Feasibility Study

NW New Jersey Food Processing & Innovation Center

Greenfield Packing Plant

Oxford, NJ

Conducted for:

Board of Directors

Richard Cotton
Glenn Fohr
William Rymon

November, 2023

Conducted by:

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DISCLAIMER:

Results predicted in this feasibility study are speculative and based on the best information available to the authors at the time of writing. This feasibility study predicts a very positive financial outcome in the first three years of operation. The author makes no claims to actual results. Further, the author is very experienced in start-up and start-over meat processing businesses and is certain that unforeseen events can and will happen during start-up, which will have a negative impact on financial outcomes. These unforeseen events cannot be predicted and are extremely difficult to build into a financial model. Nevertheless, the goal of the enterprise should be to build a solid and experienced management team who can maneuver and manage through difficulties when they arise.

I. Executive Summary

NW New Jersey Food Processing and Innovation (herein referred to as FPIC) non-profit company based in Oxford, NJ planned by businessman, Richard Cotton. A newly designed greenfield meat processing plant will be built with donated funds and debt.

The company will provide:

a) Processing services to livestock producers and meat marketing companies.

b) Fresh and frozen subprimals, ground products, some portion-cut items, further processed items (curing, smoking, sausage manufacture, and bone-broth manufacture), edible offal, and byproducts from beef and hogs and lambs. Also, fresh, and frozen halves and whole lamb and goat carcasses will be sold to retail and wholesale customers. All beef, lamb, and goat products will be certified Halal for those consumers desiring ritual certified meat.

c) A location for training community college students, vocational agriculture students and culinary institute students.

Warren County is not huge in population, but it is near large population centers. The location is ideal for the proposed plant given access to such a massive customer base all while being in a rural setting suitable for small farms. Farmers across New Jersey are disenchanted about the lack of suitable meat processing capacity and claim it is limiting the number of livestock they can produce.

A livestock harvest and processing plant sized at approximately 24,500 sq. ft. (32,000 sq. ft. with animal pens) has been preliminarily designed for harvest, processing, further processing (grinding, portion-cutting, and cooking/smoking). It will be located on the outskirts of Oxford, NJ on property owned by Warren County. The plant will be capable of processing 4,200 beef cattle, 1,200 hogs, and 7,200 lambs and goats per year. It is expected that approximately 50% of the livestock processed will be custom processed as a service to regional livestock producers. The plant will also serve as training for the community college and local vocational programs with a classroom designed into the plant. The estimated cost to build and equip this plant is estimated to be approximately $10 million. The plant is expected to employ approximately 37 employees. Working capital needs are estimated at $1.4 MM. The sources of funds to meet the capital requirements will be a combination of charitable gifts and debt.

The company is projected to have a negative EBITDA (-$347,000) with a negative Net Income (-$1.3 M) in its first year of operation. In the second year, EBITDA is projected to increase to $1.4 M and Net Income becomes positive at $433,000. The plant is projected to begin cash flowing in month 22 of operation. When the plant is fully ramped up, the third year performance is projected to yield an EBITDA of $2.1 M with Net Income at $1.2 M. In Year 3, the Return on Sales (ROS) is projected to be 12 % and a Return on Equity (ROE) is 24 %; both ratios are outstanding for a food business.

Beginning the second year of operation, cattle under 30 months of age, hogs, lambs, and goats resulted in positive net income both as custody animals (animal purchased and meat sold by company) and those custom processed for a fee. In the third year, the net income per animal processed was shown to increase significantly with all types of livestock.

The financial models represented in this feasibility study are the most sensitive to the wholesale price of meat sold to customers. To a lesser extent the models were also sensitive to the purchase price paid for the live animal. A significant discovery of sensitivity testing was the importance of the smokehouse on the profitability of each custody animal processed. If specific meat products were not smoked to manufacture further processed items such as hams, bacon, cooked sausages, and jerky, the meat would have to be sold as fresh subprimals or ground. Nevertheless, smoking these items allows for much higher margins and is a critical step in the business.

Is It Feasible?

