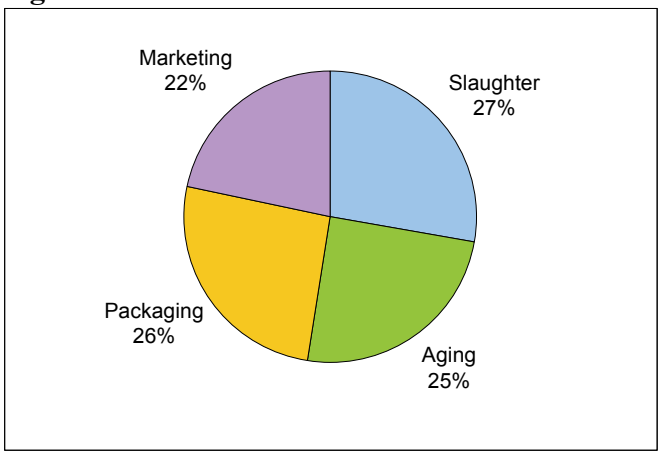
Respondents were also asked if their operation is currently equipped to handle or compost offal (i.e. animal waste), as mobile slaughtering units may also require this capacity (Figure 2.09). Ninety-three percent (142) of respondents said they had the capacity to handle waste on-site, 6% (9) said they do not have the capacity to handle waste on-site, and 1% (2) of respondents were not sure.

Figure 2.09: Farm/Ranch Has Capacity to Handle/Compost Offal



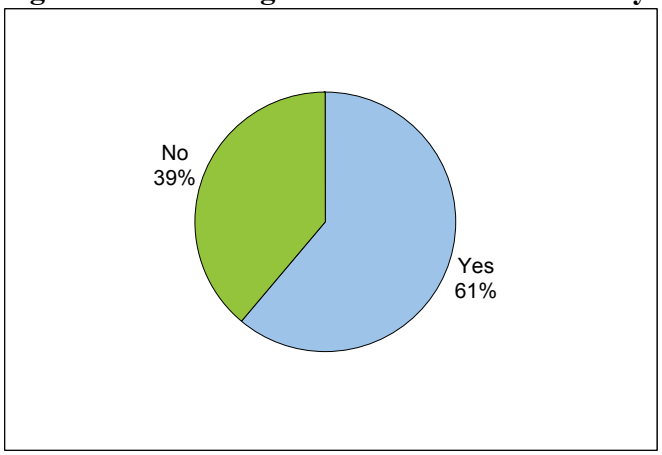
To better understand which aspects of a cooperative/business entity most appeal to livestock producers, respondents were asked to describe the functions they might want a cooperative/business entity to perform for their farm/ranch (Figure 2.10). Responses were fairly evenly divided over four functions: meat slaughtering; meat packing/wrapping; meat aging; and marketing. Twenty-seven percent (41) of respondents listed the slaughtering of meat as a function they would like to have the entity perform, 26% (40) said they were interested in the entity packing and/or wrapping the finished meat, 25% (38) were interested in the entity having the ability to age meat, and the final 22% (34) of respondents were interested in the entity performing marketing functions for its members.

Figure 2.10: Preferred Functions of a Potential Co-op or Business Entity



Finally, respondents were asked if they would be willing to invest in a producer business entity if it were shown to be potentially profitable (Figure 2.11). Sixty-one percent (94) of respondents said they would be interested in investing in the entity, while the other 39% (59) said they would not be interested in investment.

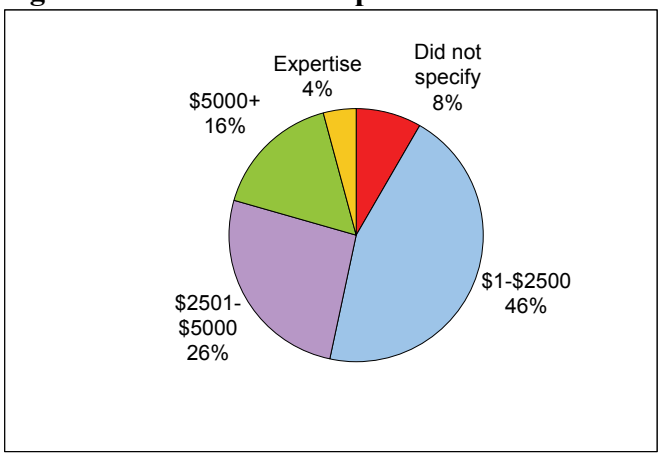
Figure 2.11: Willingness to Invest in Potentially Profitable Entity



Respondents who expressed interest in investing in the entity were asked what amount they would be willing to invest, given that the business entity was proven to be a worthwhile investment of time and money (Figure 2.12). Forty-six percent (70) of respondents said they were willing to invest up to $2500, while 26% (40) were willing to invest between $2500 and $5000, and another 16% (25) of respondents said they would be willing to invest upwards of $5000. Four percent (6) of respondents were willing to

provide the entity with their expertise as opposed to lending financial support, including expertise with various processing activities, such as cutting, wrapping, skinning, etc., as well as expertise with unique livestock. Eight percent (12) of respondents who said they were willing to invest did not specify a monetary amount.

Figure 2.12: Potential Respondent Investment Amounts



Conclusions

The results of this study indicate that just over 60% of the surveyed livestock producers would be willing to invest money, time, or both in this venture, meaning the business entity may have as many as 91 producer members at its inception. According to the production information provided by survey respondents, the potential slaughter/processing/packing business entity should have the capacity to process and/or package 2,433 cattle on an annual basis (203 cattle/month), 4,262 sheep annually (356/month), 72 goats annually (6/month), and 136 pigs on an annual basis (11/month) Table 2.03).

Table 2.03: Projected Processing/Packaging Capacity

Livestock Type	Annually	Per month
Cattle	2,433	203
Sheep	4,262	356
Goat	72	6
Pig	136	11

Based on the investment participation rates obtained through the survey, a conservative estimate of potential start-up investment is $227,500 (91 producers at $2500 each), while a more liberal estimate of potential starting investments is $375,500 (40 producers at $5000 each, plus 51 producers at $2500 each).

There are two possibilities for the slaughtering/processing facility: a mobile unit or a stationary facility. Under the mobile scenario, the slaughtering function would be performed at a mobile unit, with the hanging, processing, and packing functions performed in a stationary unit. The feasibility of a mobile unit would depend on the number of animals to be slaughtered and/or processed.

III. CURRENT AND POTENTIAL LIVESTOCK MARKETS

Resident Survey Description

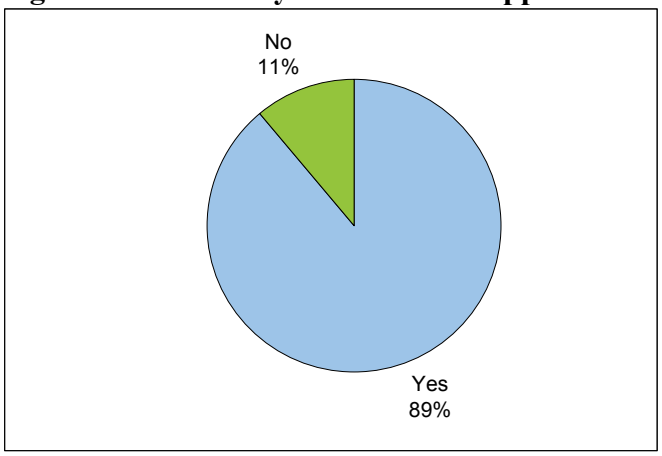
During the summer of 2006, a survey of residents in Nevada was conducted to gain an understanding of consumer perception and purchasing behavior of meat products. The survey was mailed to a random sampling of 5200 residents representing all regions of the state. A total of 542 surveys were returned and considered viable, for a response rate of 10.4%.

Although there were 128 different versions of the consumer survey, the bulk of the survey was the same for all versions, which were differentiated only by the pricing and meat type presented in the bidding section of the survey. The first section of the survey gathered information as to the respondent's household's current meat consumption and meat attribute preferences. The second section of the survey presented the respondent with a series of standard meat products and meat products featuring special attributes (locally grown and grass-fed). Respondents were asked to decide how much they would be willing to pay for the meat product with special attributes versus the standard meat product. The third section of the survey asked the respondent to give an estimate of how many pounds of several different meat cuts his/her household had purchased in the past thirty days, and the final section consisted of basic demographic questions designed to give a better understanding to certain trends among respondents and their purchasing and consumption behaviors. A copy of one version of the survey can be found in Appendix E.

Resident Survey Results

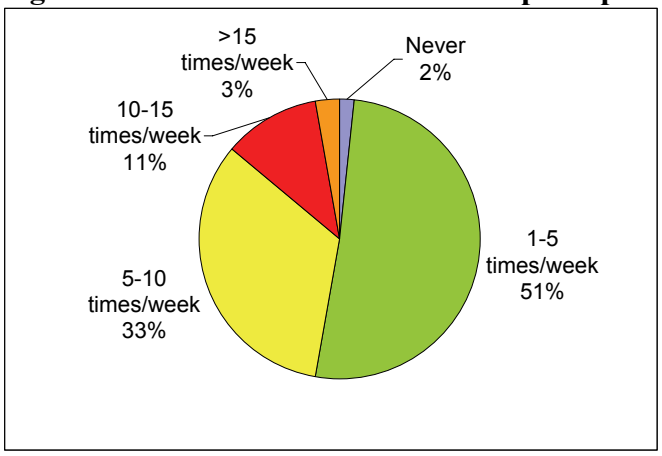
To ensure that the survey reached the household member most likely to understand the household's meat consumption and purchasing preferences, respondents were asked if they were the primary shopper for their household (Figure 3.01). Eighty-nine percent (469) of respondents confirmed that they are their household's primary shopper, while the remaining 11% (61) said they are not.

Figure 3.01: Primary Household Shopper



Respondents were asked how often their household consumes meat products each week (Figure 3.02). Fifty-one percent (264) of respondents who answered this question said their household consumes meat products between 1 and 5 times per week, 33% (172) said their household eats meat between 5 and 10 times each week, 11% (58) said their household eats meat between 5 and 10 times per week, and 3% (14) said their household consumes meat products more than 15 times each week. An additional 2% (9) said their household never eats meat, and 12 respondents (2% of total population) did not answer the question.

Figure 3.02: Household Meat Consumption per Week



Respondents were asked to provide an estimate of how much meat, in pounds, their household consumed in the previous month (Tables 3.01-3.03). This was done in an effort to determine how much meat, and what type of meat, is currently being consumed by residents of Nevada. Table 3.01 shows the amount of beef consumed by the average household (with an average household size of 2.5 members) in an average month. Tri-tip, beef roasts, and ground beef were the most popular cut types of beef amongst respondents.

Table 3.01: Average Beef Consumption per Household per Month

Cut type	Average lbs consumed per household per month
Fillet	3.65 lbs
Rib eye	4.62
Top loin	4.60
T-bone steak	4.35
NY steak	4.41
Prime rib	5.95
Preformed beef patties/meatballs	5.04
Ground beef	6.89
Beef roast	7.13
Tri-tip	7.31
Stew meat	3.37
London broil	4.21
Misc. beef cuts	4.69

Table 3.02 shows the amount of pork consumed by the average household in the average month. Shoulder cuts were by far the most popular type of pork consumed, with

pork ribs and chops running a distant second and third.

Table 3.02: Average Pork Consumption per Household per Month

Cut type	Average lbs consumed per household per month
Shoulder	7.15 lbs
Belly	3.40
Ribs	5.29
Leg	4.07
Loin	4.77
Ground pork	3.18
Pork chops	5.06
Bacon	4.19
Ham	3.59
Misc. pork cuts	4.18

Table 3.03 shows the amount of lamb consumed by the average household in a given month. The most popular cut among respondents was leg of lamb, while breast and rack of lamb were also popular.

Table 3.03: Average Lamb Consumption per Household per Month

Cut type	Average lbs consumed per household per month
Shoulder	2.98 lbs
Rack	3.23
Breast	3.40
Leg	4.53
Loin	2.28
Shank	2.53
Lamb chops	2.64
Misc. lamb cuts	1.30

In order to determine where respondents purchase meat, respondents were asked to rank different types of stores where meat might be purchased, and were also asked to rank the stores in terms of which type they visit most often (Table 3.04). In order from the stores visited most often to least often, respondents are purchasing meat at grocery stores, specialty meat stores, natural foods stores, direct from the farmer (farmer's markets), through the Internet, and through other methods, with the most common "other" option described as wholesale/warehouse stores, such as Costco Wholesale.

To give a better understanding of which of these types of stores are the respondent's primary meat purchasing outlets, the third column of Table 3.04 shows the percent of respondents who ranked that store type as their primary meat purchasing outlet. Following this ranking, grocery stores are still the most popular meat purchasing outlet, with 77% (414) of respondents giving them the top rank, followed by "other" at 11% (59), while 6% (32) of respondents said their primary meat purchasing outlet is natural food stores, and 3% (16) said their primary outlet is specialty meat stores (i.e., butcher, deli). Less than 1% (5) of respondents said their meat comes primarily directly from the farmer, and less than 1% (5) said their meat is purchased primarily over the Internet. Seven respondents (just over 1% of the total population) did not answer the question.

Table 3.04: Meat Purchasing Outlets

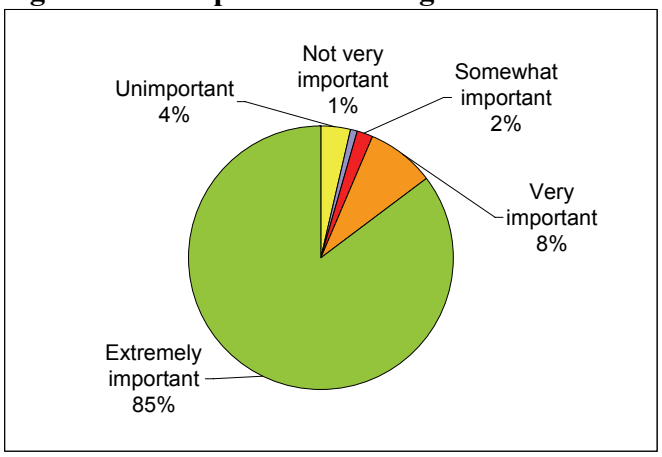
Rank	Outlet	% Ranked #1
1	Grocery store	77%
2	Specialty meat store	3%
3	Natural foods store	6%
4	Direct from famer	<1%
5	Internet	<1%
6	Other	11%

The next section of the survey asked respondents to rank factors that might influence their meat purchasing decisions on a scale of 1 to 5, where a value of 1 indicates very little influence and a value of 5 indicates strong influence on the purchasing decision. The ratings of each individual factor are described in Figures 3.03-3.20.

The freshness of meat refers to how old the meat appears to be at the time of sale. Respondents were asked to rate the importance of this quality when considering making a meat purchase (Figure 3.03). Eighty-five percent (436) of respondents who answered the

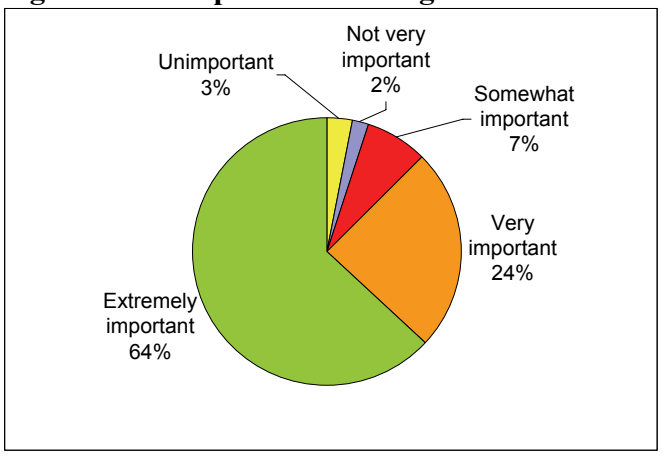
question said the freshness of meat is an extremely important factor in their purchasing decisions, 8% (42) said it is very important, 2% (11) said freshness is somewhat important, less than 1% (3) said freshness is not very important, and the remaining 4% (19) of respondents who answered the question said freshness is not important at all. Nineteen respondents (4% of the total population) did not answer the question.

Figure 3.03: Importance Rating of Freshness of Meat



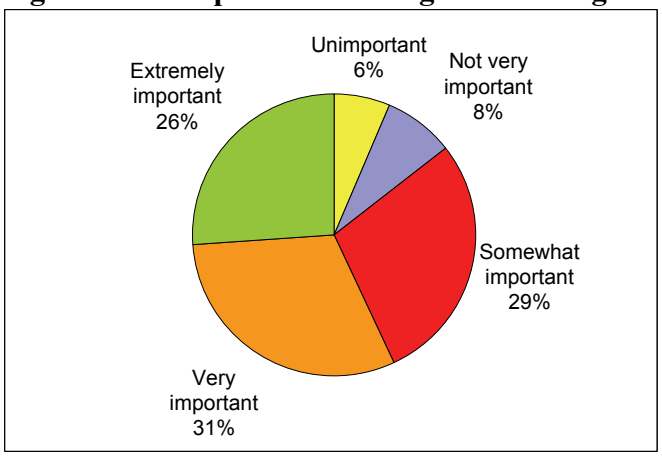
Meat's tenderness refers to the amount of force necessary to chew the meat, and may be affected by the cut of the meat, in addition to the fat content. Meat that has a tender consistency may be more attractive to consumers than meat that is tough. Respondents were asked to rate the importance of the tenderness of meat when considering a meat purchase (Figure 3.04). Sixty-four percent (325) of respondents who answered the question said that the tenderness of meat is an extremely important factor on their purchasing decisions, 24% (124) said it is very important, 7% (38) said tenderness is somewhat important, 2% (9) said it is not very important, and the remaining 3% (16) said tenderness is not an important factor in their meat purchasing decisions. Eighteen respondents (3% of total population) did not answer the question.

Figure 3.04: Importance Rating of Meat Tenderness



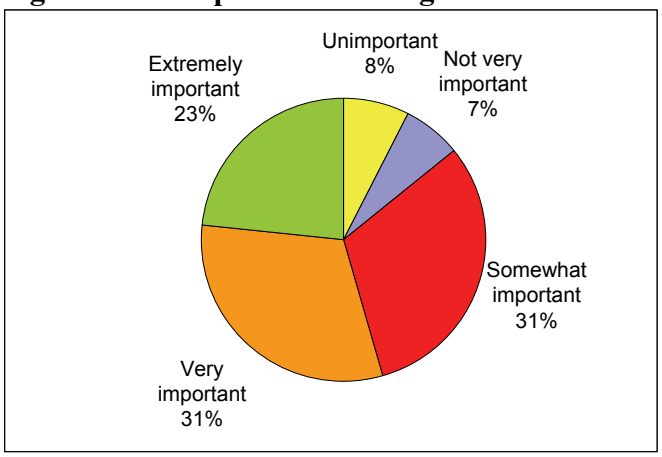
Marbling is the presence of strips or flecks of fat in meat, which may enhance the meat's flavor, tenderness, and juiciness. To get an idea of the influence of meat's marbling on consumer purchases in Nevada, respondents were asked to rate the importance of a meat product's marbling when considering a meat purchase (Figure 3.05). Twenty-six percent (131) of respondents who answered the question rated marbling as extremely important, 31% (153) considered marbling a very important factor, 29% (153) said it is somewhat important, 8% (40) said it is not very important, and the remaining 6% (32) rated the marbling of meat as unimportant. Thirty-one respondents (6% of total population) did not answer the question.

Figure 3.05: Importance Rating of Marbling of Meat



A portion of the USDA grade assigned to meat is derived from the muscle texture of the meat, with firmer muscle texture receiving a higher grade. To gain an understanding of the influence of meat's muscle texture on consumer purchases in Nevada, respondents were asked to rate the importance of a meat product's muscle texture when considering a meat purchase (Figure 3.06). Twenty-three percent (116) of respondents who answered the question considered muscle texture to be an extremely important factor in meat purchases, 31% (152) said it is very important, another 31% (154) said it is somewhat important, 7% (33) said it is not very important, and the remaining 8% (37) of respondents who answered the question did not consider meat's muscle texture to be an important factor at all in their meat purchasing decisions. Thirty-eight respondents (7% of total population) did not answer the question.

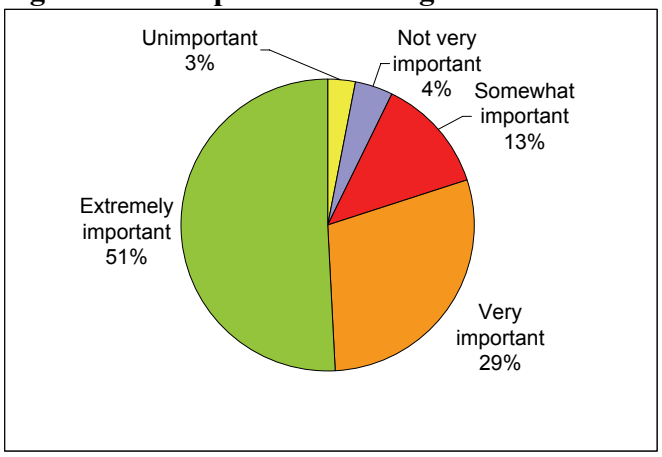
Figure 3.06: Importance Rating of Meat's Muscle Texture



By USDA standards, meat is considered lean if it contains no more than 2.7 grams of fat per ounce. To determine the influence of lean mean on purchasing decisions of consumers in Nevada, survey respondents were asked to rate the importance of lean meat when considering a meat purchase (Figure 3.07). Fifty-one percent (261) of respondents who answered the question said they consider the leanness of meat to be an extremely

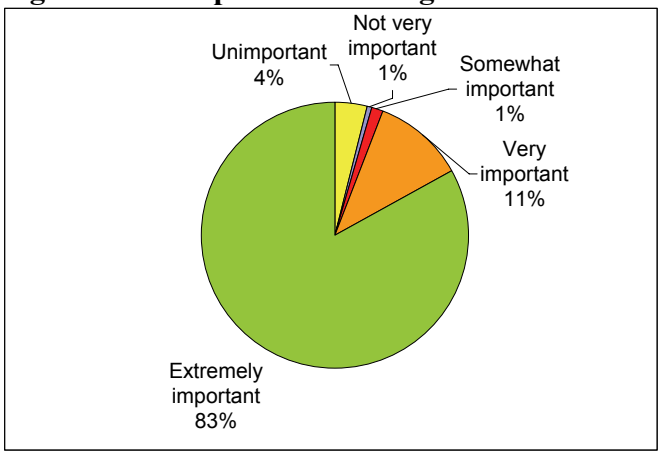
important factor in meat purchasing decisions, 29% (148) rated leanness as very important, 13% (64) said it is somewhat important, 4% (21) said it is not very important, and the remaining 3% (16) of respondents who answered the question considered the leanness of meat to be unimportant. Twenty respondents (4% of total population) did not answer the question.

Figure 3.07: Importance Rating of Lean Meat



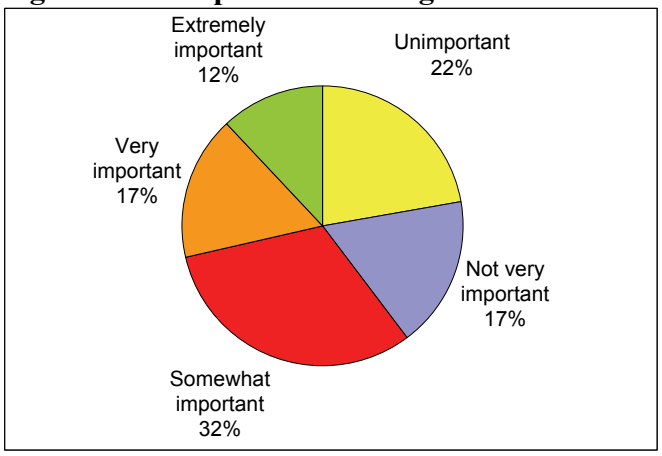
While each consumer's perception of a meat product's taste is subjective, certain meat attributes may enhance meat's flavor. To determine the importance of meat's flavor on consumer purchases, respondents were asked to rate the importance of the flavor/taste of meat when considering making a meat purchase (Figure 3.08). Eighty-three percent (422) of respondents who answered the question rated the flavor and/or taste of meat as an extremely important factor, 11% (56) said it is very important, 1% (6) said it is somewhat important, 1% (4) said it is not very important, and the remaining 4% (19) of respondents who answered the question said that the flavor and/or taste of meat is not an important factor at all. Twenty-three respondents (4% of total population) did not answer the question.