This study, through the following sections, will demonstrate the economic, market, technical, financial, and management feasibility of the proposed project. The fact that the company is organized in such a way as to primarily benefit a) livestock producers in the region, b) current and future students who desire to improve their skills in food production and processing, and c) to provide trust to customers of the business that their food is coming from a place with a great deal of transparency and benefits (a) and (b) above. Therefore, it is the professional opinion of Food & Livestock Planning, Inc. that this project is feasible in the five areas described and is worthy of funding.

Introduction to the Study:

Mr. Richard Cotton, real estate developer, livestock producer, and businessman is organizing a meat processing business in Oxford Township, NJ. The processing company is legally organized as a 501 C-3 Corporation and is called NW New Jersey Food Processing and Innovation Center (herein referred to as FPIC). The plant has been preliminarily designed with a plan in place to solicit donations from several sources to help pay for it. Warren County will dedicate approximately 12 acres near their landfill to hosting the plant with a long-term lease. The physical address is 218 Mt. Pisgah Ave., Oxford, NJ. This township only has a population of 2,500 people according to the 2010 census; however, it is in close proximity to the New York City and Newark metropolitan areas.

The new plant will be designed as a multiple-species plant for 25 beef equivalents per day (3 hogs = 1 B.E. and 6 lambs = 1 B.E). It will operate under the purview of USDA FSIS inspection and food-safety requirements; it will have an on-site inspector. This plant will focus on harvest, processing, and further processing of beef cattle (both under and over 30 months of age), hogs, lambs, and goats. Also, the plant will sell services to other producers (custom processing) for a fee. All custody meat products processed will be sold via wholesale channels. The plant will likely be certified Halal to accommodate customers desiring ritual slaughter. The plant is too small to accommodate Kosher harvest.

Food & Livestock Planning, Inc. (F&LPI) has been retained to conduct the feasibility study and ongoing assistance with strategy and development of the project.

This feasibility study examines the potential for the new NW New Jersey Food Processing & Innovation Center.

II. Economic Feasibility

Introduction:

A business strategy is underway for Warren County to host the future processing plant with a long-term land lease. The site has sewer lines to the municipal wastewater plant and access to three-phase electrical power and natural gas.

Diligent Innovation of Momence, IL has preliminarily designed the plant. Diligent Innovation will design the plant, provide all utility demands, will manufacture the rails, shackles, and much of the infrastructure, and will install all process equipment, wastewater equipment, and the hot water system. A local contractor will be engaged by Mr. Cotton, to oversee construction and manage the subcontractors.

A. Minimum Amounts of Required Inputs

An Enterprise Financial Model was prepared to project economic performance of the project. Total Capital input required to complete this project is estimated at approximately $10 million with approximately $1.4 M of that being in the form of Working Capital to complete construction, purchase cattle (& inputs), and to begin operations.

The actual plant is estimated to be around 32,000 square feet (including livestock pens). The plant's wastewater will be treated by the township municipal wastewater plant. It is being planned for waste bones, fat, blood, paunch, and soft tissues to be composted near the plant site.

Any new processing plant must start with a reduced throughput during the first months of start-up. New employees will need to be hired and trained in new skills; there will be some lag-time in developing flow-through logistics (incoming livestock and outgoing product); and the new plant will need to have all the "bugs" worked out. Production (throughput) for FPIC is projected to ramp-up over a two-year period. Therefore, in the first year of operation, the minimum amount of beef equivalents is 2,366 (1,300 cattle, 600 hogs, and 5,200 lambs and goats).

During the ramp-up, employees will be added as needed and as can be trained. At full operational strength (in Year 3), the Financial Enterprise model estimates 31 Direct Labor and 6 Management employees. Summary Tables of projected Labor (at full operational strength) are included in Appendices 1 and 2.

A listing of Projected Plant Overhead and Operational Expenses for Year 3 of operation is included in Appendix 3.

At full operational capability (Year 3), the throughput of cattle is estimated to be approximately 3,400 beef equivalents (1,800 cattle, 600 hogs, and 7,200 lambs and goats). In order to process this number, the plant is projected to require approximately $133 thousand for Utilities, $4.6 million for Livestock Purchases, $1.6 million for Direct Labor, and $767 thousand for General and Administrative expenses.

For more detail on the Financial Model, see Section V – Financial Feasibility. Also, the Enterprise Financial Model (MS Excel Workbook) is available for review.

B. Contracts in Place and Contracts to be Negotiated, including Terms and Renewals

As the project is in its very early phases, very few contracts are in place, and most have not been negotiated or signed. However, each of the following items are major building blocks of the project and will need contract negotiations during the development process. Other minor contracts will also be negotiated at the appropriate times, as well. As previously noted, Food & Livestock Planning, Inc. has been retained to manage through this process. Food & Livestock Planning has decades of experience in the meat packing industry – especially in the critical areas of project planning and strategy for start-ups and start-overs.

1. Plant Design & Construction:

   As has been previously noted, Diligent Innovations has been retained for designing the process flow and overall building. Diligent Innovations has an in-house design/engineering division and an in-house manufacturing and construction division. Richard Cotton is very knowledgeable of contractors in the region and will select a General Contractor who will manage the subcontractors. A copy of the design is presented in Appendix 4.

2. Equipment:

   i. Slaughter and Fabrication: There are two industry leaders for automated slaughter and fabrication equipment: Marel and Frontmatec. Both are European companies with divisions headquartered in the USA. These will be presented for the owners' consideration. One note: the size of this project may

be too small to economically employ automated slaughter and fabrication equipment. There is certainly a savings in labor cost; however, this equipment is quite expensive. Due to the overall small size of this operation, this equipment may not be economically feasible.

Equipment will likely be supplied by a combination of UltraSource and Diligent Innovations (will manufacture hide puller, etc,).

ii. Cleaning and Sanitation: Due to its importance to the overall operation, one specific type of equipment should be mentioned separately; that is, cleaning and sanitizing equipment. Food Safety is one of the core competencies for maintaining profitable operations.

Summary – Equipment: The list of all the different types of equipment (and providers of each) is well beyond the scope of this feasibility study. However, Food & Livestock Planning works closely with all of these companies; and will guide the owners in final decision-making and negotiation.

3. Maintenance Contracts:

Maintenance contracts will be provided by each individual equipment supplier.

For example, UltraSource provides a top-flight service contract for equipment purchased through them. As part of their maintenance agreement[1], UltraSource will provide round-the-clock phone and internet support. Further, many pieces of their equipment come equipped with cameras and internet capabilities. The UltraSource technician can visually inspect the process over the internet; they can even take control and operate the equipment in order to do troubleshooting and (some) repair.

Additionally, many of these companies have liberal return policies. Again, UltraSource will return a piece of equipment if the owners decide they need a bigger or faster version; or if the owners just decide not to install it.

Other equipment providers, likewise, know that keeping the equipment running is extremely important to the operation. Their maintenance plans are also focused on doing just that for the operations.

4. Financing:

[1] Note: This is not a promise of service; read the contract carefully. However, UltraSource is well-known for their service and return policies.

It is assumed a large percentage of the cost to build and equip the processing plant will come from several large donations (discussed later). Debt financing will be sourced for working capital and the capital balance for the plant and equipment. As of this writing, this process has not yet begun. However, the principals clearly understand the overall importance of funding this project. Mr. Cotton is well versed in locating financing for operating capital.

For further information, see Section V.A. – Commercial Underwriting.

5. Financial Modeling, Feasibility Study and Project Consulting:

Food & Livestock Planning, Inc. (F&LPI – these authors) has been engaged to perform this Feasibility Study (with the attendant Enterprise Financial Modeling). An executed contract is in place. This report is the result of those efforts. Further, the owners have engaged F&LPI as on-going consultants through the design, construction, and start-up phases of plant operations. The intention is that F&LPI will provide management and guidance for the principals as well as direct engagement of service and equipment providers. F&LPI will also assist with the hiring of key management personnel. The F&LPI website is listed in Section VI. – References; a brief overview of the team is listed in Section X. – Consultant's Expertise.