Figure 3.08: Importance Rating of Flavor/Taste of Meat



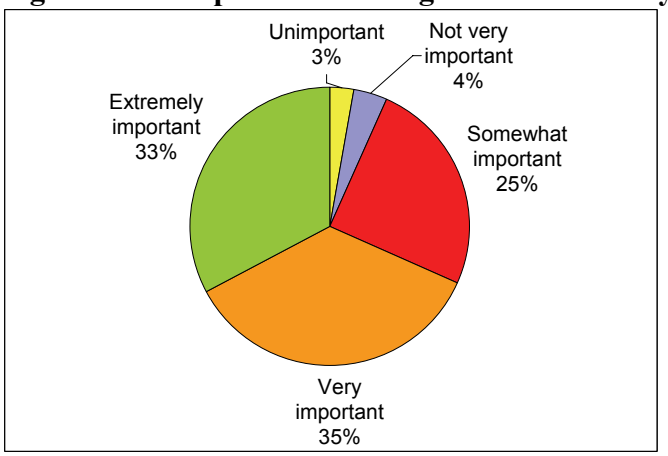
Previous studies have shown that consumers are affected by name brands, and may be willing to pay more for products marketed under a recognizable brand (such as Giddens and Hoffman, 2001). To better understand the effects of brand names on meat purchases made by consumers in Nevada, respondents were asked to rate the importance of a meat product's brand name when considering a meat purchase (Figure 3.09). Twelve percent (61) of respondents who answered the question rated the name brand of a meat product as extremely important, 17% (84) of respondents said name brand is very important, 32% (162) of respondents said it is somewhat important, 17% (88) of respondents said meat's brand name is not very important, and the remaining 22% (112) of respondents rated the meat product's brand name as an unimportant factor in meat purchasing decisions. Twenty-three respondents (4% of total population) did not answer the question.

Figure 3.09: Importance Rating of Meat Product's Name Brand



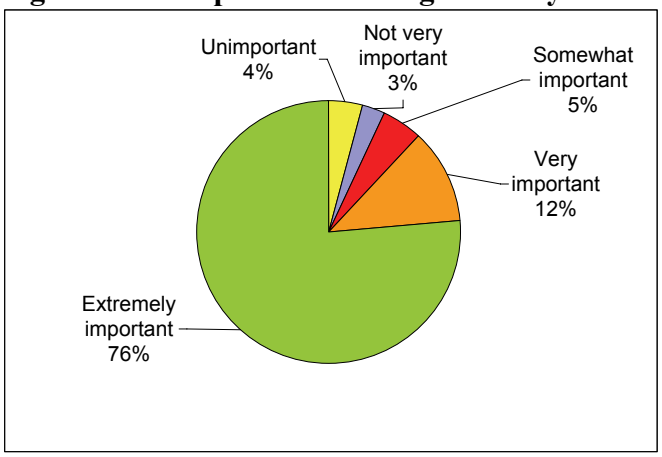
The cut of meat may affect the meat's tenderness, and will likely affect the price of the meat as well. Respondents were asked to rate the importance of the cut of a meat product when considering a meat purchase (Figure 3.10). Thirty-three percent (167) of respondents who answered the question said cut type is an extremely important factor in meat purchasing decisions, 35% (180) said it is very important, 25% (127) said the cut of meat is somewhat important, 4% (20) said it is not very important, and the remaining 3% (14) of respondents who answered the question said that the cut type of a meat product is not an important factor in meat purchasing decisions. Twenty-two respondents (4% of total population) did not answer the question.

Figure 3.10: Importance Rating of Meat's Cut Type



Recent food safety scares, such as *Bovine Spongiform Encephalopathy* (BSE, or Mad Cow Disease) have sparked a new interest in meat safety. To determine whether or not these issues have had an effect on consumers in Nevada, respondents were asked to rate the importance of the safety of a meat product when considering a purchase (Figure 3.11). Seventy-six percent (383) of respondents who answered the question rated the safety of a meat product as an extremely important factor in purchasing decisions, 12% (59) said it is very important, 5% (24) said meat safety is somewhat important, 3% (14) of respondents said it is not very important, and the remaining 4% (21) of respondents who answered the question said that the safety of a meat product is not at all important when considering a meat product purchase. Twenty-nine respondents (6% of total population) did not answer the question.

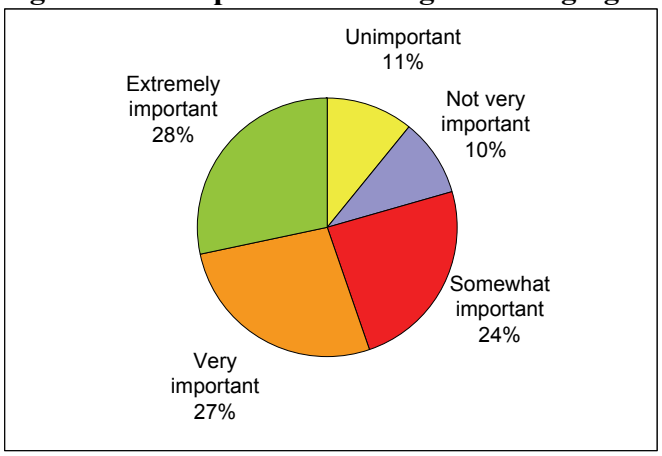
Figure 3.11: Importance Rating of Safety of Meat



As with branding, product packaging may have an effect on consumers' perception of the product, and may influence the amount of money consumers are willing to pay for the product. Because of this effect, respondents were asked the rate the importance of a meat product's packaging when considering making a meat product purchase (Figure 3.12). Twenty-eight percent (144) of respondents who answered the

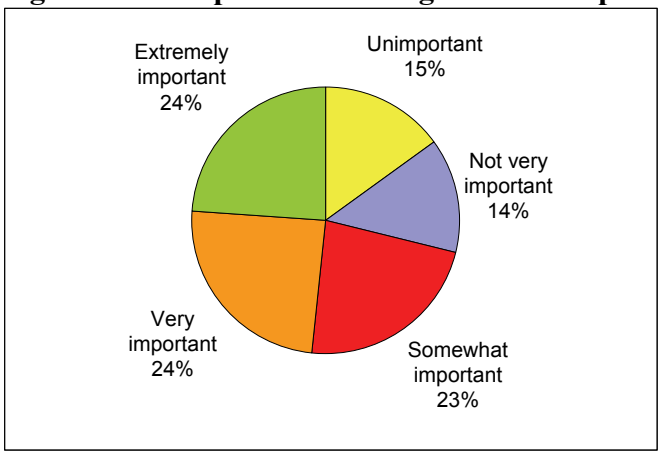
question rated the packaging of meat as an extremely important purchasing factor, 27% (136) of respondents said it is a very important factor, 24% (123) said it is a somewhat important factor, 10% (48) said it is not very important, and the remaining 11% (55) felt that the packaging of meat is not at all an influential factor when considering a meat product purchase. Twenty-four respondents (5% of total population) did not answer the question.

Figure 3.12: Importance Rating of Packaging of Meat



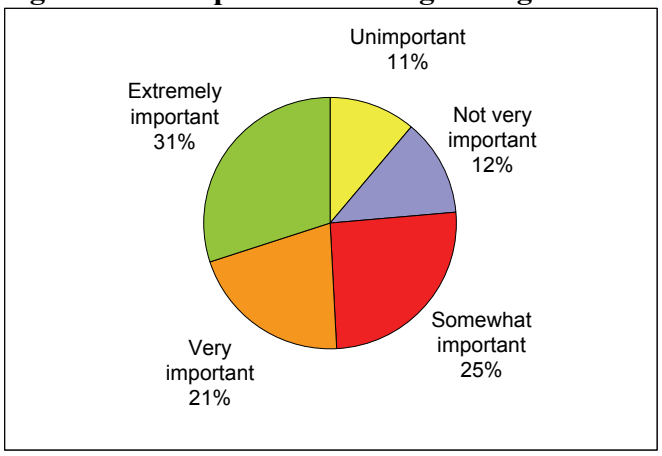
To determine whether or not sales and promotions of meat products affect the meat purchases of consumers in Nevada, respondents were asked to rank the importance of a sale or special promotion when considering a meat purchasing decision (Figure 3.13). Twenty-four percent (120) of respondents who answered the question rated a sale/promotion as extremely important, 24% (125) said it is a very important factor, 23% (114) said it is somewhat important, 14% (70) said it is not very important, and the remaining 15% (76) of respondents said a sale or promotion on meat is an unimportant factor in their meat purchasing decisions. Twenty-five respondents (5% of total population) did not answer the question.

Figure 3.13: Importance Rating of Sale or Special Promotion of Meat



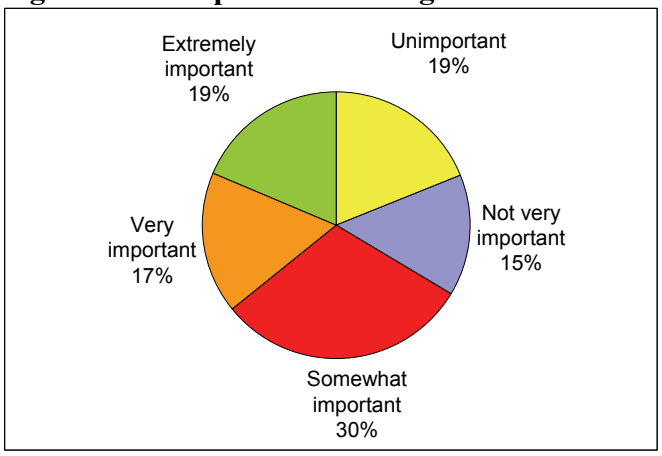
Organic meats come from livestock that has been raised without growth hormones or routine antibiotics, and that has not been genetically modified. Because the market for organic products has expanded in recent years, respondents were asked to rate the importance of a meat product being organic when considering a purchase (Figure 3.14). Thirty-one percent (154) of respondents who answered the question said the organic feature of meat is an extremely important factor in their purchasing decisions, 21% (106) said it is very important, 25% (130) said it is somewhat important, 12% (63) said it is not very important, and the remaining 11% (57) said that organic meat is not at all important in their meat purchasing decisions. Twenty respondents (4% of total population) did not answer the question.

Figure 3.14: Importance Rating of Organic Meat



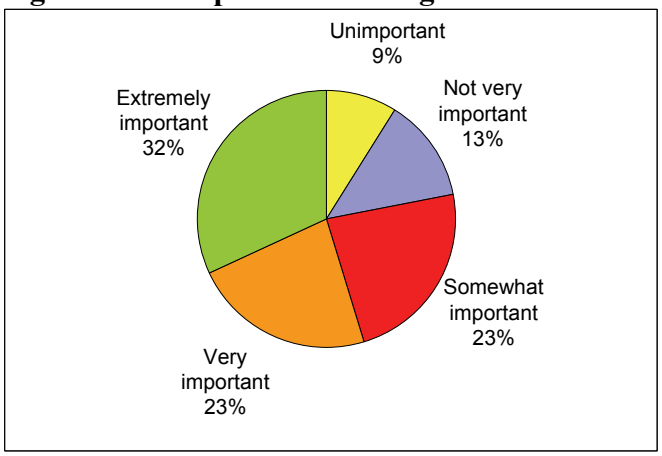
As with organics, the market for locally produced foods has expanded in recent years. To get more insight as to the market for locally produced meats in Nevada, respondents were asked to rate the importance of a meat product's origin (specifically, whether or not it was raised/processed in Nevada, or "Nevada Grown") when considering a meat product purchase (Figure 3.15). Nineteen percent (95) of respondents who answered the question rated a meat product's origin as extremely important, 17% (88) said it is very important, 30% (155) rated meat's origin as somewhat important, 15% (75) said it is not very important, and the remaining 19% (96) said that a meat product locally grown was not important. Twenty-one respondents (4% of total population) did not answer the question. As 36% of the respondents indicated that locally grown was extremely or very important, this may constitute a target market consumer.

Figure 3.15: Importance Rating of Nevada Grown Meat



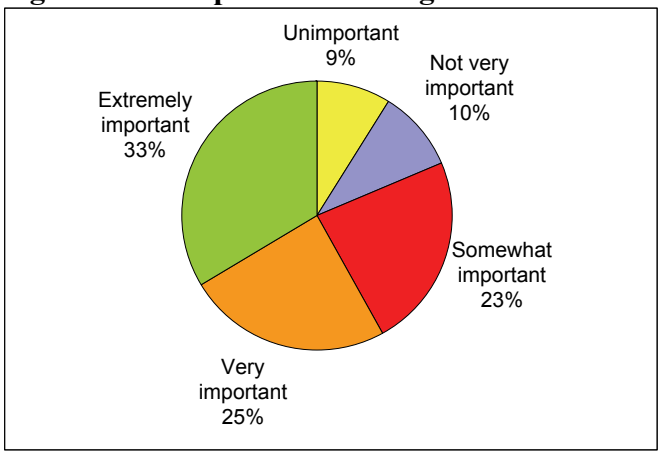
To determine the importance of natural meats to consumers in Nevada, respondents were asked to rate the importance of meat being natural on their meat product purchasing decisions (Figure 3.16). Thirty-two percent (163) of respondents who answered the question rated the natural quality of meat as extremely important, 23% (114) said it is very important, 23% (119) said natural meat is somewhat important, 13% (65) said it is not very important, and the remaining 9% (45) said meat being certified natural is not important to them when considering a meat purchase. Twenty-four respondents (5% of total population) did not answer the question.

Figure 3.16: Importance Rating of Natural Meat



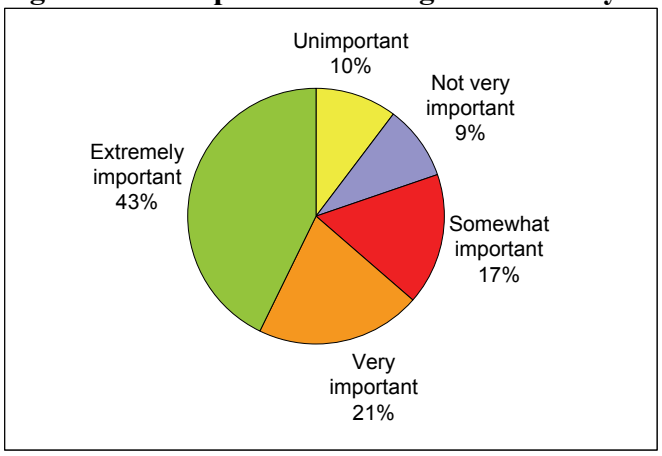
Respondents were asked to rate the importance of a meat product having been produced in an environmentally friendly manner when considering a meat product purchase (Figure 3.17). Thirty-three percent (173) of respondents who answered the question said that environmentally friendly production practices were extremely important, 25% (125) said they are very important, 23% (119) said they are somewhat important, 10% (50) said it is not very important, and the remaining 9% (45) rated environmentally friendly meat as being unimportant to their meat purchasing decisions. Eighteen respondents (3% of total population) did not answer the question.

Figure 3.17: Importance Rating of Environmentally Friendly Meat



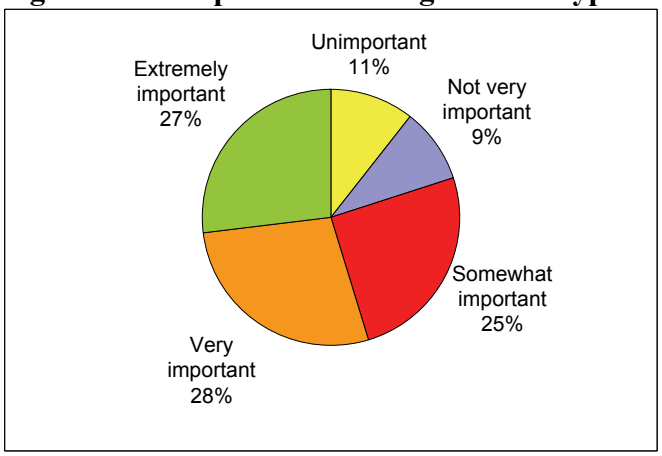
In order to better understand preferences for the treatment of livestock among consumers in Nevada, respondents were asked to rate the importance of the animal having been humanely treated when considering a meat product purchase (Figure 3.18). Forty-three percent (220) of respondents who answered the question rated humane treatment as extremely important, 21% (106) said it is very important, 17% (86) said it is somewhat important, 9% (48) said it is not very important, and the remaining 10% (52) said that the humane treatment of the animal does not affect their meat purchasing decisions. Eighteen respondents (3% of total population) did not answer the question.

Figure 3.18: Importance Rating of Humanely Raised Meat



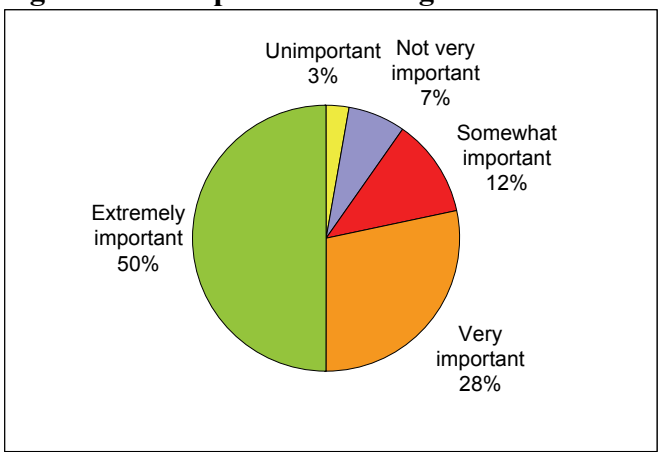
The type of feed livestock consumes can affect the flavor, leanness, and texture of meat. Respondents were asked to rate the importance of the animals feed type on their meat product purchasing decisions (Figure 3.19). Twenty-seven percent (137) of respondents who answered the question rated feed type as extremely important, 28% (142) said it is very important, 25% (130) said it is somewhat important, 9% (47) said it is not very important, and the remaining 11% (54) of respondents rated feed type as unimportant to their meat product purchasing decisions. Twenty respondents (4% of the total population) did not answer the question.

Figure 3.19: Importance Rating of Feed Type



Although price may play a role in any purchasing decision, there are other factors to consider when purchasing meat. In order to better understand the effect of price on consumer's meat purchasing decisions in Nevada, respondents were asked to rate the importance of the price of meat when making a meat product purchase (Figure 3.20). Fifty percent (257) of respondents who answered the question rated the price of meat as extremely important, 28% (144) said it is very important, 12% (60) said it is somewhat important, 7% (35) said it is not very important, and the remaining 3% (14) of respondents rated the price of meat as unimportant to their purchasing decision. Twenty respondents (4% of total population) did not answer the question.

Figure 3.20: Importance Rating of Price of Meat



The results of the attribute ratings discussed above are also summarized in Table 3.05. The entries of the table represent the average of the rating given to each attribute, in order of the most influential factor to the least influential factor on meat purchasing decisions. Recall that each attribute was rated on a scale of 1 to 5, where a value of 1 indicates the attribute exerts the least influence on meat purchasing decisions, while 5 indicates the greatest influence. On average, freshness and taste/flavor were rated as the most influential purchasing factors, with average ratings of 4.5. Safety and tenderness

each earned an average rank of 4.3, with leanness (ranked 4.1) and price (ranked 4.0) rounding out the factors given average ratings of "very important" and higher.

Cut type (ranked 3.8), the humane treatment of animals (ranked 3.6), and environmentally friendly production (ranked 3.5) were also seen as being influential on meat purchasing decisions by survey respondents. The marbling of the meat, natural production, the animal's feed type, and the product's packaging were all given an average rank of 3.4. Organic production, the muscle texture of the meat, and whether the product is featured in a sale or promotion were given just slightly less importance, with average ratings of 3.3.

The origin of the product (specifically, whether or not the meat product had been grown/raised in Nevada) and the product's brand name were seen as less influential factors on meat product purchasing decisions. These attributes were given average ratings of 2.9 and 2.7, respectively.

Table 3.05: Factors Influencing Purchase of Meat

Attribute	Importance Ranking
Freshness	4.5
Taste/Flavor	4.5
Safety	4.3
Tenderness	4.3
Leanness	4.1
Price	4.0
Cut type	3.8
Humane treatment	3.6
Environmentally friendly	3.5
Marbling	3.4
Naturally raised	3.4
Feed type	3.4
Packaging	3.4
Organic	3.3
Muscle texture	3.3
Sale/Promotion	3.1
Origin ("Nevada grown")	2.9
Brand name	2.7

Pricing

To gain an understanding of the price range consumers are currently paying for different cuts and types of meat, respondents were asked how much they usually pay per pound for New York steak, ground beef, pork chops, pork sausage, and leg of lamb. Respondents were then asked about their willingness to pay for the same cuts of meat featuring the special attributes of having been locally raised/produced (Nevada grown) and having been grass-fed (which results in leaner meat than livestock raised on corn or grain). The second meat product presented to respondents was said to be differentiated from the initial ("standard") product through labeling practices, with the label serving as the only indication that the meat product features special attributes. Table 3.06 shows the average prices respondents said they were willing to pay for the undifferentiated products, as well as the prices they would pay for the same meat products with a label featuring the special attributes. Table 3.07 shows the price premium respondents said they were willing to pay, which is equal to the difference in price per pound between the standard product and the differentiated product.

When asked how much they currently pay for an undifferentiated cut of New York steak, respondents said they pay an average of $5.90/lb. For locally grown beef, respondents were willing to pay $10.11/lb, a premium of $4.21/lb. For grass fed beef, respondents were willing to pay $9.67/lb, a premium of $3.77. For a New York steak that is both locally grown and grass fed, respondents were willing to pay $10.23/lb or a premium of $4.33/lb over the undifferentiated product.

Respondents said they currently pay an average of $2.73/lb for undifferentiated ground beef. When asked what they would be willing to pay for locally grown ground

beef, respondents said they were willing to pay $2.78/lb, a premium of $0.05/lb. Respondents said they were willing to pay $2.61/lb for lean ground beef, a discount of $0.12/lb. When asked how much they would be willing to pay for ground beef that was both locally produced and grass fed, respondents gave an average figure of $3.10/lb, or a premium of $0.37/lb over the undifferentiated product. From this data, it is not possible to determine exactly why lean ground beef was the only meat product in this study that earned a discount rather than a premium, but it is possible that this is the result of a flavor/taste issue among consumers. While the lean aspect of grass-fed meat makes it healthier alternative to meat with higher fat content, some consumers do not like the taste of grass-fed beef. As ground beef could be considered an inferior good, it is also possible that respondents just weren't as interested in ground beef with special attributes.

Respondents were asked how much they currently pay for undifferentiated pork chops, and gave an average amount of $3.55/lb. When asked how much they would be willing to pay for locally grown pork chops, respondents said they would be willing to pay $3.61/lb, a premium of $0.06/lb over the undifferentiated product. Respondents said they would be willing to pay $3.57/lb for grass fed pork chops, a premium of $0.02/lb. For pork chops that are both locally grown and lean, respondents were willing to pay $3.82/lb, a premium of $0.27/lb over the undifferentiated pork chops.