6. Legal:

Legal counsel for setting up the company and guiding the legal structure of the business is Katherine A. Fina, Esq. with the law firm Florio, Perucci, Steinhardt, Cappelli, Tipton & /Taylor, LLC, 91 Larry Holmes Drive, Suite 200, Easton PA 18042.

Ms. Fina will also provide oversight of legal contracts.

7. Animals – Custom Kill Fee: Currently

Custom harvest is a service provided to livestock producers. The plant does not purchase the animal, nor does it sell the meat. It merely provides the facility, labor, and service: the animal is killed, processed, and packaged according to customer specifications.

The Custom pricing[2] is currently structured for financial modeling for this project as follows:

[2] The Rutgers Livestock Processing Needs Survey (2021) found the mean slaughter cost of beef, hogs, lambs/goats as $114, $88, and $46, respectively; and the processing fees for beef, hogs, and lamb/goats was $0.78/lb.,

	Cattle	Hogs	Lambs/goats
• Kill Fee, $ / hd:	100	85	150
• Processing Fee*, $ / lb.:	0.80	1.00	

** (pounds of hanging weight)*

The business has not yet officially developed the custom kill contracts (or cutting options). These fees will officially be advertised within three months of the plant being opened.

8. Rendering (removing bones, excess fat, soft tissues, blood, and paunch)

The initial intent of the plant is to dispose of inedible rendering by using compost. There must be several acres available for layering the waste items on clay-packed earth or concrete to be mixed with other organic matter such as wood chips, ground wood shavings, or ground straw and turned with a loader and tractor. This is especially useful in disposing of blood and the paunch materials of ruminants. There is a cost to composting with labor and grinding equipment for the bones, but it can be sold as organic fertilizer. Further, an environmental engineer will need to be engaged in order to design the facility properly.

As no final decision has been reached regarding composting, no revenue stream is included in the enterprise financial model at this time.

Alternatively, Darling Ingredients ("Darling" or "DII") is the largest rendering company in the U.S. with multiple locations. Generally, smaller packing plants must pay for a renderer to remove the waste portions of the slaughter and fabrication process. However, once the operation achieves a certain size, the renderer can realize significant revenue from these services and is willing to provide part of that revenue stream back to the packing plant. As of this writing, these services have not been discussed or negotiated with Darling (or other renderers). As such, there is neither a cost nor a revenue amount associated with the rendering in the enterprise financial model.

9. Hides:

$0.85/lb., and $60/lb., respectively. Because it is not the intent to make as much money as possible, the rates chosen were done so as a more conservative but industry-competitive rates.

For cattle hides, the closest hide company will be Boston Hides, Boston, MA. Tasman has a plant in Louisville, KY and AJ Hollander has a plant in Morriston, TN, which are a long distance away. The hogs will be scalded and will not produce a hide and the lambs/goats are also intended to be scalded to produce a hide-on carcass. As no terms have been finalized, the enterprise financial model has a modest price for hide sales: $10 per hide for cattle under 30 months and $5 for cattle over 30 months.

10. Insurance:

The typical insurance packages which will need to be purchased are: (1) Workman's Comp, (2) Employee / Benefits, (3) Business / Recall Insurance/Product liability, and (4) Property insurance. The owners may have preferred suppliers; however, there are several national (and regional) suppliers of all these different types: Nationwide, Farm Bureau, Anthem / BCBS, just to name a few.

These and other providers will all be pursued as the project moves forward.