Finally, respondents were asked the same questions in regards to leg of lamb. On average, respondents said they currently pay $5.29/lb for leg of lamb, but would be willing to pay $6.03/lb for locally grown leg of lamb, a premium of $0.74/lb. When asked how much they would be willing to pay for a lean leg of lamb, respondents said they would be willing to pay $6.15/lb, a premium of $0.86/lb. For a leg of lamb that is

both locally grown and lean, respondents said they would be willing to pay $6.22/lb, a premium of $0.93/lb.

Table 3.06: Willingness to Pay for Meat With and Without Special Attributes

	NY Steak	Ground Beef	Pork Chop	Leg of Lamb
Unlabeled Product	$5.90/lb.	$2.73/lb.	$3.55/lb.	$5.29/lb.
Locally Grown	10.11	2.78	3.61	6.03
Grass Fed (Lean)	9.67	2.61	3.57	6.15
Both Locally Grown & Lean	10.23	3.10	3.82	6.22

Table 3.07: Willingness to Pay Premiums for Meat With Special Attributes

	NY Steak	Ground Beef	Pork Chop	Leg of Lamb
Unlabeled Product	---	---	---	---
Locally Grown	$4.21/lb.	$0.05/lb.	$0.06/lb.	$0.74/lb.
Grass Fed (Lean)	3.77	-0.12	0.02	0.86
Both Locally Grown & Lean	4.33	0.37	0.27	0.93

To give an idea of how many respondents said they were willing to pay a premium for meats with special attributes, Table 3.08 shows the percentage of total respondents who were willing to pay at least some premium amount for the differentiated meats. For all meats, at least 65% of respondents were willing to pay a premium for the meat products featuring the locally grown and/or grass fed attributes.

For Nevada grown New York steak, 83.6% (445) of respondents were willing to pay a premium, while 80.6% (434) were willing to pay a premium for lean New York steak, and 86.1% (463) of respondents were willing to pay a premium for New York steak that was both locally grown and lean. For locally grown ground beef, 75.9% (408) of respondents were willing to pay some premium, while 78.2% (421) were willing to pay a premium for grass-fed ground beef, and 74.2% (399) of respondents were willing to pay a premium for ground beef that is both locally grown and lean.

Just over 81% (436) of respondents were willing to pay a premium for locally grown pork chops, while 72.3% (389) were willing to pay a premium for grass-fed pork chops, and 75.8% (408) of respondents were willing to pay a premium for pork chops

featuring both the Nevada grown and lean aspects. Finally, for locally grown leg of lamb, 74.4% (400) of respondents were willing to pay a premium, while 65.9% (355) were willing to pay a premium for grass-fed leg of lamb, and 75.0% (404) of respondents were willing to pay a premium for leg of lamb that is both locally grown and lean.

Table 3.08: Percentage of Respondents Willing to Pay a Premium for Meat with Special Attributes

	NY Steak	Ground Beef	Pork Chop	Leg of Lamb
Locally Grown	83.6%	75.9%	81.1%	74.4%
Grass Fed (Lean)	80.1	78.2	72.3	65.9
Both Locally Grown & Lean	86.1	74.2	75.8	75.0

This pricing information was analyzed in conjunction with the demographic data to give an idea of who the target consumers are for each of the products. Table 3.09 shows the results of this analysis. The left hand column lists the demographic information that was analyzed, while the row across the top of the table shows to which type of meat the information applies. A negative sign indicates that the demographic attribute in question has a negative effect on willingness to pay, while a positive sign indicates a positive effect on willingness to pay, and a zero indicates that the demographic attribute does not have a significant effect on willingness to pay. While the attributes age, education, and income are continuous variables (meaning, for example, that if the age attribute has a negative sign, willingness to pay for that type of meat decreases as age increases), male, children, full time employment, Caucasian, and Northern Nevada are dummy variables, given the value of 1 if the respondent falls into that demographic category and a value of 0 otherwise (meaning, for example, that if the male attribute has a positive sign, being male will have a positive effect on willingness to pay for that type of meat).

Locally grown New York steaks appealed mostly to younger adults, particularly males, who are employed full time and have children in the household. Grass-fed New York steak was valued most by younger adults with higher education levels, who live in Northern Nevada. Lean New York steak was also valued most by respondents who described themselves as belonging to a minority race group. Locally grown ground beef also appealed mostly younger adults, especially males, who have higher income levels and education levels than the average respondent, and who live in Northern Nevada. Grass-fed ground beef was most attractive to younger adult males with no children in the household, who are employed less than full time and live in Northern Nevada.

Locally grown pork chops appealed more to younger adults with higher education levels and full time employment. Grass-fed pork chops appealed more to males living in Northern Nevada without children, who identified themselves as being in a race group other than Caucasian. Locally grown leg of lamb was most appealing to respondents with higher education and income levels, who are full time employed and Caucasian, and do not have children. Grass-fed leg of lamb was most appealing to younger adult females with lower education levels and lower employment levels, who do not live in Northern Nevada. Grass-fed leg of lamb was also most appealing to persons identifying themselves as being a minority race.

Table 3.09: Demographic Effects on Willingness to Pay

	New York steak		Ground beef		Pork chops		Leg of lamb	
	Locally grown	Grass fed	Locally grown	Grass fed	Locally grown	Grass fed	Locally grown	Grass fed
Age	-	-	-	-	-	0	0	-
Male	+	0	+	+	0	+	0	-
Education	0	+	+	0	+	0	+	-
Income	0	0	+	0	0	0	+	0
Children	+	0	0	-	0	-	-	0
Full time employment	+	0	0	-	+	0	+	-
Caucasian	0	-	0	0	0	-	+	-
Northern Nevada	0	+	+	+	0	+	0	-

Resident Survey Conclusions

Survey respondents rated freshness and taste/flavor as the most important factors on their meat purchasing decisions; however, 55% of the respondents rated natural production as having an extremely or very important influence on their meat purchasing decisions, and 36% of respondents rated local production as having an extremely or very important influence on their purchasing decisions. These individuals constitute a target market for a Nevada grown natural meat products. The highest premiums the consumers in this study were willing to pay pertained to high-grade beef products, but all meat products bearing both the grass-fed and locally grown labels received willingness to pay premiums over the standard meat products. This indicates that the use of these two labels together will bring a higher premium then the labels would individually. Additionally, at least 65% of the respondents were willing to pay a premium for the labeled products discussed.

Across all products, the results of this study indicate that the target market for the specialty meat products is composed of younger adults (22-35), primarily male, with a higher education level (college degree or higher), living in Northern Nevada. Additionally, the existence of children in the household had an effect on willingness to pay for locally grown labeled products. These results are indicative of those found in

similar studies, as well as in the general consumption patterns currently observed in consumers. Generally, younger adults tend to be willing to try new products and place a greater importance on product labeling. It is also common that consumers with higher education levels tend toward a healthier diet and are more likely to take the time to research product information and educate themselves about product safety. Additionally, families with children place a greater importance on high-quality, healthy food, assuming the household has the disposable income to do so. Interestingly, it is more common for female gender to have a positive effect on willingness to pay for specialty food products, but this study found that being male had more of an effect on willingness to pay than being female. However, this study focused on meat products, which are eaten in greater quantity by males. All product packaging, distribution, and promotion originating from the proposed slaughter/processing facility should focus on the target consumer described above.

IV. ECONOMIC FEASIBILITY

Organizational Possibilities

The following paragraphs describe various business structures that the members of the proposed slaughter/processing facility may want to consider.

Traditional Cooperative

A cooperative is a business entity that is member-owned, meaning the business is controlled and owned by the same people who utilize its services. The owners of the cooperative finance and operate the business, striving for a mutual benefit by working together. By combining resources, the overall production costs are decreased, and the production capabilities and marketing successes are increased. Cooperatives are run similar to other business entities and usually incorporate under state laws. They require bylaws and a board of directors, who set policy and hire managers to run the day-to-day operations. In addition to the user-owned aspect, two other characteristics make a cooperative different from other business organizations: they are user-controlled, and user-benefited (Rapp and Ely, 1996).

The user-controlled characteristic refers to the election of a board of directors and the ability of common stock holders and/or cooperative members to vote on major organizational issues. User-benefited characteristics include the distribution of resources based on the member's use of the organization. Cooperatives provide a direct cost savings through the purchase of bulk supplies, increases in market access, a distribution of overhead and fixed costs as well as the allocation of profits based on usage to the members.

Cooperative members may finance the start-up and operation costs of the organization through a variety of methods. One option is for members to make a direct financial contribution through a membership fee, or through the sale of common or preferred stock. Another finance method is for the cooperative to withhold a portion of the net earnings from cooperative members for reinvestment back into the organization. Finally, assessment fees can be charged based on the number of units procured from each member, or based on the number of units sold after processing. The advantage of soliciting a direct contribution or utilizing the sale of stock is the upfront cash requirements to purchase capital equipment and building services. Assessment fees and/or net earning withholdings are more beneficial once the cooperative has begun operations and require working capital or future replacement cash.

It is vital to the success of a cooperative that owners stay informed of the business practices. A cooperative is a democratically controlled organization that operates through a majority vote. Members have a monetary interest in the financial well-being of the organization and rely heavily on the education and success of the other member producers. While the pooling of resources helps reduce risk in the market place, judgments and decisions made on one farm can affect the profitability of other cooperative members.

New Generation Cooperative

The "New Generation Cooperative" (NGC) is similar in structure to traditional cooperatives, but the NGC focuses on marketing niche strategies rather than the traditional cooperative roles, such as production and storage. One of the main focuses of

the NGC is delivery rights, which are tied directly to the initial investment required from each member. The NGC establishes a production volume, and then sells shares based on a delivery commitment from farmers, which stipulates that enough of the NGC's product is produced to fulfill the NGC's capacity requirement. One disadvantage of this system is the inability of the cooperative to encompass new producers, as the production capacity is already maximized at inception. However, delivery rights may be sold or traded to other members of the cooperative and future expansion can allow for the sale of additional delivery rights.

NGCs normally maintain a marketing agreement with the member producers, whereas traditional cooperatives do not. Because NGCs are limited to purchasing products from their members only, they require a much narrower level of quality standards than traditional cooperatives. The process of identity preserved is used to ensure that an acceptable quality product is grown by members, or it can trade lower quality member grain for the higher quality grain needed for processing.

The key advantage to NGCs is the fact that the organization can supply a large amount of its own start-up capital. NCGs can typically generate 30%-50% of their start-up capital, lowering long-term private debt commitments and freeing up future profits for larger dividend payments to farmers (Harris, Stefanson, and Fulton, 1996). Additionally, delivery rights ensure a reliable volume of product for the cooperative, while guaranteeing a home for the producer’s product. It also allows the cooperative to better react to market conditions.

New generation cooperatives may choose a combination of options, but usually organizations stay within a stock or non-stock form of capital acquisition. Potential

members may feel more comfortable with stock options, as it is a more commonly understood system of capitalization.

Capitalizing refers to the amount of money needed to begin operations and the mechanism for acquiring the cash. Important decisions include whether the cooperative will issue stock or non-stock options (i.e. membership dues), borrow from traditional financial institutions, and determine minimal rates of return for its members. The goal is to provide enough working capital to begin and maintain operations while sustaining manageable debt levels for the organization and making the investment affordable to prospective members.

Ownership certificates come is a variety of forms, including common stock, preferred stock, membership certificates, and capital certificates. In terms of cooperatives, common stocks are shares of the cooperative representing membership/ownership in the cooperative and are accompanied by voting rights. Common stock can be divided into classes, each carrying different voting privileges and assessed different values. Those with more privileges are more expensive to purchase. Cooperatives usually do not pay interest on common stock issued. Preferred stock is nonvoting stock that can be issued to both members and nonmembers of the cooperative. The proceeds from the purchase of preferred stocks are usually used for capital investment and. As with common stock, preferred stock can be divided into classes, each with a different value receiving different scales of interest payments. Preferred stock owners receive interest for their investment, and are usually given their interest dividends before the distribution of profits to common stock holders. If the organization ceased to exist, preferred stock holders are compensated first.

If the members of a cooperative decide that they do not want to offer stock, membership is derived through membership certificates. Voting rights accompany membership certificates, which are issued once membership dues are paid. Usually memberships and capital certificates are insured, but are non-interest bearing. Capital certificates are similar to preferred stock, but are not issued as stock. They are sold in a variety of denominations and do not have accompanying voting rights. Interest may or may not be paid to capital certificate holders, but nonmembers may purchase the certificates.

NGCs require a marketing contract, making all members producers. In an NGC, preferred stock and/or capital certificates are generally not offered. After the cooperative has begun operation, members continue their investment by providing additional risk capital. This can be accomplished in a variety of ways. The cooperative may retain a portion of earnings as an additional investment into the organization. This can be done in two ways: through the payment or retention of a per-unit fee for each member, or through the retention on the overall cooperatives net earnings. Either way, the equity investment is credited to the members' equity accounts and held as a liability on the cooperatives balance sheet.

Cooperative Legal Considerations

The legal considerations cooperatives must consider include the drafting of articles of incorporation, creating bylaws, membership applications, creating and maintaining marketing and purchase agreements, and revolving fund certificates. While the Capper-Volstead Act of 1922 and the Farm Credit Act of 1971 have aided

cooperatives in their ability to work together in the handling, processing and marketing of their goods, and allows them to borrow jointly, cooperatives are still subject to numerous antitrust laws and are responsible for all tax codes relating to their enterprise.

Articles of incorporation give the cooperative a distinct legal standing. It limits personal liability for debt incurred by the cooperative, excluding the amount of their initial investment. The articles of incorporation also describe the nature of the business entity, its location, the proposed duration of the association, and the names of the principle parties involved. Once drafted, the articles are filed with the Secretary of State, activating the cooperative.

Bylaws define how the cooperative will conduct business. The bylaws describe membership requirements and list the rights and responsibilities of the cooperative's members. They also discuss voting procedures and the board structure that will govern the cooperative.

Membership applications are composed of five main parts: the applicant's statement addressing membership; the signature of the applicant; a statement of cooperative acceptance; signatures of the board president and secretary; and a statement of the duties and intent of the prospective member. A membership certificate may be issued to each member as evidence of entitlements to the organization.

Marketing and purchasing agreements set the standard of quality acceptable to the cooperative. They also state how the proceeds of the cooperative will be distributed, once deductions for operating and capital expenditures have been taken. Often marketing and purchasing agreements are required when seeking outside financial backing.

The revolving funds certificate is a written receipt for capital investments and retained earnings that will eventually be revolved or redeemed. These investments may be deductions based on a per-unit of production, reinvested earnings, or original capital subscription, if not issued in stock form. All legal documents should be written with the help of a lawyer to ensure state provisions are addressed. Appendix A contains the name and contact information for several agricultural lawyers located in Nevada.

Investing risk capital is the responsibility of all members. The amount of risk capital invested is an important decision for the cooperative's members to consider. It must cover a large portion of the start-up and operational costs, so that outside investors feel comfortable that the membership will work to make the operation successful. Members must also invest enough capital to give them a financial stake in the success of the enterprise.

Most private loan institutions will require the cooperative members to assume at least 50% of the capital risk, but it may take many years for the members to acquire this percentage. Long-term credit is available through federal and state sponsored credit programs. Sources of facility loans include: USDA Rural Development; Cobank; St. Paul Bank for Cooperatives; and National Cooperative Bank. Many commercial banks and credit unions have local programs for small business start-up, such as Bank of the West. Cooperatives can apply for short-term loans to cover operating costs during the first year of operation. These are acquired through the Farm Credit System and the National Cooperative Bank (Rapp and Ely, 1996).

C Corporation

The C corporation is the traditional form of corporation, which is a business entity that provides limited liability to its owners and shareholders, meaning the personal assets of the owners and shareholders are protected from the financial issues of the corporation (Legalzoom.com, 2006). Unlike a sole proprietorship or partnership, a corporation exists as a separate legal entity, and therefore is taxed separately from its directors and shareholders. When a C corporation goes public, it may have an unlimited number of shareholders (who are the legal owners of the corporation), who do not have to be residents or citizens of the United States.

The C corporation is managed by a board of directors elected by the corporation's shareholders and makes policy decisions on the corporation's behalf, while the officers and employees of the corporation conduct the business dealings of the entity. As mentioned, the directors, employees, and shareholders of the corporation are not personally liable for the corporation's debts. However, it is the responsibility of the directors and officers to ensure that certain formalities are observed on the corporation's behalf. This includes formalities such as annual meetings, appointment of officers and election of directors, and issuance of stock. Perhaps the largest responsibility of the corporation is to maintain enough capital to protect the corporation from any business debts. In the event that these formalities are not observed, shareholders may be held personally liable for corporate debts.

S Corporation

S corporations are C corporations that have elected to file for S corporation tax status. Filing as an S corporation combines the limited liability of the C corporation with the tax status of the sole proprietorship or partnership. The main difference between C corporations and S corporations (and also the major advantage to S corporations) is the tax treatment. While C corporations are subject to double taxation, S corporations are granted "pass through" taxation because all of the corporation's profits are passed on to the shareholders in the form of dividends, so there is no taxation at the corporate level. Another advantage to the S corporation is that the corporation's directors may pass business losses through to their personal income tax return. The biggest disadvantage of the S corporation is the restrictions that are placed on shareholders: an S corporation may not have more than 100 shareholders, who must be citizens or residents of the United States.

Limited Liability Company

As the name implies, a limited liability company (LLC) is a business ownership structure that provides limited liability to its owners, called members. The main differences between the LLC and the corporate structure are that the LLC is more flexible and less formal than the corporation, and the two entities are subject to different tax laws. An LLC can also serve as the general partner in a limited partnership, giving the individual owners protection from liability, financial or otherwise.

Some of the advantages of the LLC are the operating flexibility they provide, including the fact that a board of directors is not required as with corporations, and there

is currently no requirement in Nevada for an annual meeting of the shareholders. As with S corporations, LLCs are also free from double taxation because the LLC members report their share of profits or losses on their personal income taxes. The LLC is not taxed at the business entity level. The final advantage to the LLC is the limited liability the entity provides to its members. Disadvantages of the LLC are that they do not require an operating agreement, the lack of which may lead to management issues, and the fact that while the LLC isn't subject to double taxation, it may be taxed at a higher rate than a corporation.

Owner Investment

Ownership options that can be exchanged between members within the cooperative are referred to as exchangeability. Redemption refers to the expectation that member ownership will be redeemed under specific conditions, such as retirement or death. Investment amounts should be determined by comparative usage requirements. Producers interested in owning more than their usage percentage can purchase additional preferred stock or capital certificates.

Cooperatives must maintain financial reserves to tie them over during periods of reduced production or environmental recession. These reserves can be earmarked for specific spending, such as debt reduction, facility improvements, or operational growth. Reserves also provide peace of mind for members, allowing the cooperative to weather hard times without the need for additional investment by members.

After reserves have been established, the cooperative needs to develop a system to repay investors their initial cash outlays. Usually a percentage of operating revenues are

dedicated for the repayment of owner equity and the purchase of stock or certificates of outgoing members. This can be done in two ways: either a payment amount is determined based on the input of each member; or the resources are pooled and distributed based on the percentage share owned in the cooperative. Both systems require a delayed payment for initial livestock inputs, so that the cooperative pays for the initial livestock and repays profits after the meat has been successfully sold.

With traditional cooperatives, the initial investments are very low, often less than $100. Ownership is offered through the issuance of capital certificates and not stock options. Traditional cooperatives are generally more restrictive than other ownership types in allowing exchanges. This is usually done through the sale of certificates between members at the board of director's discretion. Traditional cooperatives usually have an established par value for certificates that is determined at the time of buy-in. Traditional cooperatives allow new members to join at any time, so a par value must be established.

Traditional cooperatives use a set price system for profit distribution. Based on the number of certificates owned or the amount of meat produced, the cooperative will disperse profits as flat fees at the close of the business cycle.

Members in new generation cooperatives typically invest $10,000 - $12,000 to purchase marketing rights (Coltrain, Barton, and Boland, 2001). NGCs do not normally establish a par value, so ownership stocks are valued at market price. It is highly correlated to the expected profitability of the organization; so certificate sales are usually done through a flat fee. Since NGCs are exchangeable, redemption obligations are not required.

NGCs commonly use the pooling system. In the pooling system, a pool is opened at the start of the production period, with payments made as meat is sold. An initial payment can be arranged at delivery time, with additional progress payments made until the pool is closed and the final margins are determined. The amount of profit distribution is directly tied to the amount of meat generated by each member and is tied to the producer's contract.

For investor-owned firms, stock certificates are purchased, with the stock value based directly on the profitability of the organization, and profits are distributed through dividends. The value of a stock certificate is based on the future anticipated profitability of the enterprise. Stock sales and exchanges can occur through an open market, and non-producers can buy-in to the cooperative.

Loans

There are a variety of credit and loan options for start-up businesses. Short-term loans known as development loans are used for start-up and input costs for new businesses. Typically development loans are interest payment only loans for the first three years, and then the cooperative has seven years to repay the principle. The life of the loan is 10 years, and regular inspections occur to insure that the loan is used for input purchases only. Other short-term loans run for three to five years and can be used for the purchase of capital equipment, start-up costs and operational costs. Equipment loans, or lease lines, can be issued for capital equipment under $1 million. These are five-year lines of credit, where loan funds are accessed only when equipment is purchased.

American AgCredit provides intermediate-loans for land purchase, building improvements, and for the purchase of processing equipment. They provide long-term loans for packing and storage facilities, and real estate purchase and improvement.

Bank of the West requires cooperative members/stockholders to hold 51% of the investment risk; however, there are exceptions for start-up organizations. A new business may be able to hold 30% of the investment risk, meaning 70% of the start-up capital is borrowed, if the cooperative agrees to distribute no more than 20% of the gross profits. All remaining profit must be reinvested into the business in order for the owner investment to increase to 51%. Copies of the bylaws and marketing and purchase agreements must accompany the credit application.

Business Plan Financials

This section of the study addresses financial analyses and recommends an optimal solution to slaughtering and processing animals. Based on research, the analysis performed, and estimated returns on investment, this study recommends operating two mobile slaughter units with a localized processing plant.

Mobile Slaughter Unit

This section also details start-up costs and outlines the current slaughter demand as well as the distributed slaughter schedule to maximize the use of two mobile units. Financial forecasts are detailed for two mobile slaughter units and the processing facility.

Mobile Slaughter Unit

Mobile slaughter units are currently in operation in the States of Washington, California and New Mexico and are under consideration in Wyoming. There are many benefits to a mobile slaughter unit: (1) USDA inspected meats can be sold at local stores and restaurants, (2) animals are treated more humanely, transport stresses are minimized or eliminated, and (3) transport costs are negated (Lopez Community Land Trust, 2007). In 2002, a mobile slaughtering unit was developed by the Lopez Community Land Trust in the State of Washington, and put into service. Bruce Dunlop, an engineer as well as a resident beef and lamb farmer in Lopez Island, Washington, oversaw the engineering and fabrication of the mobile slaughterhouse (Bruce Dunlop, December 2006 & January 2007).

Inside Processing

Mobile slaughter units are currently built by TriVan Truck Body, located in Ferndale, Washington. TriVan has a reputation for high quality work, long-term reliability, and excellent customer service and is considered the Northwest's premier source for custom made truck bodies, trailers, and enclosures, all manufactured in a new, state-of-the-art production facility.

Refrigeration

The mobile slaughter unit comes fully equipped without the need for refurnishing or additional equipment installation, and satisfies USDA inspection and licensing

Mobile Slaughter Unit Rear View

requirements. The unit consists of a mechanical/storage unit, slaughter unit and refrigeration unit. Miscellaneous equipment includes knives, saws, scales and other necessary supplies. A semi truck tractor is necessary to pull the trailer and must be purchased separately, either new or used.

It takes approximately 14 – 20 weeks to receive a mobile slaughter unit. The purchase terms are as follows: 30% down at the time of the order, and the balance on completion. The approximate vehicle weight is 25,000 pounds (Marty Van Driel, Trivan, 2007).

Existing Slaughter Schedule

Based on the results of the producer survey described in section 2 (Figures 2.02 and 2.03), most livestock calving in Nevada occurs in the spring. Animals are slaughtered between the ages of 18 and 22 months, creating the majority of the slaughter demand in the fall (Figures 4.01, 4.02, and 4.03). Survey respondents expressed their willingness to adjust their calving schedule to regulate excess demand in the fall and allow for year round operation of mobile units. Additionally, variable pricing may be used to encourage winter and spring slaughter demand.

Figure 4.01: Beef Slaughter by Season

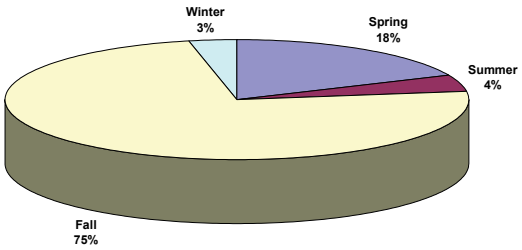


Figure 4.02: Sheep/Lamb Slaughter by Season

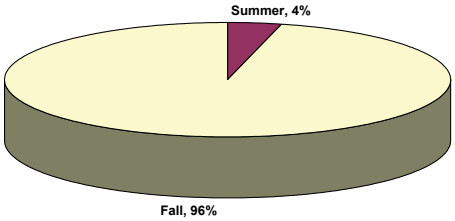
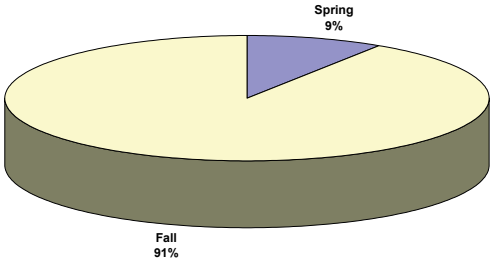


Figure 4.03: Pork Slaughter by Season



Existing Slaughter Demand vs. Mobile Unit Capacity

When operating at 100% of capacity and aging meat at a processing plant rather than in the mobile unit, the yearly slaughter demand exceeds capacity by 241% if utilizing a single unit. Use of two mobile units is critical to meet slaughter demand, as well as being able to cover the wide geographical area of interest. Under this scenario, demand only exceeds capacity by 121%. A third mobile slaughter unit or stationary slaughter facility will be required for growth as business expands.

Table 4.01 depicts the existing slaughter schedule by month in pounds from the survey data. As shown by the Demand/Capacity column, slaughter demand is greater than the capacity for any single mobile slaughter unit.

Table 4.01: Single Mobile Slaughter Unit Existing Demand vs. Capacity

1 Mobile Slaughter Unit Demand for Processing as a Percentage of Capacity in Pounds							
	Beef	Lamb	Pork	Total Monthly Demand	Single Unit Daily Capacity	Monthly Capacity (20 Days)	Demand/Capacity
January	21,969	0	0	21,969	4520	90,400	24%
February	21,969	0	0	21,969	4520	90,400	24%
March	118,885	0	820	119,705	4520	90,400	132%
April	118,885	0	820	119,705	4520	90,400	132%
May	118,885	0	820	119,705	4520	90,400	132%
June	28,398	8,275	0	36,673	4520	90,400	41%
July	28,398	8,275	0	36,673	4520	90,400	41%
August	28,398	8,275	0	36,673	4520	90,400	41%
September	479,499	205,375	8,260	693,133	4520	90,400	767%
October	479,499	205,375	8,260	693,133	4520	90,400	767%
November	479,499	205,375	8,260	693,133	4520	90,400	767%
December	21,969	0	0	21,969	4520	90,400	24%
Total	1,946,250	640,950	27,240	2,614,440		1,084,800	241%

Distributed Slaughter Demand vs. Mobile Unit Capacity

Table 4.02 depicts the slaughter schedule by month in pounds using a distributed method to balance out slaughter demand versus the mobile units' capacity, again based on survey results depicting the potential for flexibility with the slaughtering schedule. Based on an average month of 20 work days, two mobile slaughter units are capable of processing 9040 pounds of meat a day, or approximately 180,800 pounds of meat per month. This assessment assumes a total of 240 operating days for each unit per calendar year.

Table 4.02: Two Mobile Slaughter Units Distributed Demand vs. Capacity

2 Mobile Slaughter Units Demand for Processing as a Percentage of Capacity in Pounds							
	Beef	Lamb	Pork	Total Monthly Demand	Double Unit Daily Capacity	Monthly Capacity (20 Days)	Demand/Capacity
January	162,188	53,413	2,270	217,870	9040	180,800	121%
February	162,188	53,413	2,270	217,870	9040	180,800	121%
March	162,188	53,413	2,270	217,870	9040	180,800	121%
April	162,188	53,413	2,270	217,870	9040	180,800	121%
May	162,188	53,413	2,270	217,870	9040	180,800	121%
June	162,188	53,413	2,270	217,870	9040	180,800	121%
July	162,188	53,413	2,270	217,870	9040	180,800	121%
August	162,188	53,413	2,270	217,870	9040	180,800	121%
September	162,188	53,413	2,270	217,870	9040	180,800	121%
October	162,188	53,413	2,270	217,870	9040	180,800	121%
November	162,188	53,413	2,270	217,870	9040	180,800	121%
December	162,188	53,413	2,270	217,870	9040	180,800	121%
Total	1,946,250	640,950	27,240	2,614,440		2,169,600	121%

As shown by the Demand/Capacity column, demand still exceeds capacity by 121%. To alleviate the immediate necessity to purchase three mobile slaughter units, it is recommended that two mobile slaughter units are purchased to reduce the slaughter demand by 17% as detailed in Table 4.03. This results in 100% capacity utilization of the two mobile slaughter units.

Table 4.03: Two Mobile Slaughter Units Total Slaughter Capacity

Total Mobile Slaughter Capacity							
	Beef	Lamb	Pork	Total Monthly Demand	Double Unit Daily Capacity	Monthly Capacity (20 Days)	Demand/Capacity
January	134,616	44,332	1,884	180,832	9040	180,800	100%
February	134,616	44,332	1,884	180,832	9040	180,800	100%
March	134,616	44,332	1,884	180,832	9040	180,800	100%
April	134,616	44,332	1,884	180,832	9040	180,800	100%
May	134,616	44,332	1,884	180,832	9040	180,800	100%
June	134,616	44,332	1,884	180,832	9040	180,800	100%
July	134,616	44,332	1,884	180,832	9040	180,800	100%
August	134,616	44,332	1,884	180,832	9040	180,800	100%
September	134,616	44,332	1,884	180,832	9040	180,800	100%
October	134,616	44,332	1,884	180,832	9040	180,800	100%
November	134,616	44,332	1,884	180,832	9040	180,800	100%
December	134,616	44,332	1,884	180,832	9040	180,800	100%
Total	1,615,388	531,989	22,609	2,169,985		2,169,600	100%

Mobile Unit Operating Costs

Labor Expenses

Two employees are needed for each mobile slaughter unit to operate four distinct job responsibilities. These positions include two butchers, two assistants/drivers at approximately $25,376 a year and two HACCP inspectors. Both mobile slaughter units would require two butchers at an estimated yearly salary of $30,056 (Business Seminole, 2006).

The USDA Hazard Analysis and Critical Control Point (HACCP) regulation requires all slaughter and packaging facilities to develop a plan to identify critical control points for meat safety and to develop specific action plans to ensure food safety. The HACCP Inspector position is responsible for all meat inspection and supervisory capabilities within the plant. This position can be combined with the on-site butcher position, provided the employee has time to facilitate the necessary paperwork required

by the USDA. Annual salaries are in the range of $39,940 - $56,849; a salary of $46,221 was used for this study (Career Journal, 2006). Total salaries include the estimated yearly salary, along with an estimated 15% of total salary added for taxes and benefits.

Diesel Fuel Costs

The size of the service area directly affects the fuel and maintenance costs for the mobile unit. The area of interest includes the circle between Dayton, Carson Valley, Lahontan, Smith Valley, Mason Valley and Antelope Valley. This is an area with a driving circumference of approximately 200 miles. Washoe Valley and Bridgeport add an additional round trip of approximately 40 miles. It is expected that the mobile slaughter units can potentially travel up to 220 miles each day in service and will get approximately 5 miles to the gallon. Table 4.04 depicts total monthly fuel costs.

Table 4.04: Monthly Fuel Expenses

Monthly Estimated Fuel Expenses					
# of Units	Miles per Day	Days per Month	Diesel Costs per Gallon	Miles per Gallon	Monthly Total
2	150	20	2.82	5	$ 3,384.00

For this study the daily traveling distance of 150 miles per day is used as the base. Diesel prices are at a national retail average of $2.82 a gallon (EIA, 2007). Calculating fuel/oil costs and maintenance, it is estimated that the 2 mobile slaughter units will cost $230.00 a day. This includes a daily fuel estimate of $200.00 and an additional $30.00 a day estimated for repairs.

Offal Disposal

The survey results show that 93% of respondents have offal disposal facilities. This analysis does not take into account offal disposal costs and assumes the waste remains on the property where the slaughter occurs.

Portable Corral Facilities

Corral facilities are needed on each farm when using the mobile slaughter unit. A small pool of survey respondents (68%) do not have corral facilities available and will need to purchase five-foot portable corral facilities which range in price from $250 to $800. This expense has not been included in this analysis.

Additional Mobile Slaughter Unit Expenses

Other expenses include auto insurance, supplies, and vehicle licensing and loan principal and interest. Loan interest is assumed at a fixed rate of 9% over 10 years.

Start-up Costs

Table 4.05 itemizes acquisition and commissioning costs for each mobile slaughter unit. The price to purchase a tractor trailer varies from $20,000 - $90,000; for this study an estimated cost of $45,000 was used for the financial projections. Yearly depreciation is calculated over 10 years at an annual amount of $3,800.00.

Table 4.05: Mobile Slaughter Unit Start-Up Costs

Capital Expenditures	Cost per Each	2 Mobile Units
Trailer		
Mobile Slaughter Unit	$ 140,000.00	$ 280,000.00
Additional Miscellaneous Supplies	$ 5,000.00	$ 10,000.00
Semi Truck Tractor *	$ 45,000.00	$ 90,000.00
Total Acquisition Costs	$ 190,000.00	$ 380,000.00
Commissioning and Testing		
Validation Testing/HACCP Plan	$ 4,500.00	$ 9,000.00
Staff Training	$ 2,000.00	$ 4,000.00
Total Testing and Training Costs	$ 6,500.00	$ 13,000.00
Additional Costs		
Sales Tax on Trailer **	$ 10,325.00	$ 20,650.00
Total Start-up Costs	**$ 206,825.00**	**$ 413,650.00**
Depreciation	**$ 3,800.00**	**$ 38,000.00**

* A Semi Truck Tractor can be purchased used or new at an estimated price range of $20,000-$90,000. Half the price of a new tractor was used for these calculations.

** Sales tax calculated at an average rate of Douglas County, Lyon county and Carson City (7.375%)

Mobile Slaughter Unit Loan Amortization Table

The amortization table (Table 4.06) was constructed using acquisition and start-up costs of $413,650 for the two mobile slaughter units, assuming a loan period of 10 years at 9% interest. The monthly loan principal and interest payment is $5239.94. Commercial rates of interest may change due to economic conditions.

Table 4.06: Mobile Slaughter Unit Loan Amortization

Inputs	
Loan principal amount	$ 413,650.00
Annual interest rate	9.000%
Loan period in years	10
Base year of loan	2007
Base month of loan	January

Key Figures	
Annual loan payments	$62,879.28
Monthly payments	$5,239.94
Interest in first calendar year	$36,143.49
Interest over term of loan	$215,142.80
Sum of all payments	$628,792.80

Payments in First 12 Months

Year	Month	Beginning Balance	Payment	Principal	Interest	Cumulative Principal	Cumulative Interest	Ending Balance
2007	Jan	$413,650.00	$5,239.94	$2,137.56	$3,102.38	$2,137.56	$3,102.38	$411,512.44
	Feb	$411,512.44	$5,239.94	$2,153.60	$3,086.34	$4,291.16	$6,188.72	$409,358.84
	Mar	$409,358.84	$5,239.94	$2,169.75	$3,070.19	$6,460.91	$9,258.91	$407,189.09
	Apr	$407,189.09	$5,239.94	$2,186.02	$3,053.92	$8,646.93	$12,312.83	$405,003.07
	May	$405,003.07	$5,239.94	$2,202.42	$3,037.52	$10,849.35	$15,350.35	$402,800.65
	Jun	$402,800.65	$5,239.94	$2,218.94	$3,021.00	$13,068.29	$18,371.35	$400,581.71
	Jul	$400,581.71	$5,239.94	$2,235.58	$3,004.36	$15,303.87	$21,375.71	$398,346.13
	Aug	$398,346.13	$5,239.94	$2,252.34	$2,987.60	$17,556.21	$24,363.31	$396,093.79
	Sep	$396,093.79	$5,239.94	$2,269.24	$2,970.70	$19,825.45	$27,334.01	$393,824.55
	Oct	$393,824.55	$5,239.94	$2,286.26	$2,953.68	$22,111.71	$30,287.69	$391,538.29
	Nov	$391,538.29	$5,239.94	$2,303.40	$2,936.54	$24,415.11	$33,224.23	$389,234.89
	Dec	$389,234.89	$5,239.94	$2,320.68	$2,919.26	$26,735.79	$36,143.49	$386,914.21

Yearly Schedule of Balances and Payments

Year	Beginning Balance	Payment	Principal	Interest	Cumulative Principal	Cumulative Interest	Ending Balance
2008	$386,914.21	$62,879.28	$29,244.09	$33,635.19	$55,979.88	$69,778.68	$357,670.12
2009	$357,670.12	$62,879.28	$31,987.08	$30,892.20	$87,966.95	$100,670.89	$325,683.05
2010	$325,683.05	$62,879.28	$34,987.69	$27,891.59	$122,954.64	$128,562.48	$290,695.36
2011	$290,695.36	$62,879.28	$38,269.77	$24,609.51	$161,224.41	$153,171.99	$252,425.59
2012	$252,425.59	$62,879.28	$41,859.74	$21,019.54	$203,084.15	$174,191.53	$210,565.85
2013	$210,565.85	$62,879.28	$45,786.47	$17,092.81	$248,870.63	$191,284.33	$164,779.37
2014	$164,779.37	$62,879.28	$50,081.56	$12,797.72	$298,952.19	$204,082.05	$114,697.81
2015	$114,697.81	$62,879.28	$54,779.56	$8,099.72	$353,731.74	$212,181.78	$59,918.26
2016	$59,918.26	$62,879.28	$59,918.26	$2,961.02	$413,650.00	$215,142.80	$0.00

Processing Facility

It is recommended, based on survey results, that the processing facility be located in an area of Nevada that is central member ranches. Survey results, location of potential customers, and land costs throughout Northern Nevada indicate that the processing facility should be located in a central location, such as Silver Springs, Nevada, approximately 35 miles east of Carson City and 26 miles west of Fallon. This central location accommodates the Lahontan Valley, where 28% of respondents reside; is close to Yerington (32 miles), where an additional 13% of respondents reside; and is 51 miles from the Carson Valley, where 16% of the respondents reside.

Land

As of January 1, 2006, according to the USDA Agricultural Statistics Board, a measurement of the value of land in Nevada was $1,000.00 an acre. This represents a 15% increase from 2005 (USDA-NASS, 2006). The processing facility requires an acre of land to function.

Land improvements necessary for the facility include road access, water access, sewer lines, phone service, electricity, and natural gas. A rough estimate of $20,000 in land improvements are conditional on the location of the land purchased and its proximity to existing services.

Building

A prefabricated building can be purchased for $20 to $30 per square foot, excluding delivery, concrete work, site prep, wiring, plumbing and interior design (Sacco, 2007). This building is of steel construction and the components of steel buildings are fabricated at the factory. Steel beams, sheeting, and fasteners are delivered to the site, where the building is pieced together. Any interior work is done after the construction is complete. Additionally, snow load requirements must be considered when figuring roofing requirements. This study is estimating the need for a 10,000 square foot building, costing approximately $250,000- $300,000.

The general contractor is responsible for all permitting, architectural review, concrete foundation and the construction of the building. Estimates range from $75 to $100 per square foot to assemble. Utilizing a 10,000 square foot building, contractor fees are estimated at $1,000,000 (NCED, 2000 – Adjusted for inflation and facility size).

If chosen as the central location, the Silver Springs building requirements require all commercial units to purchase equivalent dwelling units (EDU). All commercial operations are required to purchase 1.5 EDUs, which allow the facility to operate up to 38 sinks and toilets, at an estimated cost of $12,369.

Refrigeration units are discussed in the equipment section, but must be installed during the building process. Refrigeration costs are included in the building construction analysis, so that they may be included in the capital loan figures. Table 4.07 lists the building expenses.

Table 4.07: Estimated Processing Facility Costs

Estimated Processing Facility Costs					
Approximate Size in Square Footage	Sewer Fees	Contractor Cost per Square Footage	Prefabricated Bldg Estimate per Square Foot	Estimated Land Costs & Improvements	Total Estimated Cost
10,000	**$ 12,369**	**$ 100.00**	**$ 30.00**	**$ 21,000**	**$ 1,333,369**

Furniture and Fixtures

Table 4.08 lists an estimate of office furniture and fixtures (Dell.com, 2007; OfficeDepot.com, 2007; TelephoneSystems.com, 2007; CSNOfficeFurniture.com, 2007).

Table 4.08: Processing Facility Office Equipment

Office Equipment	Cost	Life Span	Depreciation
Communications System	$ 2,000	5	$ 400
Computer Network	$ 3,745	5	$ 749
Computer Workstations (5)	$ 16,075	5	$ 3,215
All in One (Printer, Copier, Fax, Scanner)	$ 5,000	5	$ 1,000
Office Furniture	$ 9,540	5	$ 1,908
Total	**$ 36,360**		**$ 7,272**
Depreciation	**$ 3,636**		

Refrigeration Units

The refrigerated units are prefabricated units delivered to the site directly from the manufacturer. For optimal storage, two 10 foot by 30 foot (10'x30') refrigeration (cooler) units and one freezer unit would be required, at an approximate cost of $100,000 (Bush Refrigeration, 2007). After the meat has been cut, a freezer unit is needed for storage before the meat goes to the buyer. This approximate price includes delivery and installation.

Processing Facility Equipment Costs

Table 4.09 details a required list of equipment for the processing facility (Center for Economic Initiatives, 2004). While used equipment is readily available, the prices listed below reflect new purchase costs. Using a percentage reduction for total capital expenses will provide a financial analysis reflecting actual costs for a combination of used and new equipment. Once purchased, a monthly expense of $100.00 is used to reflect replacement and repair costs.

Table 4.09: Processing Facility Equipment List

Viscera Room		Cost	Salvage	Life Span	Yearly Depreciation
1,000 lb. Cap. Hoist Hook	$	2,000	500	15	$ 100
Paunch Working Table	$	18,000	2,500	15	$ 1,033
Tripe Inspection Ring	$	700	100	15	$ 40
Utility and Wrapping Table	$	900	150	15	$ 50
Total	**$**	**21,600**	**$ 3,250**		**$ 1,223**
Cutting Room					
Bagging Table with Stainless Steal Rack	$	4,000	500	15	$ 233
Bone Chip Removal System	$	300	-	15	$ 20
Bone Collector Set for Grinder	$	1,500	-	15	$ 100
Carcass Dropper	$	1,600	300	15	$ 87
Cutting Board	$	200	-	15	$ 13
Double Chamber Vacuum Packing Machine	$	10,000	1,500	15	$ 567
Double Section Boning Table	$	6,000	1,500	15	$ 300
grinder	$	5,000	300	15	$ 313
Grinder Cutting Tool Set	$	1,200	150	15	$ 70
Heating Element for Sterilizer	$	1,000	-	5	$ 200
I-Beam Trolley	$	100	-	15	$ 7
Pre-cut Evacuation System	$	5,000	300	15	$ 313
Stainless Steal Saw Sterilizer	$	1,000	-	15	$ 67
Stainless Steal Table with Cutting Board Top	$	1,900	500	15	$ 93
Stainless Steel Power Band Saw	$	6,000	500	5	$ 1,100
Static Scale with Digital Weight Indicator	$	4,700	1,000	15	$ 247
Utility and Wrapping table	$	4,000	500	15	$ 233
Wheel Caster assembly	$	1,000	-	15	$ 67
Total	**$**	**54,500**	7,050		**$ 4,030**
Refrigeration/Freezer Units					
10'x30' Freezer Unit	$	30,000	5,000	30	834
10'x30' Refrigeration Unit (2)	$	30,000	5,000	30	834
Total	**$**	**60,000**	10,000		1,668
Total Equipment Costs	**$**	**136,100**	**$ 20,300**		**$ 6,921**

Processing Facility Start-up Costs

Table 4.10 lists the total start-up costs for the processing facility. Building expenses include the cost of material, contractor labor, refrigeration/freezer units, land improvements and sewer fees. Straight line depreciation for non-residential real property has a recovery period of 39 years which equates to $38,611 a year (IRS, 2007).

Table 4.10: Processing Facility Start-up Costs

Capital Expenditures		
Building Expenses	$	1,333,369
Furniture and Fixtures	$	36,360
Facility Equipment	$	136,100
Total Start-Up Costs	**$**	**1,505,829**
Depreciation	**$**	**38,611**

Processing Facility Loan Amortization Table

The amortization table 4.11, loan principal and interest amount, reflects the total start-up costs to construct and furnish the processing facility, assuming a loan period of 15 years at 9% interest. The following expenses were used: processing facility building expenses at $1,333,369; furniture and fixtures at $36,360; and processing facility equipment at $136,100.