11. Livestock Supply:

As previously noted, livestock will either be purchased based on current market conditions, or the livestock ownership will be retained through the plant into the meat where the plant is just performing processing services for a fee. There are several factors which will influence availability of livestock for processing: (1) business relationship between the livestock producers and the plant, (2) geographical location of the farms producing the livestock in relation to the location of the plant and (3) competition. Each of these factors is discussed in detail further down in this document. However, to briefly summarize each:

a. Business relationship. Producers will sell to or will process their livestock in a facility they trust.
b. Geographic Location: According to a published producer survey of New Jersey cattle, hog, and small ruminant producers by Rutgers University in 2021, the largest percentage of respondents traveled between 20 and 60 miles for processing, but there were a small percentage of respondents who transported their livestock over 100 miles for processing. The availability of livestock in this region will be discussed in greater detail in Section III.
c. Competition: FPIC will have to compete in the auction barns or direct from the farm in order to purchase livestock. For custom processing, FPIC will have to compete with other small processors based on price and quality of service.

12. Off-Take:

Although signed, off-take agreements are certainly not required prior to plant start-up, it would be helpful to begin these discussions well in advance. Nevertheless, the meat industry typically does not contract meat to foot service and retail customers. It typically is relationship selling with bid-ask price negotiations.

The marketplace will be discussed in detail in Section III.

13. Other Contracts:

Another class of contracts which will need to be negotiated are utilities (and other similar items).

a. Standard Utilities:
   It is assumed that the selected site will have access through municipal, county, coop, or local suppliers of the following:
   - Water: Supplied by the municipality
   - Electricity: will need 3-phase at site
   - Gas / Propane:

b. Other Utilities:
   - Waste-water Disposal: will be municipal POTW
   - Internet: high-speed / fiber optic is preferred.
   - Trash / Waste: standard / industrial service

c. Other Similar Items:
   - Software: ERP / Accounting, Inventory / Tracking, Sales, Food Safety
   - Consumables, in general:
     - Packaging
     - Linens & Uniforms
     - Knives, Gloves, Chemicals
     - Others of similar type
   - Other miscellaneous contracts

Summary Other Contracts: These are quite similar to any other industrial plant site.

C. Environmental Risks

1. Wastewater:

Beef, hogs, and lambs/goats will require approximately 500 – 600, 100, and 85 gallons per animal, respectively of gallons of water per animal carcass per day. Therefore, this is also the approximate volume of wastewater produced.

Wastewater will be disposed of by Publicly Operated Treatment Works (POTW).

a. Wastewater Disposal – POTW

All process wastewater from the slaughter floor should pass through a screen to catch and separate solids.

A five-day Biological Oxygen Demand (BOD) value is used to measure the level of treatment needed to discharge wastewater safely. The BOD for all food-processing wastewater is relatively high compared to other industries. A high BOD level indicates that wastewater contains elevated amounts of dissolved and suspended solids, minerals and organic nutrients containing nitrogen and phosphorus. The following is assumed for the proposed plant:

The peak daily flows of wastewater are not large = approximately 12,500 gallons per day. If peak discharges need to be reduced by the municipal waste-water treatment plant, a surge tank could be installed to reduce the peak discharge.

Composition of wastewater from a packing plant [a, b]

	Raw Effluent, mg/l	After Screening, mg/l
Biological Oxygen Demand (BOD)	4,440	2,420
Chemical Oxygen Demand (COD)	6,478	3,563
Suspended Solids (SS)	4,033	1,008
Total Nitrogen	330	182
Total Phosphorus	61	34
Oil & Grease	1,711	428

[a] Source – Food and Livestock Planning, Inc.
[b] Effluent does not include blood from the sticking process

The municipality may charge a fee based on BOD loading. Also, these charges may be a negotiating tool for the plant site development. Some municipalities may offer to treat the wastewater free of charge as incentive to locate in the area.

b. Wastewater Pretreatment-On-Site

At a minimum, wastewater leaving the plant should be screened. Then pretreatment on the plant site can be the use of a dissolved air flotation system (DAF); or a sequence of settling tanks. The plant may be designed with a multiple sequential concrete tank system, which serves as a type of anaerobic and aerobic pretreatment as well as a settling basin for solids. It is expected that both pretreatment options will significantly reduce the BOD loads.