Table 4.11: Processing Facility Loan Amortization

Inputs	
Loan principal amount	**$ 1,505,829.00**
Annual interest rate	**9.000%**
Loan period in years	**15**
Base year of loan	**2007**
Base month of loan	**January**

Key Figures	
Annual loan payments	$183,277.44
Monthly payments	$15,273.12
Interest in first calendar year	$133,504.72
Interest over term of loan	$1,243,332.60
Sum of all payments	$2,749,161.60

Payments in First 12 Months

Year	Month	Beginning Balance	Payment	Principal	Interest	Cumulative Principal	Cumulative Interest	Ending Balance
2007	Jan	$1,505,829.00	$15,273.12	$3,979.40	$11,293.72	$3,979.40	$11,293.72	$1,501,849.60
	Feb	$1,501,849.60	$15,273.12	$4,009.25	$11,263.87	$7,988.65	$22,557.59	$1,497,840.35
	Mar	$1,497,840.35	$15,273.12	$4,039.32	$11,233.80	$12,027.97	$33,791.39	$1,493,801.03
	Apr	$1,493,801.03	$15,273.12	$4,069.61	$11,203.51	$16,097.58	$44,994.90	$1,489,731.42
	May	$1,489,731.42	$15,273.12	$4,100.13	$11,172.99	$20,197.71	$56,167.89	$1,485,631.29
	Jun	$1,485,631.29	$15,273.12	$4,130.89	$11,142.23	$24,328.60	$67,310.12	$1,481,500.40
	Jul	$1,481,500.40	$15,273.12	$4,161.87	$11,111.25	$28,490.47	$78,421.37	$1,477,338.53
	Aug	$1,477,338.53	$15,273.12	$4,193.08	$11,080.04	$32,683.55	$89,501.41	$1,473,145.45
	Sep	$1,473,145.45	$15,273.12	$4,224.53	$11,048.59	$36,908.08	$100,550.00	$1,468,920.92
	Oct	$1,468,920.92	$15,273.12	$4,256.21	$11,016.91	$41,164.29	$111,566.91	$1,464,664.71
	Nov	$1,464,664.71	$15,273.12	$4,288.13	$10,984.99	$45,452.42	$122,551.90	$1,460,376.58
	Dec	$1,460,376.58	$15,273.12	$4,320.30	$10,952.82	$49,772.72	$133,504.72	$1,456,056.28

Yearly Schedule of Balances and Payments

Year	Beginning Balance	Payment	Principal	Interest	Cumulative Principal	Cumulative Interest	Ending Balance
2008	$1,456,056.28	$183,277.44	$54,441.79	$128,835.65	$104,214.51	$262,340.37	$1,401,614.49
2009	$1,401,614.49	$183,277.44	$59,548.76	$123,728.68	$163,763.27	$386,069.05	$1,342,065.73
2010	$1,342,065.73	$183,277.44	$65,134.84	$118,142.60	$228,898.11	$504,211.65	$1,276,930.89
2011	$1,276,930.89	$183,277.44	$71,244.94	$112,032.50	$300,143.05	$616,244.15	$1,205,685.95
2012	$1,205,685.95	$183,277.44	$77,928.21	$105,349.23	$378,071.26	$721,593.38	$1,127,757.74
2013	$1,127,757.74	$183,277.44	$85,238.41	$98,039.03	$463,309.68	$819,632.40	$1,042,519.32
2014	$1,042,519.32	$183,277.44	$93,234.36	$90,043.08	$556,544.04	$909,675.48	$949,284.96
2015	$949,284.96	$183,277.44	$101,980.39	$81,297.05	$658,524.43	$990,972.53	$847,304.57
2016	$847,304.57	$183,277.44	$111,546.85	$71,730.59	$770,071.29	$1,062,703.11	$735,757.71
2017	$735,757.71	$183,277.44	$122,010.72	$61,266.72	$892,082.00	$1,123,969.84	$613,747.00
2018	$613,747.00	$183,277.44	$133,456.17	$49,821.27	$1,025,538.17	$1,173,791.11	$480,290.83
2019	$480,290.83	$183,277.44	$145,975.27	$37,302.17	$1,171,513.44	$1,211,093.28	$334,315.56
2020	$334,315.56	$183,277.44	$159,668.76	$23,608.68	$1,331,182.21	$1,234,701.95	$174,646.79
2021	$174,646.79	$183,277.44	$174,646.79	$8,630.65	$1,505,829.00	$1,243,332.60	$0.00

The Process

After the mobile unit delivers the carcass to the processing facility, the carcass must be washed thoroughly. The animal's normal body temperature must be reduced to prevent the meat from souring. This is typically done by placing the carcasses in a freezer set at 15° C (27° F) because the warm carcasses will raise the freezer temperature, providing a mean temperature of 0° C (32° F). Lower temperatures may cause cold shortening, described as an intense shortening of muscle fiber, resulting in tough meat. After 24 hours, the carcasses are moved to another freezer, where a constant 0° C (32° F)

is maintained. The carcass must be stored for a minimum of seven days, although 14-21 days is more common, before it is butchered into retail portions (EPA, 1995).

Space is needed to accommodate the initial 24-hour refrigeration, extended two week storage, a viscera room, a meat cutting and processing room, and a shipping bay. Due to health concerns and USDA inspection requirements, constant hot water and power is required at the facility to maintain a sterile environment and ensure regulated refrigeration. Either a metal, pre-engineered building or a wood frame building will suffice, although interior finishes will have to be added to meet sanitation requirements.

Processing Facility Operating Costs

The financial forecast shows an estimate of annual income, cost of goods, and operating costs for the processing facility. Cost of goods is calculated as the price paid to the farmer; retail revenue is the price received by the processing facility. These include general expenses necessary to process the meat and distribute to retail locations. The financial statement also includes office expenses, such as telephones, office supplies and utilities, transportation and packaging expenses and maintenance and tool costs. Legal and accounting fees are also included.

Labor Expenses

Salary expenses include a full time manager/butcher, a brand/marketing product manager, an additional full time butcher and a full time office employee. Additional butchers and seasonal help will be hired as needed based on processing demand determined by the plant manager.

A plant manager usually receives a salary and full benefit package. Plant managers usually earn approximately $72,100 a year depending on size and location of the facility (Career Journal, 2007). Plant managers are usually responsible for overall operations, marketing, and member services. This position requires formal training in the agribusiness field, meat production experience, and a USDA slaughter certification. The plant manager will also be responsible for scheduling and managing the mobile slaughter units.

The brand/marketing product manager's job is to develop and implement product marketing activities to develop brand awareness and to maximize sales. This individual should have experience marketing a product in a niche market and would report to the plant manager. The median yearly salary is $83,441 (Salary.com, 2007).

Butchers earn an annual salary between $17,000 – 42,000, depending on duration and type of experience (Career Prospects, 2007). For the financial calculations, it was assumed that one butcher would be needed. The yearly salary of $42,000 was used for the forecast.

Additional butchers usually are paid approximately $11.00 an hour, approximately $21,440 a year; benefits are optional (College Grad, 2007). Seasonal labor requires experience, but no formal education. Typical rates vary depending on location, but in Northern Nevada, labor rates are approximately $15 per hour, working an estimated 24 weeks per year.

Office staff is usually paid $12 per hour with or without benefits, which equates to a yearly salary of $24,788. The office employee should have secretarial and bookkeeping skills, although a certified public accountant (CPA) should be kept on

retainer for profit distribution and tax filing. A 15% tax and benefits percentage was calculated monthly.

Revenue Projections

Retail Revenue

Retail prices were calculated using a weighted method to take into account the different cuts of beef and varying prices (Cattlemen's Beef Board, 2006).

Traditional retail pricing of cattle is $2.09 a pound (USDA-AMS, 2007); pork is $1.59 a pound (USDA-ERS, 2004); and sheep/lamb is $176.79 (American Sheep Industry Association, 2006). Based on the consumer survey results, retail prices were increased by 7% for pork, 17% for lamb, 13% for low-value beef (ground beef, chuck, etc.) and 30% for high-value beef (steak, sirloin, etc). These prices reflect the higher premium that consumers stated they are willing to pay.

The total revenue for beef was calculated by multiplying the price per cattle and the number of animals (168) slaughtered each month for a total of $315,781 a month. The number of cattle (168) was calculated using the survey data of 134,616 total pounds divided by 800 pounds (800 pounds is a lower weight bound on a grass-fed animal, 1000-1100 pounds would increase the likelihood of rating Choice).

Table 4.12: Retail Cattle Prices

Type	% of Cow	Average Price per lb	Retail Value Price per Cow	Carcass Weight	
Rib	9%	4.76	0.43		
Chuck	29%	1.73	0.50		
Loin	16%	6.45	1.03		
Round	22%	1.74	0.38		
Brisket,Plate,Flank	19%	2.61	0.50		
	95%	**$ 17.30**	**$ 2.84**	585	$ 1,662.16
Trim			**$ 1.22**	175	$ 213.50
				Total Carcass Price	**$ 1,875.66**

Revenue for pork was calculated by multiplying the price per pork and the number of animals slaughtered each month (10), for a total of $2,851 a month. The number of pigs (10) was calculated using the survey data of 1,884 total pounds divided by 200 pounds, which is the average weight of a pig. Pork prices were calculated at an overall price per pound.

Table 4.13: Retail Pork Prices

Type	Average Price per lb	Total Pork Weight	Assume 16% waste
All Types of Pork	$ 1.70	200	168
		Total Carcass Price	**$ 285.60**

Sheep/Lamb revenue was computed at the carcass weight price multiplied by the number of animals per month (296) for total revenue of $61,133. The number of sheep/lamb (296) was calculated using the survey data of 44,332 total pounds divided by 150 pounds, which is the average weight of a sheep/lamb. Sheep/Lamb prices were based on a set price for carcass weight at 85 pounds plus (American Sheep Industry Association, 2006).

Table 4.14: Retail Sheep/Lamb Prices

Type	Average Price per Sheep/Lamb	Total Sheep/Lamb Weight
All Types of Sheep/Lamb	$ 206.84	85 lbs +
	Total Carcass Price	**$ 206.84**

Cost of Goods/Wholesale Pricing

The cost of goods represents the wholesale meat prices paid to member ranches for their livestock. Traditional wholesale pricing of cattle is $89.99/ctw for an 800-pound cow, which equates to approximately $719.92 per carcass (USDA-AMS, 2007). Traditional pricing for pork is $40.20/ctw for a 200-pound pig, which equates to approximately $80.40 per carcass (USDA-ERS, 2004). Traditional pricing for sheep/lamb is $95.50 for a carcass weight equal to and exceeding 85 pounds (American Sheep Industry Association, 2006). A study by Acevedo, Lawrence, and Smith (2006) found the cost of production for grass-fed beef was higher than beef fed on a traditional diet. Therefore, a sustainable price of $1.30/lb was used for this study. This price is paid on total carcass weight, not dressed weight. Due to consumer willingness to pay studies for wholesale grass-fed pork and lamb, wholesales prices for these products were increased by 20% over traditional wholesale pricing.

Beef was calculated at approximately $1040.00 ($1.30/lb) for carcass weight at 168 cattle a month for a total of $174,720 (National Cattlemen's Beef Association, 2003).

Table 4.15: Wholesale Cattle Prices

Type	Average Price per lb	Total Cattle Weight	Total Carcass Price
Cattle, Grass Fed	$ 1.30	800	
			$ 1,040.00

Pork was calculated at approximately $.48 a pound based on carcass weight at 10 pigs a month for a total of $965.00.

Table 4.16: Wholesale Pork Prices

Type	Average Price per lb	Total Pork Weight	Total Carcass Price
Pork, Grass Fed	$ 0.48	200	
			$ 96.48

Sheep and Lamb was calculated at $114.60 carcass weight for an animal weighing in excess of 85 pounds for 296 sheep/lamb a month for a total of $33,922.

Table 4.17: Wholesale Sheep/Lamb Prices

Type	Average Price per Sheep/Lamb	Total Sheep/Lamb Weight	Total Carcass Price
Sheep/Lamb, Grass Fed	$ 114.60	85 lbs +	
			$ 114.60

Table 4.18 summarizes the carcass price, as well as monthly and yearly expected cost of goods and/or wholesale pricing.

Table 4.18: Summary of Wholesale/Cost of Goods by Type of Meat

Type/Grass Fed	Cost of Goods per Carcass	Monthly	Yearly
Cattle	$ 1,040.00	$ 174,720	$ 2,096,640
Pork	$ 96.48	$ 965	$ 11,578
Sheep/Lamb	$ 114.60	$ 33,922	$ 407,059
Total		**$ 209,606**	**$ 2,515,277**

1st Year Financial Statement

Table 4.19 is the financial forecast for the first year of operation, which details forecasted revenue and expenses for the processing facility and mobile slaughter units. Salaries and expenses are detailed separately for each entity. Start-up costs have been detailed separately and include loan amortization tables. The monthly loan principal and interest payments are included in this financial statement.

Processing Facility Revenue

This section of the report details retail revenue and cost of goods. Retail revenue and cost of goods (wholesale pricing) are calculated based on the slaughter demand from the survey and pricing based on a premium retail price for naturally raised meat. Refer to Tables 4.12– 4.18 for detailed pricing.

Total Salaries

The approximate number of employees for two mobile slaughter units and the processing facility is 11. This includes a plant manager who will manage the processing facility and oversee the operations of the mobile slaughter units. The processing facility will employ a marketing manager, who will build brand/product recognition through a marketing and advertising program. Three butchers will be employed in total; one for the processing facility and one each for the mobile slaughter units. It is forecast that a seasonal butcher will be needed for the processing facility and may be needed from time to time to help in the mobile slaughter units. An office staff position is required at the processing facility, in addition to monthly consulting with a CPA. The mobile slaughter units require a driver/assistant for each. A HACCP inspector is also required to be with the mobile slaughter units for USDA requirements.

Total Expenses

The processing facility and mobile slaughter unit expenses are detailed and include necessary insurances, loan P&I payments, taxes, depreciation, equipment repairs and miscellaneous other items.

Insurance Estimates

The insurance estimates do not represent firm quotes. They are estimates based on the preliminary information provided for builder's risk, worker's compensation, business auto and trailers, general liability and business personal property, and contents for a total of $71,000 a year (ISU Stetson-Beemer Insurance, 2007).

Table 4.19: 1st Year Forecasted Financials

Forecasted Financials - Year 1 - Mobile Slaughter Units and Processing Facility													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Processing Facility Revenue													
Beef (168 animals per month)	$ 315,781	$ 315,781	$ 315,781	$ 315,781	$ 315,781	$ 315,781	$ 315,781	$ 315,781	$ 315,781	$ 315,781	$ 315,781	$ 315,781	$ 3,789,367
Pork (10 animals per month)	$ 2,851	$ 2,851	$ 2,851	$ 2,851	$ 2,851	$ 2,851	$ 2,851	$ 2,851	$ 2,851	$ 2,851	$ 2,851	$ 2,851	$ 34,212
Sheep/Lamb (296 animals per month)	$ 61,133	$ 61,133	$ 61,133	$ 61,133	$ 61,133	$ 61,133	$ 61,133	$ 61,133	$ 61,133	$ 61,133	$ 61,133	$ 61,133	$ 733,592
Total Retail Revenue	**$ 379,764**	**$ 379,764**	**$ 379,764**	**$ 379,764**	**$ 379,764**	**$ 379,764**	**$ 379,764**	**$ 379,764**	**$ 379,764**	**$ 379,764**	**$ 379,764**	**$ 379,764**	**$ 4,557,171**
Less Cost of Goods	$ 209,606	$ 209,606	$ 209,606	$ 209,606	$ 209,606	$ 209,606	$ 209,606	$ 209,606	$ 209,606	$ 209,606	$ 209,606	$ 209,606	$ 2,515,277
Gross Revenue	**$ 170,158**	**$ 170,158**	**$ 170,158**	**$ 170,158**	**$ 170,158**	**$ 170,158**	**$ 170,158**	**$ 170,158**	**$ 170,158**	**$ 170,158**	**$ 170,158**	**$ 170,158**	**$ 2,041,894**
Salaries- Processing Facility													
Plant Manager (1)	$ 6,008	$ 6,008	$ 6,008	$ 6,008	$ 6,008	$ 6,008	$ 6,008	$ 6,008	$ 6,008	$ 6,008	$ 6,008	$ 6,008	$ 72,100
Product/Brand Marketing Manager (1)	$ 6,953	$ 6,953	$ 6,953	$ 6,953	$ 6,953	$ 6,953	$ 6,953	$ 6,953	$ 6,953	$ 6,953	$ 6,953	$ 6,953	$ 83,441
Butcher (1)	$ 3,500	$ 3,500	$ 3,500	$ 3,500	$ 3,500	$ 3,500	$ 3,500	$ 3,500	$ 3,500	$ 3,500	$ 3,500	$ 3,500	$ 42,000
Seasonal Employees (1)	$ 1,787	$ 1,787	$ 1,787	$ 1,787	$ 1,787	$ 1,787	$ 1,787	$ 1,787	$ 1,787	$ 1,787	$ 1,787	$ 1,787	$ 21,440
Office Staff (1)	$ 2,064	$ 2,064	$ 2,064	$ 2,064	$ 2,064	$ 2,064	$ 2,064	$ 2,064	$ 2,064	$ 2,064	$ 2,064	$ 2,064	$ 24,768
Taxes/Benefits	$ 2,737	$ 2,737	$ 2,737	$ 2,737	$ 2,737	$ 2,737	$ 2,737	$ 2,737	$ 2,737	$ 2,737	$ 2,737	$ 2,737	$ 32,847
Total Processing Facility Salaries	**$ 23,050**	**$ 23,050**	**$ 23,050**	**$ 23,050**	**$ 23,050**	**$ 23,050**	**$ 23,050**	**$ 23,050**	**$ 23,050**	**$ 23,050**	**$ 23,050**	**$ 23,050**	**$ 276,596**
Salaries- Mobile Slaughter Units													
Butcher (2)	$ 5,009	$ 5,009	$ 5,009	$ 5,009	$ 5,009	$ 5,009	$ 5,009	$ 5,009	$ 5,009	$ 5,009	$ 5,009	$ 5,009	$ 60,112
Driver/Assistant (2)	$ 4,229	$ 4,229	$ 4,229	$ 4,229	$ 4,229	$ 4,229	$ 4,229	$ 4,229	$ 4,229	$ 4,229	$ 4,229	$ 4,229	$ 50,752
HACCP Inspector (2)	$ 7,704	$ 7,704	$ 7,704	$ 7,704	$ 7,704	$ 7,704	$ 7,704	$ 7,704	$ 7,704	$ 7,704	$ 7,704	$ 7,704	$ 92,443
Taxes/Benefits	$ 2,541	$ 2,541	$ 2,541	$ 2,541	$ 2,541	$ 2,541	$ 2,541	$ 2,541	$ 2,541	$ 2,541	$ 2,541	$ 2,541	$ 30,496
Total Mobile Slaughter Units Salaries	**$ 19,484**	**$ 19,484**	**$ 19,484**	**$ 19,484**	**$ 19,484**	**$ 19,484**	**$ 19,484**	**$ 19,484**	**$ 19,484**	**$ 19,484**	**$ 19,484**	**$ 19,484**	**$ 233,803**
Total Salaries	**$ 42,533**	**$ 42,533**	**$ 42,533**	**$ 42,533**	**$ 42,533**	**$ 42,533**	**$ 42,533**	**$ 42,533**	**$ 42,533**	**$ 42,533**	**$ 42,533**	**$ 42,533**	**$ 510,399**
Processing Facility Expenses													
Accounting and Legal	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 300	$ 3,600
Bank Charges	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 25	$ 300
Business License	$ 145	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 145
Depreciation-Building	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 38,611	$ 38,611
Depreciation-Furniture and Fixtures	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,636	$ 3,636
Depreciation-Equipment	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,921	$ 6,921
Equipment Replacement and Repairs	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 1,100
Insurance: Builders Risk	$ 10,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 10,000
Insurance: Workers Compensation	$ 15,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 15,000
Insurance: General Liability	$ 2,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,500
Insurance: Business Personal Property	$ 1,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,000
Janitorial	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 4,800
Loan P&I Payment	$ 15,273	$ 15,273	$ 15,273	$ 15,273	$ 15,273	$ 15,273	$ 15,273	$ 15,273	$ 15,273	$ 15,273	$ 15,273	$ 15,273	$ 183,277
Office Supplies	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150	$ 1,800
Packaging Supplies	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 6,000
Postage	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 1,200
Property Taxes (3.0316)	$ 11,413	$ -	$ -	$ 11,413	$ -	$ -	$ 11,413	$ -	$ -	$ 11,413	$ -	$ -	$ 45,651
Utilities	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 12,000
Total Processing Facility Expenses	**$ 57,906**	**$ 17,848**	**$ 17,848**	**$ 29,261**	**$ 17,848**	**$ 17,848**	**$ 29,261**	**$ 17,848**	**$ 17,848**	**$ 29,261**	**$ 17,848**	**$ 67,016**	**$ 337,541**
Mobile Slaughter Unit Expenses													
Accounting and Legal	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 1,200
Cell Phones	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 200	$ 2,400
Consumable Supplies	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 400	$ 4,800
Depreciation-Slaughter Units	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,800	$ 3,800
Equipment Repairs	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150	$ 1,800
Fuel/Oil	$ 4,584	$ 4,584	$ 4,584	$ 4,584	$ 4,584	$ 4,584	$ 4,584	$ 4,584	$ 4,584	$ 4,584	$ 4,584	$ 4,584	$ 55,008
Insurance: Business Auto and Trailers	$ 25,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 25,000
Insurance: Workers Compensation	$ 15,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 15,000
Insurance: General Liability	$ 2,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,500
Loan P&I Payment	$ 5,240	$ 5,240	$ 5,240	$ 5,240	$ 5,240	$ 5,240	$ 5,240	$ 5,240	$ 5,240	$ 5,240	$ 5,240	$ 5,240	$ 62,879
Miscellaneous	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 1,200
Tax and License	$ 2,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,000
Truck Maintenance	$ 229	$ 229	$ 229	$ 229	$ 229	$ 229	$ 229	$ 229	$ 229	$ 229	$ 229	$ 229	$ 2,750
Total Mobile Slaughter Unit Expenses	**$ 55,503**	**$ 11,003**	**$ 11,003**	**$ 11,003**	**$ 11,003**	**$ 11,003**	**$ 11,003**	**$ 11,003**	**$ 11,003**	**$ 11,003**	**$ 11,003**	**$ 14,803**	**$ 180,338**
Total Expenses	**$ 113,409**	**$ 28,851**	**$ 28,851**	**$ 40,264**	**$ 28,851**	**$ 28,851**	**$ 40,264**	**$ 28,851**	**$ 28,851**	**$ 40,264**	**$ 28,851**	**$ 81,820**	**$ 517,879**
Operating Profit/(Loss)	**$ 14,216**	**$ 98,773**	**$ 98,773**	**$ 87,361**	**$ 98,773**	**$ 98,773**	**$ 87,361**	**$ 98,773**	**$ 98,773**	**$ 87,361**	**$ 98,773**	**$ 45,805**	**$ 1,013,615**

5-Year Financial Forecast

The table below (Table 4.20) depicts the total revenue, cost of goods, labor, expenses, and gross profit (loss) for both the mobile slaughter units and processing facility for the first five years. Year-to-year changes were calculated at a 5% increase.

Table 4.20: 5 Year Forecasted Financials

5 Year Forecasted Financials Mobile Slaughter Units & Processing Facilities						
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Total**
Processing Facility Revenue						
Beef	3,789,367	3,978,835	4,177,777	4,386,666	4,605,999	20,938,644
Pork	34,212	35,923	37,719	39,605	41,585	189,042
Sheep/Lamb	733,592	770,272	808,785	849,224	891,686	4,053,558
Total Retail Revenue	**$ 4,557,171**	**$ 4,785,029**	**$ 5,024,281**	**$ 5,275,495**	**$ 5,539,269**	**$ 25,181,245**
Less Cost of Goods	$ 2,515,277	2,641,041	2,773,093	2,911,747	3,057,335	$ 13,898,492
Gross Revenue	**$ 2,041,894**	**$ 2,143,989**	**$ 2,251,188**	**$ 2,363,747**	**$ 2,481,935**	**$ 11,282,752**
Salaries- Processing Facility						
Plant Manager (1)	72,100	75,705	79,490	83,465	87,638	398,398
Product/Brand Marketing Manager (1)	83,441	87,613	91,994	96,593	101,423	461,064
Butcher (1)	42,000	44,100	46,305	48,620	51,051	232,077
Seasonal Employees (1)	21,440	22,512	23,638	24,819	26,060	118,470
Office Staff (1)	24,768	26,006	27,307	28,672	30,106	136,859
Taxes/Benefits	32,847	34,490	36,214	38,025	39,926	181,501
Total Processing Facility Salaries	**$ 276,596**	**$ 290,426**	**$ 304,947**	**$ 320,195**	**$ 336,204**	**$ 1,528,368**
Salaries- Mobile Slaughter Units						
Butcher (2)	60,112	63,118	66,273	69,587	73,067	332,157
Driver/Assistant (2)	50,752	53,290	55,954	58,752	61,689	280,437
HACCP Inspector (2)	92,443	97,065	101,918	107,014	112,365	510,806
Taxes/Benefits	30,496	32,021	33,622	35,303	37,068	168,510
Total Mobile Slaughter Units Salaries	**$ 233,803**	**$ 245,493**	**$ 257,768**	**$ 270,656**	**$ 284,189**	**$ 1,291,909**
Total Salaries	**$ 510,399**	**$ 535,919**	**$ 562,715**	**$ 590,851**	**$ 620,393**	**$ 2,820,278**
Processing Facility Expenses						
Accounting and Legal	3,600	3,780	3,969	4,167	4,376	19,892
Bank Charges	300	315	331	347	365	1,658
Business License	145	152	160	168	176	801
Depreciation-Building	38,611	40,542	42,569	44,697	46,932	213,350
Depreciation-Furniture and Fixtures	3,636	3,818	4,009	4,209	4,420	20,091
Depreciation-Equipment	6,921	7,267	7,631	8,012	8,413	38,245
Equipment Replacement and Repairs	1,100	1,155	1,213	1,273	1,337	6,078
Insurance: Builders Risk	10,000	10,500	11,025	11,576	12,155	55,256
Insurance: Workers Compensation	15,000	15,750	16,538	17,364	18,233	82,884
Insurance: General Liability	2,500	2,625	2,756	2,894	3,039	13,814
Insurance: Business Personal Property	1,000	1,050	1,103	1,158	1,216	5,526
Janitorial	4,800	5,040	5,292	5,557	5,834	26,523
Loan P&I Payment	183,277	192,441	202,063	212,167	222,775	1,012,724
Office Supplies	1,800	1,890	1,985	2,084	2,188	9,946
Packaging Supplies	6,000	6,300	6,615	6,946	7,293	33,154
Postage	1,200	1,260	1,323	1,389	1,459	6,631
Property Taxes (3.0316)	45,651	47,933	50,330	52,846	55,489	252,249
Utilities	12,000	12,600	13,230	13,892	14,586	66,308
Total Processing Facility Expenses	**$ 337,541**	**$ 354,419**	**$ 372,139**	**$ 390,746**	**$ 410,284**	**$ 1,865,130**
Mobile Slaughter Unit Expenses						
Accounting and Legal	1,200	1,260	1,323	1,389	1,459	6,631
Cell Phones	2,400	2,520	2,646	2,778	2,917	13,262
Consumable Supplies	4,800	5,040	5,292	5,557	5,834	26,523
Depreciation-Slaughter Units	3,800	3,990	4,190	4,399	4,619	20,997
Equipment Repairs	1,800	1,890	1,985	2,084	2,188	9,946
Fuel/Oil	55,008	57,758	60,646	63,679	66,863	303,954
Insurance: Business Auto and Trailers	25,000	26,250	27,563	28,941	30,388	138,141
Insurance: Workers Compensation	15,000	15,750	16,538	17,364	18,233	82,884
Insurance: General Liability	2,500	2,625	2,756	2,894	3,039	13,814
Loan P&I Payment	62,879	66,023	69,324	72,791	76,430	347,448
Miscellaneous	1,200	1,260	1,323	1,389	1,459	6,631
Tax and License	2,000	2,100	2,205	2,315	2,431	11,051
Truck Maintenance	2,750	2,888	3,032	3,184	3,343	15,198
Total Mobile Slaughter Unit Expenses	**$ 180,338**	**$ 189,355**	**$ 198,822**	**$ 208,763**	**$ 219,202**	**$ 996,480**
Total Expenses	**$ 517,879**	**$ 543,773**	**$ 570,962**	**$ 599,510**	**$ 629,485**	**$ 2,861,609**
Operating Profit/(Loss)	**$ 1,013,615**	**$ 1,064,296**	**$ 1,117,511**	**$ 1,173,387**	**$ 1,232,056**	**$ 5,600,865**

Sensitivity Analysis

The following 4 tables depict the 5-year financial forecasts with differing revenue scenarios.

(1) Increase in retail meat pricing by 10% (Table 4.21)
(2) Decrease in retail meat pricing by 10% (Table 4.22)
(3) Increase in the number of animals slaughtered by 10% (Table 4.23)
(4) Decrease in the number of animals slaughtered by 10% (Table 4.24)

Table 4.21: Increase in Retail Meat Pricing by 10%

5 Year Forecasted Financials Mobile Slaughter Units & Processing Facilities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Processing Facility Revenue						
Beef	4,161,627	4,369,708	4,588,194	4,817,603	5,058,483	22,995,615
Pork	37,633	39,515	41,491	43,565	45,743	207,947
Sheep/Lamb	808,182	848,591	891,021	935,572	982,350	4,465,716
Total Retail Revenue	**$ 5,007,442**	**$ 5,257,814**	**$ 5,520,705**	**$ 5,796,740**	**$ 6,086,577**	**$ 27,669,278**
Less Cost of Goods	$ 2,515,277	2,641,041	2,773,093	2,911,747	3,057,335	13,898,492
Gross Revenue	**$ 2,492,165**	**$ 2,616,773**	**$ 2,747,612**	**$ 2,884,993**	**$ 3,029,242**	**$ 13,770,786**
Salaries- Processing Facility						
Plant Manager (1)	72,100	75,705	79,490	83,465	87,638	398,398
Product/Brand Marketing Manager (1)	83,441	87,613	91,994	96,593	101,423	461,064
Butcher (1)	42,000	44,100	46,305	48,620	51,051	232,077
Seasonal Employees (1)	21,440	22,512	23,638	24,819	26,060	118,470
Office Staff (1)	24,768	26,006	27,307	28,672	30,106	136,859
Taxes/Benefits	32,847	34,490	36,214	38,025	39,926	181,501
Total Processing Facility Salaries	**$ 276,596**	**$ 290,426**	**$ 304,947**	**$ 320,195**	**$ 336,204**	**$ 1,528,368**
Salaries- Mobile Slaughter Units						
Butcher (2)	60,112	63,118	66,273	69,587	73,067	332,157
Driver/Assistant (2)	50,752	53,290	55,954	58,752	61,689	280,437
HACCP Inspector (2)	92,443	97,065	101,918	107,014	112,365	510,806
Taxes/Benefits	30,496	32,021	33,622	35,303	37,068	168,510
Total Mobile Slaughter Units Salaries	**$ 233,803**	**$ 245,493**	**$ 257,768**	**$ 270,656**	**$ 284,189**	**$ 1,291,909**
Total Salaries	**$ 510,399**	**$ 535,919**	**$ 562,715**	**$ 590,851**	**$ 620,393**	**$ 2,820,278**
Processing Facility Expenses						
Accounting and Legal	3,600	3,780	3,969	4,167	4,376	19,892
Bank Charges	300	315	331	347	365	1,658
Business License	145	152	160	168	176	801
Depreciation-Building	38,611	40,542	42,569	44,697	46,932	213,350
Depreciation-Furniture and Fixtures	3,636	3,818	4,009	4,209	4,420	20,091
Depreciation-Equipment	6,921	7,267	7,630	8,012	8,413	38,243
Equipment Replacement and Repairs	1,100	1,155	1,213	1,273	1,337	6,078
Insurance: Builders Risk	10,000	10,500	11,025	11,576	12,155	55,256
Insurance: Workers Compensation	15,000	15,750	16,538	17,364	18,233	82,884
Insurance: General Liability	2,500	2,625	2,756	2,894	3,039	13,814
Insurance: Business Personal Property	1,000	1,050	1,103	1,158	1,216	5,526
Janitorial	4,800	5,040	5,292	5,557	5,834	26,523
Loan P&I Payment	183,277	192,441	202,063	212,167	222,775	1,012,724
Office Supplies	1,800	1,890	1,985	2,084	2,188	9,946
Packaging Supplies	6,000	6,300	6,615	6,946	7,293	33,154
Postage	1,200	1,260	1,323	1,389	1,459	6,631
Property Taxes (3.0316)	45,651	47,933	50,330	52,846	55,489	252,249
Utilities	12,000	12,600	13,230	13,892	14,586	66,308
Total Processing Facility Expenses	**$ 337,541**	**$ 354,418**	**$ 372,139**	**$ 390,746**	**$ 410,283**	**$ 1,865,128**
Mobile Slaughter Unit Expenses						
Accounting and Legal	1,200	1,260	1,323	1,389	1,459	6,631
Cell Phones	2,400	2,520	2,646	2,778	2,917	13,262
Consumable Supplies	4,800	5,040	5,292	5,557	5,834	26,523
Depreciation-Slaughter Units	3,800	3,990	4,190	4,399	4,619	20,997
Equipment Repairs	1,800	1,890	1,985	2,084	2,188	9,946
Fuel/Oil	55,008	57,758	60,646	63,679	66,863	303,954
Insurance: Business Auto and Trailers	25,000	26,250	27,563	28,941	30,388	138,141
Insurance: Workers Compensation	15,000	15,750	16,538	17,364	18,233	82,884
Insurance: General Liability	2,500	2,625	2,756	2,894	3,039	13,814
Loan P&I Payment	62,879	66,023	69,324	72,791	76,430	347,448
Miscellaneous	1,200	1,260	1,323	1,389	1,459	6,631
Tax and License	2,000	2,100	2,205	2,315	2,431	11,051
Truck Maintenance	2,750	2,888	3,032	3,184	3,343	15,198
Total Mobile Slaughter Unit Expenses	**$ 180,338**	**$ 189,355**	**$ 198,822**	**$ 208,763**	**$ 219,202**	**$ 996,480**
Total Expenses	**$ 517,879**	**$ 543,773**	**$ 570,961**	**$ 599,509**	**$ 629,485**	**$ 2,861,607**
Operating Profit/(Loss)	**$ 1,463,887**	**$ 1,537,081**	**$ 1,613,936**	**$ 1,694,632**	**$ 1,779,364**	**$ 8,088,900**

Table 4.22: Decrease in Retail Meat Pricing by 10%

5 Year Forecasted Financials Mobile Slaughter Units & Processing Facilities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Processing Facility Revenue						
Beef	3,404,967	3,575,216	3,753,977	3,941,675	4,138,759	18,814,594
Pork	30,791	32,330	33,947	35,644	37,426	170,138
Sheep/Lamb	661,240	694,302	729,017	765,468	803,741	3,653,768
Total Retail Revenue	**$ 4,096,998**	**$ 4,301,848**	**$ 4,516,940**	**$ 4,742,787**	**$ 4,979,927**	**$ 22,638,500**
Less Cost of Goods	$ 2,515,277	2,641,041	2,773,093	2,911,747	3,057,335	13,898,492
Gross Revenue	**$ 1,581,721**	**$ 1,660,807**	**$ 1,743,848**	**$ 1,831,040**	**$ 1,922,592**	**$ 8,740,008**
Salaries- Processing Facility						
Plant Manager (1)	72,100	75,705	79,490	83,465	87,638	398,398
Product/Brand Marketing Manager (1)	83,441	87,613	91,994	96,593	101,423	461,064
Butcher (1)	42,000	44,100	46,305	48,620	51,051	232,077
Seasonal Employees (1)	21,440	22,512	23,638	24,819	26,060	118,470
Office Staff (1)	24,768	26,006	27,307	28,672	30,106	136,859
Taxes/Benefits	32,847	34,490	36,214	38,025	39,926	181,501
Total Processing Facility Salaries	**$ 276,596**	**$ 290,426**	**$ 304,947**	**$ 320,195**	**$ 336,204**	**$ 1,528,368**
Salaries- Mobile Slaughter Units						
Butcher (2)	60,112	63,118	66,273	69,587	73,067	332,157
Driver/Assistant (2)	50,752	53,290	55,954	58,752	61,689	280,437
HACCP Inspector (2)	92,443	97,065	101,918	107,014	112,365	510,806
Taxes/Benefits	30,496	32,021	33,622	35,303	37,068	168,510
Total Mobile Slaughter Units Salaries	**$ 233,803**	**$ 245,493**	**$ 257,768**	**$ 270,656**	**$ 284,189**	**$ 1,291,909**
Total Salaries	**$ 510,399**	**$ 535,919**	**$ 562,715**	**$ 590,851**	**$ 620,393**	**$ 2,820,278**
Processing Facility Expenses						
Accounting and Legal	3,600	3,780	3,969	4,167	4,376	19,892
Bank Charges	300	315	331	347	365	1,658
Business License	145	152	160	168	176	801
Depreciation-Building	38,611	40,542	42,569	44,697	46,932	213,350
Depreciation-Furniture and Fixtures	3,636	3,818	4,009	4,209	4,420	20,091
Depreciation-Equipment	6,921	7,267	7,630	8,012	8,413	38,243
Equipment Replacement and Repairs	1,100	1,155	1,213	1,273	1,337	6,078
Insurance: Builders Risk	10,000	10,500	11,025	11,576	12,155	55,256
Insurance: Workers Compensation	15,000	15,750	16,538	17,364	18,233	82,884
Insurance: General Liability	2,500	2,625	2,756	2,894	3,039	13,814
Insurance: Business Personal Property	1,000	1,050	1,103	1,158	1,216	5,526
Janitorial	4,800	5,040	5,292	5,557	5,834	26,523
Loan P&I Payment	183,277	192,441	202,063	212,167	222,775	1,012,724
Office Supplies	1,800	1,890	1,985	2,084	2,188	9,946
Packaging Supplies	6,000	6,300	6,615	6,946	7,293	33,154
Postage	1,200	1,260	1,323	1,389	1,459	6,631
Property Taxes (3.0316)	45,651	47,933	50,330	52,846	55,489	252,249
Utilities	12,000	12,600	13,230	13,892	14,586	66,308
Total Processing Facility Expenses	**$ 337,541**	**$ 354,418**	**$ 372,139**	**$ 390,746**	**$ 410,283**	**$ 1,865,128**
Mobile Slaughter Unit Expenses						
Accounting and Legal	1,200	1,260	1,323	1,389	1,459	6,631
Cell Phones	2,400	2,520	2,646	2,778	2,917	13,262
Consumable Supplies	4,800	5,040	5,292	5,557	5,834	26,523
Depreciation-Slaughter Units	3,800	3,990	4,190	4,399	4,619	20,997
Equipment Repairs	1,800	1,890	1,985	2,084	2,188	9,946
Fuel/Oil	55,008	57,758	60,646	63,679	66,863	303,954
Insurance: Business Auto and Trailers	25,000	26,250	27,563	28,941	30,388	138,141
Insurance: Workers Compensation	15,000	15,750	16,538	17,364	18,233	82,884
Insurance: General Liability	2,500	2,625	2,756	2,894	3,039	13,814
Loan P&I Payment	62,879	66,023	69,324	72,791	76,430	347,448
Miscellaneous	1,200	1,260	1,323	1,389	1,459	6,631
Tax and License	2,000	2,100	2,205	2,315	2,431	11,051
Truck Maintenance	2,750	2,888	3,032	3,184	3,343	15,198
Total Mobile Slaughter Unit Expenses	**$ 180,338**	**$ 189,355**	**$ 198,822**	**$ 208,763**	**$ 219,202**	**$ 996,480**
Total Expenses	**$ 517,879**	**$ 543,773**	**$ 570,961**	**$ 599,509**	**$ 629,485**	**$ 2,861,607**
Operating Profit/(Loss)	**$ 553,443**	**$ 581,115**	**$ 610,171**	**$ 640,680**	**$ 672,714**	**$ 3,058,123**

Table 4.23: Increase in the Number of Animals Slaughtered by 10%

5 Year Forecasted Financials Mobile Slaughter Units & Processing Facilities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Processing Facility Revenue						
Beef	4,161,627	4,369,708	4,588,194	4,817,603	5,058,483	22,995,615
Pork	37,633	39,515	41,491	43,565	45,743	207,947
Sheep/Lamb	808,182	848,591	891,021	935,572	982,350	4,465,716
Total Retail Revenue	**$ 5,007,442**	**$ 5,257,814**	**$ 5,520,705**	**$ 5,796,740**	**$ 6,086,577**	**$ 27,669,278**
Less Cost of Goods	$ 2,766,804	2,905,145	3,050,402	3,202,922	3,363,068	15,288,341
Gross Revenue	**$ 2,240,637**	**$ 2,352,669**	**$ 2,470,303**	**$ 2,593,818**	**$ 2,723,509**	**$ 12,380,936**
Salaries- Processing Facility						
Plant Manager (1)	72,100	75,705	79,490	83,465	87,638	398,398
Product/Brand Marketing Manager (1)	83,441	87,613	91,994	96,593	101,423	461,064
Butcher (1)	42,000	44,100	46,305	48,620	51,051	232,077
Seasonal Employees (1)	21,440	22,512	23,638	24,819	26,060	118,470
Office Staff (1)	24,768	26,006	27,307	28,672	30,106	136,859
Taxes/Benefits	32,847	34,490	36,214	38,025	39,926	181,501
Total Processing Facility Salaries	**$ 276,596**	**$ 290,426**	**$ 304,947**	**$ 320,195**	**$ 336,204**	**$ 1,528,368**
Salaries- Mobile Slaughter Units						
Butcher (2)	60,112	63,118	66,273	69,587	73,067	332,157
Driver/Assistant (2)	50,752	53,290	55,954	58,752	61,689	280,437
HACCP Inspector (2)	92,443	97,065	101,918	107,014	112,365	510,806
Taxes/Benefits	30,496	32,021	33,622	35,303	37,068	168,510
Total Mobile Slaughter Units Salaries	**$ 233,803**	**$ 245,493**	**$ 257,768**	**$ 270,656**	**$ 284,189**	**$ 1,291,909**
Total Salaries	**$ 510,399**	**$ 535,919**	**$ 562,715**	**$ 590,851**	**$ 620,393**	**$ 2,820,278**
Processing Facility Expenses						
Accounting and Legal	3,600	3,780	3,969	4,167	4,376	19,892
Bank Charges	300	315	331	347	365	1,658
Business License	145	152	160	168	176	801
Depreciation-Building	38,611	40,542	42,569	44,697	46,932	213,350
Depreciation-Furniture and Fixtures	3,636	3,818	4,009	4,209	4,420	20,091
Depreciation-Equipment	6,921	7,267	7,630	8,012	8,413	38,243
Equipment Replacement and Repairs	1,100	1,155	1,213	1,273	1,337	6,078
Insurance: Builders Risk	10,000	10,500	11,025	11,576	12,155	55,256
Insurance: Workers Compensation	15,000	15,750	16,538	17,364	18,233	82,884
Insurance: General Liability	2,500	2,625	2,756	2,894	3,039	13,814
Insurance: Business Personal Property	1,000	1,050	1,103	1,158	1,216	5,526
Janitorial	4,800	5,040	5,292	5,557	5,834	26,523
Loan P&I Payment	183,277	192,441	202,063	212,167	222,775	1,012,724
Office Supplies	1,800	1,890	1,985	2,084	2,188	9,946
Packaging Supplies	6,000	6,300	6,615	6,946	7,293	33,154
Postage	1,200	1,260	1,323	1,389	1,459	6,631
Property Taxes (3.0316)	45,651	47,933	50,330	52,846	55,489	252,249
Utilities	12,000	12,600	13,230	13,892	14,586	66,308
Total Processing Facility Expenses	**$ 337,541**	**$ 354,418**	**$ 372,139**	**$ 390,746**	**$ 410,283**	**$ 1,865,128**
Mobile Slaughter Unit Expenses						
Accounting and Legal	1,200	1,260	1,323	1,389	1,459	6,631
Cell Phones	2,400	2,520	2,646	2,778	2,917	13,262
Consumable Supplies	4,800	5,040	5,292	5,557	5,834	26,523
Depreciation-Slaughter Units	3,800	3,990	4,190	4,399	4,619	20,997
Equipment Repairs	1,800	1,890	1,985	2,084	2,188	9,946
Fuel/Oil	55,008	57,758	60,646	63,679	66,863	303,954
Insurance: Business Auto and Trailers	25,000	26,250	27,563	28,941	30,388	138,141
Insurance: Workers Compensation	15,000	15,750	16,538	17,364	18,233	82,884
Insurance: General Liability	2,500	2,625	2,756	2,894	3,039	13,814
Loan P&I Payment	62,879	66,023	69,324	72,791	76,430	347,448
Miscellaneous	1,200	1,260	1,323	1,389	1,459	6,631
Tax and License	2,000	2,100	2,205	2,315	2,431	11,051
Truck Maintenance	2,750	2,888	3,032	3,184	3,343	15,198
Total Mobile Slaughter Unit Expenses	**$ 180,338**	**$ 189,355**	**$ 198,822**	**$ 208,763**	**$ 219,202**	**$ 996,480**
Total Expenses	**$ 517,879**	**$ 543,773**	**$ 570,961**	**$ 599,509**	**$ 629,485**	**$ 2,861,607**
Operating Profit/(Loss)	**$ 1,212,359**	**$ 1,272,977**	**$ 1,336,626**	**$ 1,403,458**	**$ 1,473,630**	**$ 6,699,051**

Table 4.24: Decrease in the Number of Animals Slaughtered by 10%

5 Year Forecasted Financials Mobile Slaughter Units & Processing Facilities						
	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Processing Facility Revenue						
Beef	3,404,967	3,575,216	3,753,977	3,941,675	4,138,759	18,814,594
Pork	30,791	32,330	33,947	35,644	37,426	170,138
Sheep/Lamb	661,240	694,302	729,017	765,468	803,741	3,653,768
Total Retail Revenue	**$ 4,096,998**	**$ 4,301,848**	**$ 4,516,940**	**$ 4,742,787**	**$ 4,979,927**	**$ 22,638,500**
Less Cost of Goods	$ 2,263,749	2,376,937	2,495,783	2,620,573	2,751,601	12,508,643
Gross Revenue	**$ 1,833,249**	**$ 1,924,911**	**$ 2,021,157**	**$ 2,122,215**	**$ 2,228,325**	**$ 10,129,857**
Salaries- Processing Facility						
Plant Manager (1)	72,100	75,705	79,490	83,465	87,638	398,398
Product/Brand Marketing Manager (1)	83,441	87,613	91,994	96,593	101,423	461,064
Butcher (1)	42,000	44,100	46,305	48,620	51,051	232,077
Seasonal Employees (1)	21,440	22,512	23,638	24,819	26,060	118,470
Office Staff (1)	24,768	26,006	27,307	28,672	30,106	136,859
Taxes/Benefits	32,847	34,490	36,214	38,025	39,926	181,501
Total Processing Facility Salaries	**$ 276,596**	**$ 290,426**	**$ 304,947**	**$ 320,195**	**$ 336,204**	**$ 1,528,368**
Salaries- Mobile Slaughter Units						
Butcher (2)	60,112	63,118	66,273	69,587	73,067	332,157
Driver/Assistant (2)	50,752	53,290	55,954	58,752	61,689	280,437
HACCP Inspector (2)	92,443	97,065	101,918	107,014	112,365	510,806
Taxes/Benefits	30,496	32,021	33,622	35,303	37,068	168,510
Total Mobile Slaughter Units Salaries	**$ 233,803**	**$ 245,493**	**$ 257,768**	**$ 270,656**	**$ 284,189**	**$ 1,291,909**
Total Salaries	**$ 510,399**	**$ 535,919**	**$ 562,715**	**$ 590,851**	**$ 620,393**	**$ 2,820,278**
Processing Facility Expenses						
Accounting and Legal	3,600	3,780	3,969	4,167	4,376	19,892
Bank Charges	300	315	331	347	365	1,658
Business License	145	152	160	168	176	801
Depreciation-Building	38,611	40,542	42,569	44,697	46,932	213,350
Depreciation-Furniture and Fixtures	3,636	3,818	4,009	4,209	4,420	20,091
Depreciation-Equipment	6,921	7,267	7,630	8,012	8,413	38,243
Equipment Replacement and Repairs	1,100	1,155	1,213	1,273	1,337	6,078
Insurance: Builders Risk	10,000	10,500	11,025	11,576	12,155	55,256
Insurance: Workers Compensation	15,000	15,750	16,538	17,364	18,233	82,884
Insurance: General Liability	2,500	2,625	2,756	2,894	3,039	13,814
Insurance: Business Personal Property	1,000	1,050	1,103	1,158	1,216	5,526
Janitorial	4,800	5,040	5,292	5,557	5,834	26,523
Loan P&I Payment	183,277	192,441	202,063	212,167	222,775	1,012,724
Office Supplies	1,800	1,890	1,985	2,084	2,188	9,946
Packaging Supplies	6,000	6,300	6,615	6,946	7,293	33,154
Postage	1,200	1,260	1,323	1,389	1,459	6,631
Property Taxes (3.0316)	45,651	47,933	50,330	52,846	55,489	252,249
Utilities	12,000	12,600	13,230	13,892	14,586	66,308
Total Processing Facility Expenses	**$ 337,541**	**$ 354,418**	**$ 372,139**	**$ 390,746**	**$ 410,283**	**$ 1,865,128**
Mobile Slaughter Unit Expenses						
Accounting and Legal	1,200	1,260	1,323	1,389	1,459	6,631
Cell Phones	2,400	2,520	2,646	2,778	2,917	13,262
Consumable Supplies	4,800	5,040	5,292	5,557	5,834	26,523
Depreciation-Slaughter Units	3,800	3,990	4,190	4,399	4,619	20,997
Equipment Repairs	1,800	1,890	1,985	2,084	2,188	9,946
Fuel/Oil	55,008	57,758	60,646	63,679	66,863	303,954
Insurance: Business Auto and Trailers	25,000	26,250	27,563	28,941	30,388	138,141
Insurance: Workers Compensation	15,000	15,750	16,538	17,364	18,233	82,884
Insurance: General Liability	2,500	2,625	2,756	2,894	3,039	13,814
Loan P&I Payment	62,879	66,023	69,324	72,791	76,430	347,448
Miscellaneous	1,200	1,260	1,323	1,389	1,459	6,631
Tax and License	2,000	2,100	2,205	2,315	2,431	11,051
Truck Maintenance	2,750	2,888	3,032	3,184	3,343	15,198
Total Mobile Slaughter Unit Expenses	**$ 180,338**	**$ 189,355**	**$ 198,822**	**$ 208,763**	**$ 219,202**	**$ 996,480**
Total Expenses	**$ 517,879**	**$ 543,773**	**$ 570,961**	**$ 599,509**	**$ 629,485**	**$ 2,861,607**
Operating Profit/(Loss)	**$ 804,971**	**$ 845,219**	**$ 887,480**	**$ 931,854**	**$ 978,447**	**$ 4,447,972**

V. MARKETING RECOMMENDATIONS

Market Share

The U.S. Census Bureau estimates the 2005 population of Nevada at 2,381,281, with 906,719 total households (U.S. Census Bureau, 2005). As 51% of the consumer survey respondents stated that they eat meat between 1 and 5 times a week, and 74% of those stated that they would pay a premium for locally grown grass-fed beef, approximately 324,196 households in Nevada would be willing to purchase this product. The survey respondents reported that they eat an estimated 133.99 pounds of meat per household per month (See Tables 3.01, 3.02, and 3.03). The estimated potential demand for meat equates to 45, 850,842 pounds per month. As the business would have a monthly meat production of 180,800 pounds, this production represents only 0.4% of the potential demand as portrayed in Table 5.01.

Table 5.01: Nevada Meat Consumption

2005 Nevada Population Estimate	Nevada Occupied Housing Units	51% of Households	Percentage Willing to Pay a Premium	Total Households in Market	Household Consumption (Lbs/Month)	**Estimated Demand in Pounds**
2,381,281	906,719	462,427	74%	342,196	133.99	45,850,842

Source: U.S. Census Bureau

Niche Marketing/Branding

In a study (Levi, 1997) regarding consumer acceptance of natural beef, the author noted two primary conditions for effective marketing of this niche product. The first was to emphasize the lean or healthy aspects of the product on the label. The second was to use a locally produced label, such as a local family, region, or state of the ranch location. Labeling or branding products differentiates them or segregates them from other similar products. According to the USDA, value is added to a product when its market segment is expanded and the producer is allowed a greater share of revenue from the marketing, processing, or physical segregation of the

product. Nevada livestock producers may increase their share of product revenues through a business entity that is focused on processing and marketing branded natural grass-fed local meat products. Many consumers are willing to pay more for a product with a brand name they can identify because they associate that name with quality or trust. A study by Giddens and Hofmann (2001) found that products with brand identification were priced as much as 40% over the price of similar non-branded products. The creation of a locally produced meat brand offers producers the ability to charge higher prices while maintaining higher quality over non-branded, non-certified products. Branding is a way to differentiate a product and provide higher value through guarantees and simplicity in purchasing.

One method of branding includes origin labeling. Origin labels may be as broad as the country or state of origin, or as specific as the county or city of origin. According to a study by Bonnet and Simioni (2001) designation of origin labeling guarantees that the quality of the labeled product is due exclusively to the attributes of producing the product in a particular geographic region. Another study by Loureiro and McCluskey (2000) was motivated by the trend that "consumer's attitudes toward quality and desire for cultural identification have generated a growing demand for agricultural products that carry a strong identification with a particular geographic region (p. 309)." Origin labeling, however, is considered a *credence attribute,* a product characteristic that is neither observed nor experienced by the consumer, and hence, must be communicated by a trusted source through proper product labeling. Certification and the corresponding labeling is one way of validating origin labeling. Certification provides an alternative that allows individual producers to qualify for inclusion under an established umbrella program (third-party) and label that identifies a product from others on the market. The certification process depends on establishing a set of standards, which define how the product is

different. Producers who meet those standards qualify for certification. Producer brands (first-party), in contrast, are usually privately owned and managed, meaning the owners of a brand determine the set of standard and types of products that qualify to carry the specific brand label.

A 2005 University Center for Economic Development (UCED) study surveyed residents in Nevada to determine their willingness to pay for locally produced native plant products. The study found that residents were willing to pay a premium between 8% and 25% for a plant product with a "Nevada Grown" label over the same product without the origin label (Curtis, Cowee, and Slocum, 2005). This indicates that Nevada's consumers place value on locally produced products, and may also indicate that there is a market in Nevada for local goods.

Nevada Certification/Labeling Programs

NevadaGrown

To date, the "NevadaGrown" program demonstrates one of the only large-scale uses of Nevada-produced labeling techniques. The NevadaGrown program is a government-sponsored third-party certification program. For a producer of agriculture or food products to be considered for NevadaGrown certification, he or she must either reside or own property or a business in the State of Nevada. For a raw agricultural product, such as meat, to be certified as NevadaGrown, it must be grown (raised) in Nevada. Processed agricultural products must have at least 60% of their composition grown in Nevada. The use of the NevadaGrown logo is restricted to members in good standing. Certification is a cost-free process and membership is reconsidered on an annual basis. More information about the NevadaGrown program can be found on the program's website at http://www.nevadagrown.com, or by calling (775) 423-8587.

Made in Nevada

The Nevada Commission on Economic Development has established the "Made in Nevada" program, designed to increase support for products grown or produced within the State of Nevada. The goal of the program is to increase the volume of member business through education programs for consumers both within Nevada and outside the state. The Commission also provides business expansion expertise and assistance by partnering with the Management Assistance Program and the Small Business Development Center. Made in Nevada tags and adhesive labels are provided at no cost to members, and additional marketing opportunities exist through the Made in Nevada program.

There is a strict selection process to ensure high quality products and to maintain the reputation of Made in Nevada; for gift items, 75% of the end product must be produced, finished, and packaged in Nevada; specialty food items must be entirely produced and processed in Nevada; and agricultural and pet products must be entirely produced or processed in Nevada. Businesses are allowed to use the Made in Nevada logo if they advertise or promote the sale/distribution of Made in Nevada products, while manufacturers may qualify for benefits of the program if 50% or more of their products are manufactured in Nevada. Associate members of the program may include Nevada-based service product companies, non-profit organizations, and other grandfathered member companies. The standard membership fee for a company or organization is $50 per year. Additional membership and requirement information can be found online at http://www.expand2nevada.com/MadeinNevada2/index.php, or by calling (775) 687-4325.

Natural and Grass-Fed Beef Branding Programs

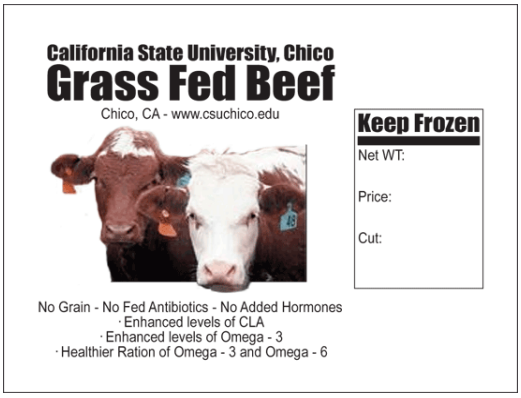
Recent studies have found consumers willing to pay premiums for natural and grass-fed beef products, including a study by Grannis and Thilamy (2000), which found that 38% of the consumer respondents were willing to pay a 10% premium for natural steak and 14% were willing to pay a 20% premium. A study by Levi (1997) found that consumers spend, on average, 48% more per pound for the leanest ground beef products at supermarkets. In the consumer survey conducted for this study, it was found that local consumers are willing to pay 7-30% premiums for grass-fed meat products.

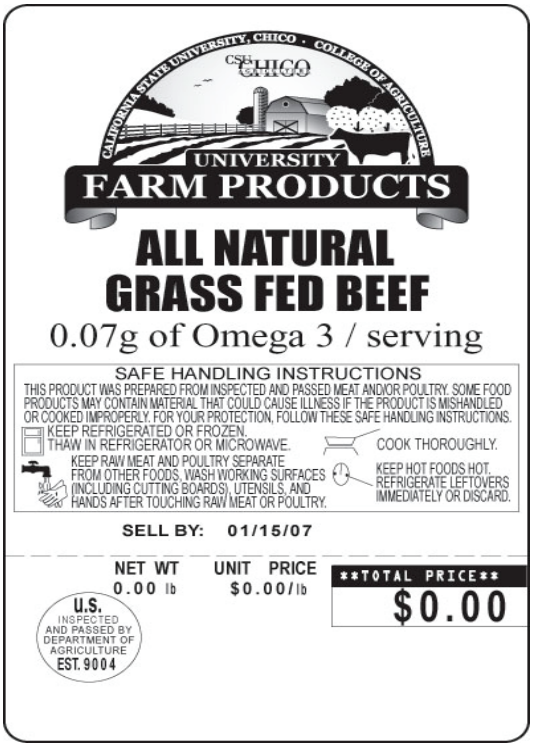
What does natural beef mean? The USDA definition of natural beef describes meat products that have been minimally processed and contains no additives, artificial flavors, colors or preservatives. This definition does not mention production techniques for natural meat, which can be confusing or even misleading to consumers. Unofficially, natural meat has been defined by ranchers and marketers as livestock raised without the use of antibiotics, growth hormones, and implants.

The USDA label for grass-fed meat says the following: grass, green, or range pasture, or forage shall be 80% or more of the primary energy source throughout the animal's life cycle. This means that on a daily basis producers can feed animals up to 20% from other sources, or wait till the finishing stage and feed animals entirely on other sources, as long as no more than 20% of the animal's feed during its entire lifetime comes from these alternate sources. In 2006, the USDA-AMS solicited comments on a revised standard which defines grass (forage) fed as: Grass (annual and perennial), forbs (legumes, brassicas), browse, forage, or stockpiled forages, and post-harvest crop residue without separated grain shall be at least 99% of the energy source

for the lifetime of the ruminant specie, with the exception of milk consumer prior to weaning (Acevedo, Lawrence, and Smith, 2006).

Figure 5.01: Labeling Examples





Source: CSU, Chico Grass-Fed Information Web Site

There are many successful natural and natural grass-fed beef producers in the US. The following is a partial listing.

Table 5.02: Natural and Natural Grass-fed Beef Producers

Natural Beef		
Producer's Name	**Type of Beef Sold**	**Web Site**
Coleman	They produce natural beef, bison, chicken, pork, lamb and sausage. The cattle are never fed or administered antibiotics and are always 100% vegetarian fed. They do not use animal by-products or animal fats and their animals are raised with no added hormones.	www.colemannatural.com
Laura's Lean Beef	Their cattle are raised on family farms solely on natural grains and grasses without animal by-products and antibiotics or growth hormones.	www.lauras1eanbeef.com
Harris Ranch	Their natural beef is minimally processed and contains no artificial ingredients.	www.harrisranchbeef.com
Niman Ranch	Produces natural beef, pork and lamb without growth-promoting antibiotics or hormones and they never feed their cattle meat.	www.nimanranch.com
Oregon Country Natural Beef	Raises their cattle the "old fashioned" way, no hormones, antibiotics or any animal by-products.	www.oregoncountrybeef.com
Natural Grass-Fed Beef		
Thousand Hills Cattle Company	Cattle are raised locally on small family farms in Minnesota and Northeast Iowa then processed at a state-of-the-art USDDA inspected facility in Cannon Falls, MN.	www.thousandhillscattleco.com
Western Grasslands Beef	Cattle are raised by family ranchers on pasture through their entire lives. Animals are not fed animal by-products or artificial fees. Cattle grow without synthetic chemicals, or artificial growth enhancing hormones or sub-therapeutic antibiotics.	www.westerngrasslands.com

Source: Acevedo, Lawrence, and Smith, 2006.

Friendly Isle Meats

In February 2006, the Molokai Livestock Cooperative based in the island of Molokai, Hawaii, opened the doors of its slaughter and processing facility in the city of Ho'olehua after having received final USDA-FSIS approval in January (Mayer, 2006). Currently the facility slaughters cattle on a regular weekly basis, and supplies the fresh beef to grocery stores,

restaurants and other local outlets. At this time the cooperative's main product is ground beef, though the cooperative members have been conducting studies as to the market for grass finished and organic beef, and were recently awarded a grant to develop a grass finished beef system. They plan to market their specialty beef cuts under the name "Friendly Isle Meats" to niche markets in Hawaii, the contiguous United States, and abroad. The cooperative also offers its slaughter services to local producers of beef and pork, as well as residents who raise the same for personal use, and provide custom cuts and wrapping as well.

Distribution

Specialty Stores

As noted in Table 3.04, 9% of the consumer survey respondents purchased their meat at specialty meat and natural food stores. Establishing contracts or distributing to these types of retail outlets would provide enough demand for the business to sell all of its meat products. The specialty/natural food market is expanding rapidly as is evidenced by the growth of Whole Foods and Trader Joe's in the US. Table 5.03 lists potential natural food retailers to contact. Additionally, Costco Warehouses are listed, as they sell many natural products and 11% (Table 3.04) of the consumer survey respondents purchase their meat products at warehouse stores such as Costco. Additionally, members of the Nevada Cattlewoman's Association provide information on beef to customers at Costco in Reno, NV one Saturday each month. This relationship could be fostered to enter this market and provide consumers with information regarding locally produced branded meat products.

Table 5.03: Natural Food Retailers

Natural Food Retailers		
Whole Foods	Estimated 155 stores located world wide. Largest retailer of Natural and Organic Foods.	www.wholefoods.com
Wild Oats	Nationwide stores selling natural and organic foods.	www.wildoats.com
Trader Joe's	A "different" grocery store. 250 stores in more than 20 States and still expanding!	www.traderjoes.com
Costco Warehouses	World wide warehouse locations. Sells food and household items	www.costco.com

Restaurants

A recent study (Curtis et al., 2006) found that nearly two-thirds of surveyed gourmet foodservice establishments in Nevada had never purchased local products. The chefs of these establishments did indicate, however, that they would be willing to either begin making local purchases or increase the purchases they currently make if producers are able to meet certain requirements. Although the gourmet restaurant market may not provide a single solution, marketing to chefs and restaurants may help to increase and/or expand sales.

Chefs indicated a need for all types of beef, lamb, and pork, including natural and organic. Some of the specific cut types included leg of lamb, tenderloin, pork roasts, pork bacon, veal loin, rib eye, beef tenders, and NY strips, while Kobe beef, veal, and buffalo were also mentioned.

The following is a listing of important and less important factors in the chef's purchasing decisions.

- *Taste, Quality & Freshness:* All of the chefs in this study said that taste and quality are extremely important factors to consider when purchasing products for use in their restaurants. Regardless of the nutritional or business goals of the chef, his/her main goal is to provide high-quality, good-tasting dishes.

- *Price:* Price refers to the amount the chef will pay to obtain the product. The majority of chefs said price is not an important factor they consider when purchasing a product; if the chef wants a product badly enough, price will not be an issue.
- *Unique Items & Signature Dishes:* The majority of chefs said that the presence of a unique or special quality is extremely important to them. Producers who feel they have a unique or special product should make sure that potential customers are aware of these qualities.
- *Consistency: Supply & Quality:* The opinion of this attribute was well-defined: the vast majority of respondents ranked a guaranteed consistent supply as extremely important. This result is not entirely surprising, as chefs may not wish to complement a previously contracted supply or find a new supplier mid-season. The opinion of guaranteed consistent quality was identical, with nearly all of the chefs saying that consistent quality was extremely important.
- *Delivery: Year-Round, Timing & Method:* Year-round availability differs from consistency in that year-round availability implies that a producer will be able to offer products all year, while consistent supply implies the producer will supply products on a regular schedule. The chefs had mixed feelings about year-round availability, but the majority felt that this was a less important attribute. The majority of chefs felt that delivery timing is a very important supplier attribute. This shows how important the timing of delivery is to chefs and how important it is for suppliers to consider delivery timing when approaching chefs and/or restaurants. Delivery method is also extremely important.

Farmer's Markets

Farmer's markets are an excellent method of introducing new food products to communities. Of the consumer survey respondents, about 1% said that they purchase their meats at farmers markets. This indicates that farmers' markets could be a potential distribution channel, but are likely to be of secondary importance. One organization, Certified Farmer's Markets, offers listings of markets in different states (http://www.farmersmarkets.net/). The USDA also has a farmer's market location web site at http://www.ams.usda.gov/farmersmarkets/map.htm. The public's growing concern with healthy eating and knowing where and how food is produced has fueled the growth of farmer's markets across the country.

Promotion

An effective promotion strategy will reach target customers through several types of media. These may include the following:

- Print Media: Residential mailers and brochures
- Electronic Media: Websites and Internet advertising
- Published Media: Newspapers, magazines, and coupons
- Broadcast Media: Television and radio

Traditional media avenues include newspapers, radio advertising, yellow pages and advertising with local and state agencies. Although these media avenues can be successful, it is imperative that the media chosen is appropriate for the target market. For example, if the target market is working women, aged 25-35, it would be best to conduct radio advertising during commute times, or use newspaper advertising on the weekends, as this market is likely to read

the newspaper only on Sunday. The section of the newspaper the advertising falls under is also important. Informational brochures and taste samples may be great promotional tools as well, especially for fresh products (Levi, 1997).

Electronic Media

A Web site can be a powerful marketing tool and is recommended as the basis of a promotion plan. The website design is important in building brand awareness and connecting products to consumers. There are companies who build websites and include hosting and other support services. An Internet marketing services firm, *We Build Pages*, has an agriculture template available for $67.00. Additionally, *eatdrink.com* builds unique web sites to promote products and services (http://www.eatdrink.com). Numerous Internet service providers (ISPs), such as *Earthlink.net*, offer hosting and shopping cart services for various monthly fees.

Marketing and Promotion Resources

The "Sustaining Family Farms and Rural Communities" program is available at http://www.ces.purdue.edu/sa/famfarm/market.html, and provides innovative strategies for both direct and traditional marketing channels. This website outlines an approach to niche marketing and lists numerous books, periodicals and organizations that aid in developing an effective marketing plan.

Hoovers, a Dun and Bradstreet company, has a list of services for the agriculture industry and includes a list of companies that specialize in wholesale food distribution. This website offers information critical to an effective marketing strategy (http://www.hoovers.com/free/).

Agriculture World offers online advertising for the agriculture industry at http://www.agriculturewworld.net/. The United States Department of Agriculture (USDA) offers important agriculture information at http://www.usda.gov/wps/portal/usdahome. Additionally, the USDA Rural Development web site offers business and cooperative program information at http://www.rurdev.usda.gov/rbs/coops/vadg.htm. The Agriculture Council of America organizes a National Agriculture Day each year. Information can be found at http://www.agday.org/index.php.

Information on marketing natural and grass-fed meats can be found on the California State University, Chico *Grass Fed Beef* Web site at http://www.csuchico.edu/agr/grassfedbeef/niche-mkt/index.html. Additionally, the *Agricultural Marketing Resource Center* at http://www.agmrc.org/agmrc/default.html has resources for marketing all types of agricultural products.

VI. SUMMARY AND RECOMMENDATIONS

The purpose of this study is to evaluate the economic feasibility of a producer-owned entity to slaughter, process, and market locally grown, grass-fed meat products in Nevada. Additionally, a primarily goal of this study is to gage the interest level of ranchers in northwestern Nevada in forming a business entity to slaughter, process, and market their livestock. The following provides a summary of the study findings, as well as recommendations that interested ranchers may wish to consider at they move forward.

Producer Participation/Interest

A mail survey of agricultural producers was conducted during the fall of 2005 in which 153 of the 800 surveys mailed were returned and considered complete and usable for an overall response rate of 20%. However, this represents nearly 70% of total livestock producers in northern Nevada. The results of this study indicate that just over 60% of surveyed livestock producers would be willing to invest money, time, or both in this venture, meaning the business entity may have 91 producer members at its inception. According to the production information provided by survey respondents, the potential slaughter/processing/packing business should have the capacity to handle 2,433 cattle on an annual basis (203 cattle/month), 4,262 sheep annually (356/month), and 136 pigs annually (11/month).

The producer respondents indicated a heavy need for slaughter services in the spring and the fall each year, which would create under use of facilities in some months and over capacity demand for facilities in other months. However, the respondents indicated the potential for altering their current calving schedule to smooth out the use of facilities across months. Additionally, the maximum capacity of the two mobile units only allowed for the slaughter of 10

pigs, 168 cattle, and 296 sheep on a monthly basis. Hence, the total animals slaughtered has been reduced by 10% from the findings of the study mentioned in the previous paragraph. It is recommended that owner ranchers be provided incentives to alter their calving, and hence slaughtering schedule, to make full, but not over use of facilities.

Overall the producer interest in this business and the willingness to invest start-up capital in the business is exciting. There is definitely enough demand for the services of the business to generate the necessary supply of livestock for the business to operate profitably; assuming product marketing is managed successfully. The location of potential member ranches based on producer survey results indicate that the processing facility should be located in a central location, such as Silver Springs, Nevada, approximately 35 miles east of Carson City and 26 miles west of Fallon. This central location accommodates the Lahontan Valley, where 28% of ranchers reside (according to survey response); is close to Yerington (32 miles), where an additional 13% of ranchers reside; and is 51 miles from the Carson Valley, where 16% of the ranchers reside. The two mobile slaughter units would be housed at this facility as well, but would travel out to member ranches to perform slaughter services. It is imperative that the USDA guidelines and approval process for meat processing plants be consulted (Federal Register, 1997).

Potential Markets

During the summer of 2006, a survey of residents in Nevada was conducted to gain an understanding of consumer perception and purchasing behavior for meat products. The survey was mailed to a random sampling of 5200 residents representing all regions of the state. A total

of 542 of the returned surveys were considered complete and viable for use in the study, for a response rate of 10.4%.

Survey respondents rated freshness and taste/flavor as the most important factors in their decision-making process as it pertains to meat purchases. However, 55% of the respondents rated natural grown as extremely or very important meat product attribute, and 36% of respondents rated locally grown as extremely or very important. These individuals constitute a niche market for Nevada grown natural meat products. The highest premiums the consumers in this study were willing to pay centered on high-grade beef products, but all products bearing a grass-fed and locally grown label received high premiums (ranging from $.02/lb to $4.33/lb). This indicates that the use of these two labels together will bring a higher premium over the labels individually. Additionally, at least 65% of the consumers were willing to pay a premium for the labeled products discussed.

Across all products the results of this study seem to indicate that the target market for the specialty meat products constitutes younger aged adults (22-35), primarily male, with a higher education level (college graduate) living in northern Nevada. Additionally, the existence of children was important for locally grown labeled products. All product packing, promotion, and distribution decisions should be made with the target market in mind.

Based on the analysis presented in Section V of this study, it is recommended that the business establish purchasing contracts (for at least 50% of total meat production) with specialty food stores and gourmet restaurants in the Great Basin region of Nevada, as well as provide the ability to transact sales through their own website. It is also recommended that the products be marketed under one brand name with local and grass-fed or natural labeling, and should feature the family owned ranching members. Promotional and advertising materials should include

descriptions of owner ranches, ranching philosophy, etc. This process will also take the burden of sales and marketing off of member ranchers and will be expedited through the marketing/brand manager employed by the business.

Financial/Business Recommendations

The New Generation Cooperative (NGC) seems to provide the most optimal legal situation for the business, as its investment options, distribution of owner's equity, and marketing options best fit the current needs of the livestock producers in Nevada. The double taxation of C corporations, the maximum membership requirements of S corporations, and the financial pass-through of an LLC make these forms of business organization less than optimal.

Using the stock option of ownership in an NGC, each member invests a start-up amount equal to the amount of livestock they plan to provide to the cooperative for slaughter, processing, and marketing. This livestock is purchased at market value (see section IV for more information), with sales revenues repaying the cost of the livestock, plus a percentage share in the profits at the end of each season paid out to each member. This ensures adequate livestock inputs to maximize production capabilities and provide an initial investment based on ownership, providing an adequate cash flow for start-up operations. Although loans on the entire start-up capital requirements were used in the feasibility analysis, it is recommended that the cooperative collect 30% ($575,843.70) of all start-up costs through the distribution of common stock to the initial investors based on their marketing contacts (their usage of the cooperative's services). As 91 of the producers said they would be willing to invest in the business, a liberal estimate of potential start-up capital is $375,500.00 (40 producers at $5000 each, plus 51 producers at $2500 each). The remaining $200,000.00 would need to come from grants or outside investors. Short-

term loans can be used to cover first year's operation costs, and long-term loans can be used to finance any additional capital investments required. It may also be advisable for the cooperative to apply for a USDA-RD value-added production grant to help finance first year operation costs. According to the current year grant specifications, the cooperative could apply for up to $150,000.00, as long as it is able to secure an equal amount through member investment or loans from non-federal sources (USDA-RD, 2005).

For the first five years, it is recommended that the cooperative focus on retaining its earnings (profits) and establish a cash reserve to weather possible negative economic conditions (see the sensitivity analysis in section IV). These retained earnings offer additional ownership to members, based on the number of shares purchased at the cooperative inception. Livestock producers will require full payment for their livestock at market value in order to maintain their ranch, and hence these payments must be made annually.

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APPENDIX

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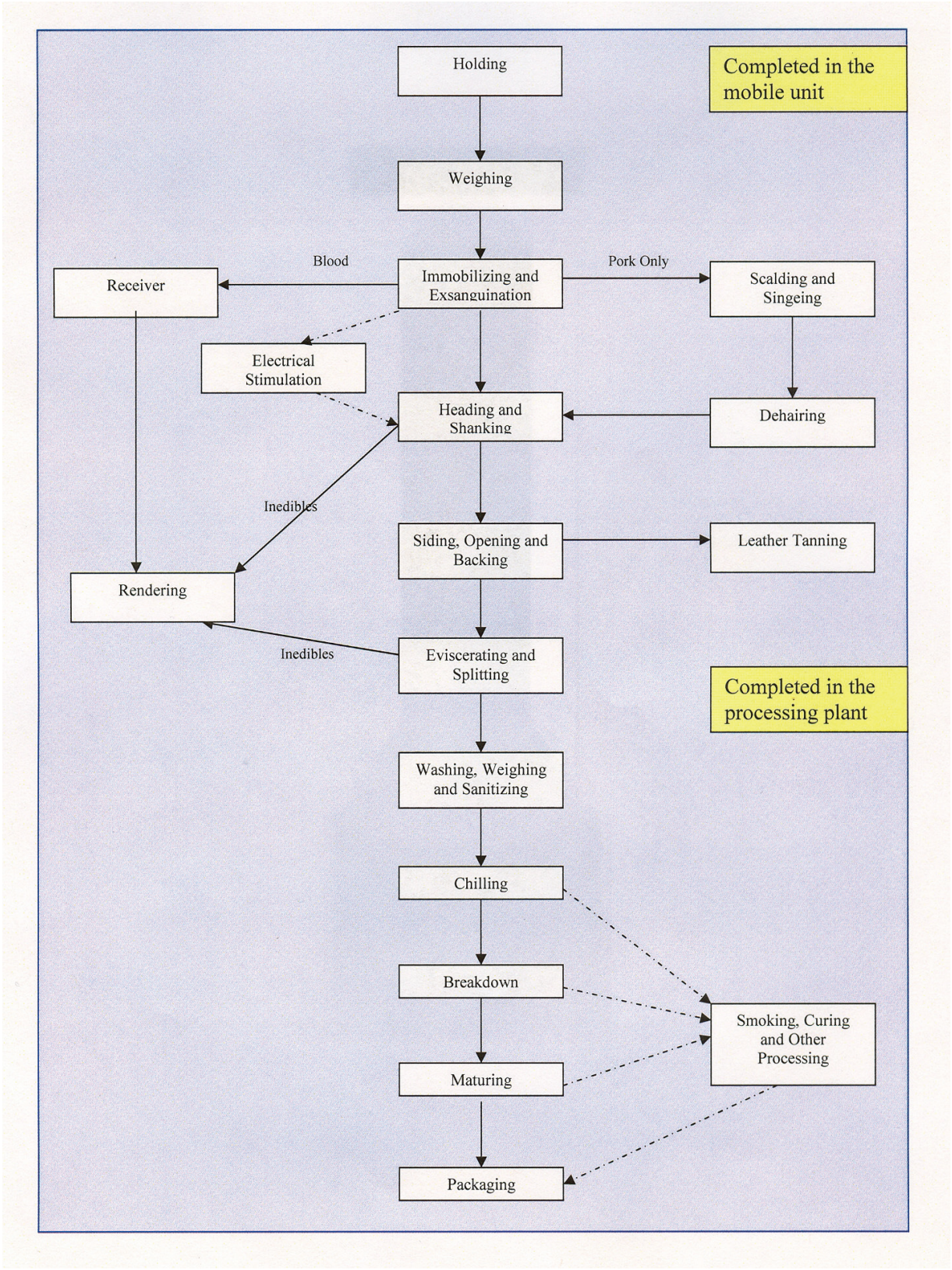
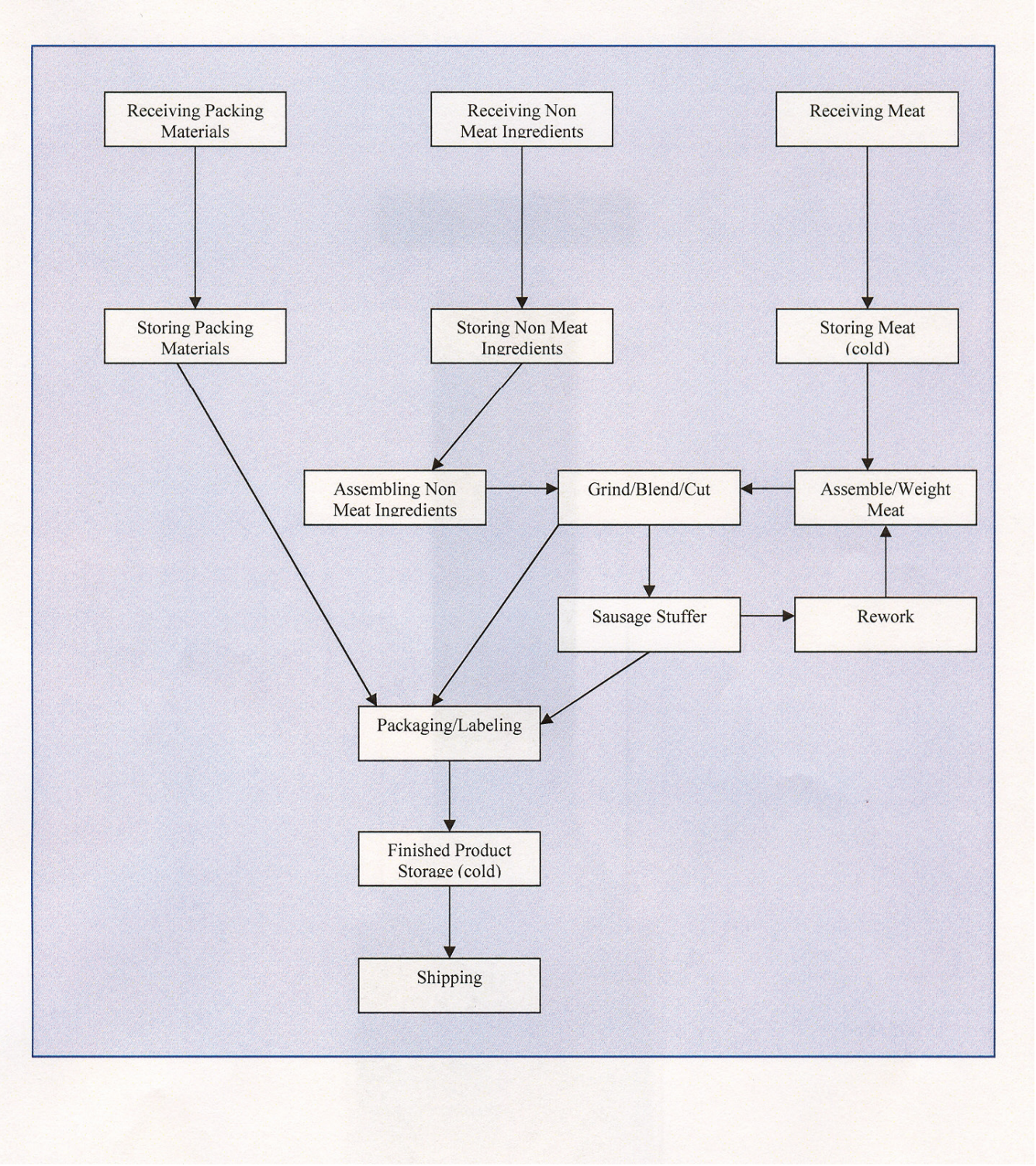
Appendix B – Mobile Unit Slaughter & Processing Facility Process



Appendix C – Meat Processing Process



Appendix D – Producer Survey

1. What is your title or position on this ranch/farm? *(check one)*

- ☐ Owner
- ☐ Manager
- ☐ Other:_____

2. How long have you been in the livestock industry? *(check one)*

- ☐ 1-5 years
- ☐ 6-10 years
- ☐ 11-20 years
- ☐ 21 years or more

3. Where is the farm/ranch located (valley)? *(check one)*

- ☐ Carson
- ☐ Mason
- ☐ Smith
- ☐ Antelope
- ☐ Eagle
- ☐ Truckee Meadows
- ☐ Bridgeport
- ☐ Dayton
- ☐ Washoe
- ☐ Lahontan
- ☐ Pleasant
- ☐ Other: _____

4. How many acres does the ranch/farm own/lease (including allotments)? _____ *(specify #)*

5. In the following table list the number and type of animals you produce annually, any specific breed used (i.e. black angus), special production methods employed (i.e. grass-fed, natural), and the calving season if appropriate.

Animal Type (beef, pork, lamb, etc.)	Number	Breed	Production Method (grass-fed)	Calving Season (spring, fall, etc.)

6. How does your ranch/farm currently market its livestock products? *(Check all that apply and specify number of animals)*

- ☐ Yearlings sold to the feedlot, #_____.
- ☐ Fed and sold fat, #_____.

- ☐ Quarter, halves, or whole carcasses sold direct to consumer, #_____.
- ☐ Small cuts boxed/packaged and sold direct to consumer, #_____.
- ☐ Other: _____.

7. If your ranch/farm currently markets its livestock products directly to the consumer, which outlets does it use? *(Check all that apply)*

- ☐ Farmers market
- ☐ Internet/mail order
- ☐ Word-of-mouth
- ☐ Other: _____
- ☐ Not applicable

8. How many employees currently work on the ranch/farm? Please include yourself, any family members, and other non-paid help. *(check one)*

- ☐ 1-2
- ☐ 3-4
- ☐ 5-6
- ☐ 7 or more

9. Has the farm/ranch seen increased profits in the last 5 years? *(check one)*

- ☐ Yes *(Skip to question 11)*
- ☐ No

10. Has the farm/ranch seen increased losses in the last 5 years? *(check one)*

- ☐ Yes
- ☐ No

11. If a local USDA inspected slaughtering and processing unit (either mobile or stationary) were available, enabling your farm/ranch to sell direct to consumers, what volume of animals might your farm/ranch slaughter and/or process?

Animal Type (beef, pork, lamb, etc.)	**Volume (Lbs.) on the hoof**

12. What type of USDA inspected slaughter facility would you prefer? *(check one)*

- ☐ Mobile (customized trailer, moved from ranch to ranch)
- ☐ Stationary (local , i.e. within 50 miles)

13. Mobile slaughter often requires holding animals in a corral and handling offal. Does the farm/ranch currently have a temporary or permanent corral to secure animals? *(check one)*

- ☐ Yes
- ☐ No
- ☐ Unsure

14. Does the farm/ranch currently have the capacity to handle or compost offal? *(check one)*

- ☐ Yes
- ☐ No
- ☐ Unsure

15. If a cooperative or other business entity of local producers was established to process and/or market livestock products, what functions would you want this entity to do for your farm/ranch? *(Check all that apply)*

- ☐ Slaughtering
- ☐ Aging
- ☐ Packaging/Wrapping
- ☐ Marketing

16. Starting a new business requires start-up capital. If this producer business entity were shown to be potentially profitable, would you be willing to invest in this business entity? *(check one)*

- ☐ Yes
- ☐ No *(Skip to question 18)*

17. If this producer business entity was a worthwhile investment of time and money, what amount would you be willing to invest in it? *(check one)*

- ☐ None
- ☐ $500-$2500
- ☐ $2501 to $5000
- ☐ More than $5000
- ☐ Expertise, specify _____

18. If you were to participate in this local producer business entity, briefly describe how your current livestock operation might change (i.e. feed out and not sell on the hoof, produce specialty product (i.e. grain-fed, natural)).

19. If the University of Nevada Cooperative Extension offered one or more of the following educational topics, which would provide the most benefit to your livestock operation. *(Check all that apply)*

- ☐ Marketing (e.g. value-added, niche marketing)
- ☐ Cooperative formation (costs and benefits)
- ☐ Business planning/investment analysis
- ☐ Animal fertility/genetics
- ☐ Meat tenderness and quality variants (stress, genetics, etc.)
- ☐ USDA label specifications
- ☐ Special production methods (e.g. grass-fed, natural, organic)
- ☐ Dealing with offal (on-site)
- ☐ Other: _____

Appendix E – Resident Survey

University of Nevada at Reno Survey on Consumer Perception and Purchasing Behavior for Meat Products

Section I: General Purchasing Habits

Q1. Are you the primary grocery shopper in your household?

☐Yes ☐No

Q2. How often do you consume meat products weekly?

☐Never ☐1-5 times ☐5-10 times ☐10-15 times ☐more than 15 times

Q3. When purchasing meat, how important are the following features to you? Please circle your evaluation in a scale from 1 to 5, with 5 indicating *very important* and 1 indicating *unimportant*. If you consider features that are not listed in the following table, please write them down at the bottom of the page and indicate how important they are to you when purchasing meat.

Features	**Importance (5 indicates very important and 1 indicates unimportant)**				
Freshness	1	2	3	4	5
Tenderness	1	2	3	4	5
Marbling	1	2	3	4	5
Muscle texture	1	2	3	4	5
Leanness	1	2	3	4	5
Taste and flavor	1	2	3	4	5
Brand name	1	2	3	4	5
Type of cuts	1	2	3	4	5
Safety	1	2	3	4	5
Packaging (packaging material and size)	1	2	3	4	5
Sales or promotion	1	2	3	4	5
Organic (free of chemicals)	1	2	3	4	5
Origin of products (state of Nevada or not)	1	2	3	4	5
Naturally raised products	1	2	3	4	5
Environmentally friendly produced	1	2	3	4	5
Humane treatment of animal in production	1	2	3	4	5
Feed type (grain or grass)	1	2	3	4	5
Price	1	2	3	4	5

Below, we present you with several types of meat products including beef, pork, and lamb. What price do you normally pay for these products and what size package do you normally buy? If you are not certain about these features, we ask you to please provide your best guess, as the information is important for use in conducting analysis.

Features	**New York steak**	**Ground beef**	**Pork chops**	**Pork sausages**	**Lamb leg**
Price	$ /pound	$ /pound	$ /pound	$ /pound	$ /pound
Package	ounce	ounce	ounce	ounce	ounce

Q4. Please rank the places where you normally purchase meat products, with 1 indicating the most commonly visited, 2 the second mostly commonly visited, and so on.

_____ General grocery store
_____ Natural store
_____ Specialty meat store
_____ Internet
_____ Directly from farmers (e.g., farmer's markets)
_____ Other (please specify) _____

Section II: Willingness to Pay

Q5. In this section, you will be presented with two cases where products are compared. In each case, two products are offered side by side. The first product is one that you may commonly see in stores. The second product differs from the first product by two features and the price. Except for these differences, the two products are exactly the same in all other aspects. You are asked to indicate which product you may be more likely to purchase given the differences presented.

Remember that in the following two cases, the two products presented are identical in all other aspects, except the differences provided under the Product B description.

a. Consider the following two types of NEW YORK STEAKS

<table>
<tr><th>Product A</th><th>Product B</th></tr>
<tr><td rowspan="2">Well presented and commonly seen in stores.</td><td>Well presented.</td></tr>
<tr><td>Has the following additional features:
1. Grass fed (lean)
2. Produced locally (Nevada Grown)</td></tr>
<tr><td>Price: $8.00/pound</td><td>Price: $9.00/pound</td></tr>
</table>

Q6.a Would you like to purchase Product B?
☐Yes ☐No

If your answer to question Q6.a is "yes", what is the maximum price you would pay to purchase Product B?
_____ $9.00/pound _____ $9.25/pound _____ $9.50/pound
_____ $9.75/pound Other (please specify) $ _____ /pound

If your answer to question Q6.a is "no", what is the maximum price you would pay to purchase Product B?
_____ I would not purchase product B no matter what the price is
_____ $8.75/pound _____ $8.50/pound _____ $8.25/pound
Other (please specify) $ _____ /pound

b. Consider the following two types of GROUND BEEF PATTIES

Product A	Product B
Well presented and commonly seen in stores.	**Well presented.**
	Has the following additional features: **1. Grass fed (lean)** **2. Produced locally (Nevada Grown)**
Price: $2.00/pound	**Price: $4.00/pound**

Q6.b Would you like to purchase Product B?
☐Yes ☐No

If your answer to question Q6.b is "yes", what is the maximum price you would pay to purchase Product B?
_____ $4.00/pound _____ $4.25/pound _____ $4.50/pound
_____ $4.75/pound Other (please specify) $ _____ /pound

If your answer to question Q6.b is "no", what is the maximum price you would pay to purchase Product B?
_____ I would not purchase product B no matter what the price is
_____ $3.75/pound _____ $3.50/pound _____ $3.25/pound
Other (please specify) $ _____ /pound

Remember that in the following two cases, the two products presented are identical in all other aspects, except the differences provided under the Product B description.

a. Consider the following two types of PORK CHOPS

Product A	Product B
Well presented and commonly seen in stores.	**Well presented.**
	Has the following additional features: **1. Lean** **2. Produced locally (Nevada Grown)**
Price: $3.00/pound	**Price: $3.50/pound**

Q6.a Would you like to purchase Product B?
☐Yes ☐No

If your answer to question Q6.a is "yes", what is the maximum price you would pay to purchase Product B?
_____ $3.50/pound _____ $3.75/pound _____ $4.00/pound
_____ $4.25/pound Other (please specify) $ _____ /pound

If your answer to question Q6.a is "no", what is the maximum price you would pay to purchase Product B?
_____ I would not purchase product B no matter what the price is
_____ $3.25/pound _____ $3.00/pound _____ $2.75/pound
Other (please specify) $ _____ /pound

b. Consider the following two types of LEG of LAMB

Product A	Product B
Well presented and commonly seen in stores.	**Well presented.**
	Has the following additional features: **1. Lean** **2. Produced locally (Nevada Grown)**
Price: $5.00/pound	**Price: $5.50/pound**

Q6.b Would you like to purchase Product B?
☐Yes ☐No

If your answer to question Q6.b is "yes", what is the maximum price you would pay to purchase Product B?
_____ $5.50/pound _____ $5.75/pound _____ $6.00/pound
_____ $6.25/pound Other (please specify) $ _____ /pound

If your answer to question Q6.b is "no", what is the maximum price you would pay to purchase Product B?
_____ I would not purchase product B no matter what the price is
_____ $5.25/pound _____ $5.00/pound _____ $4.75/pound
Other (please specify) $ _____ /pound

Section III: Purchasing History

Q6. Below we list a number of different cuts for each type of meat we consider (beef, pork, and lamb). Please recall how much of the each cut you purchased within the past 30 days.

Beef cuts	**Quantity purchased (in pounds)**
Fillet	_____
Rib eye	_____
Top loin	_____
T-bone steak	_____
NY steak	_____
Prime rib	_____
Preformed hamburgers or meatballs	_____
Ground beef	_____
Other (please specify)	_____

Pork cuts	**Quantity purchased (in pounds)**
Shoulder	_____
Belly	_____
Ribs	_____
Leg	_____
Loin	_____
Ground pork	_____
Other (please specify)	_____

Lamb cuts	**Quantity purchased (in pounds)**
Shoulder	_____
Rack	_____
Breast	_____
Leg	_____
Loin	_____
Shank	_____
Other (please specify)	_____

Section IV: Demographics

Q7. How many members are in your household, including yourself?
☐ 1-2
☐ 3-4
☐ 5-6
☐ 7 or more

Q8. Where is your residence located?
☐ Northern Nevada
☐ Eastern Nevada
☐ Southern Nevada
☐ Other: _____

Q9. Are there any children under 18 in your household?
☐ Yes
☐ No

Q10. What is your marital status?
☐ Married
☐ Single

Q11. Which of the following categories best represents your 2004 annual household income?
☐ less than $30,000
☐ $30,001 to $45,000
☐ $45,001 to $60,000
☐ $60,001 to $75,000
☐ $75,001 to $100,000
☐ above $100,000

Q12. Which of the following categories best represents your completed level of education?
☐ Middle school
☐ High school
☐ Some college
☐ 2-year associates degree
☐ 4-year college degree
☐ Graduate degree

Q13. Which of the following categories best represents your employment status?
☐ Full time employed
☐ Part time employed
☐ Unemployed
☐ Homemaker
☐ Retired
☐ Student

Q14. Do you or your direct family members work on a farm/ranch, feedlot, or slaughter plant?
☐ Yes

☐ No

Q15. What is your gender?
☐ Male
☐ Female

Q16. What is your age?
☐ 18- 25
☐ 26-35
☐ 36-45
☐ 46-55
☐ 56-65
☐ 66-75
☐ over 75

Q17. What is your ethnic background?
☐ White
☐ Black
☐ Native American
☐ Mid-eastern
☐ Asian
☐ Hispanic
☐ Other