D. Impact of Processing Capacity Expansion on Producers, Consumers, and the Area Economy, Including New Markets Created

1. Area Economy

Whenever a new agricultural business comes online, there is a multiplier effect on both upstream and downstream economics. With new outlets for livestock, the local ranchers will have the ability and incentive to increase herd and flock sizes and / or throughput – thereby increasing upstream economics from all supply sectors: breeders, feed and animal health products, equipment manufacturers, and other associated agricultural businesses. This translates not only to upstream revenue, but also increased agricultural and product supplier jobs for the entire region. Once the plant comes up to full throughput capacity (in Year 3), the plant is expected to employ 31 direct laborers and 6 to 9 management with an annual Payroll of approximately $2.17 million (See appendix 1 and Table V.O. 3). The Revenue is expected to be approximately $9.5 million (See Table V.O. 3). These jobs will be stable manufacturing and administrative jobs with above-average wages. Along with the direct jobs of the employees, there will be a multiplier effect on the local and regional area with additional job creation for employee's families as well an increased revenue for local businesses, housing suppliers, and other affiliated service industries. Lastly, the plant revenue and employee payroll will increase the local and state tax base.

In order to quantify these initial effects and the multiplier effects on the local economy, Lightcast was engaged to conduct an Economic Impact Scenario (EIS). The EIS covered a 3-county area in New Jersey: Warren (site of the plant) and the neighboring counties of Morris and Hunterdon. Two neighboring states in Pennsylvania that was studied were Monroe and Northampton. For extracts from that report, See Appendix 6.

The summary data is listed, as follows:

- Change in Earnings, $ 4,318,812

- Change in Jobs, # 72
- Change in Taxes on Production and Imports, $ 538,429

The breakout for the earnings and jobs are listed in the following:
Effect Earnings, $ Jobs

- Initial $ 2.2 Million
- Direct $ 1 Million
- Indirect $ 360,827
- Induced $ 784,877

The Initial Earnings includes both the annual payroll as well as the value the jobs bring to the plant; Direct is effect on the local economy / suppliers who are supplying goods and services to the facility; Indirect includes economy / suppliers who are supplying goods and services into the locale in order to support those direct suppliers; Induced includes earnings of non-facility economy (e.g., grocers, housing, etc.). The sum total ($4,345,704) is listed in the first set of bullet points; this is the total increase in earnings for the local region due to bringing this industry to Oxford, NJ. The same effect is true for Jobs: the plant will hire approximately 40 employees; however, the net multiplier effect will be creation of an additional 32 jobs, for a total of 72 created by bringing this industry to Oxford, NJ.

2. Impact on Project Customers

The downstream Customers of FPIC will enjoy the increased availability in supply of locally produced meats from this project. The national and regional distributors have ready access to plenty of products; however, as previously noted, they reserve a portion of their capacity for locally produced meat. They will enjoy the benefit which FPIC will bring with an increased supply of this product.

3. Impact on Agricultural Producers

The availability of new processing plant harvest capacity will have a tremendous impact on local and regional livestock producers who are seeking a local outlet for their livestock. This is the most positive impact of the Rutgers 2021 survey with livestock producers. As previously stated according to this survey, there is a large pent-up demand for custom processing services.

4. New Markets Created

The Marketing Plan is described elsewhere in this document (See Section III. – Market Feasibility). When the new plant comes on-line, there will be new markets of beef, pork, lamb, and goats. These beef cattle will also be further processed into ground

beef, portion cut steaks, and some whole muscle cuts to be processed through the smokehouse for jerky, snack sticks, and other specialty products. For hogs, there will be new pork products of fresh pork and cured and smoked hams, bacon, and sausage items. Lambs and goats will largely be sold in carcass halves and wholes. Lambs and goats will not be processed on the same day as hogs so the meat can be certified Halal. The Custom Harvest effort will provide a service for regional livestock producer customers who need a plant within a reasonable distance and with reasonable fees and are not booked too far in advance to provide processing services.

Each of these livestock production sectors which supply livestock into various product lines will have an increased opportunity for sales and throughput. As the planned capacity is larger than almost all meat processing plants in the region, this project represents a significant outlet for these livestock producers.

E. Alleviation of Supply Chain Bottlenecks

In 2021 a study was conducted and published by Rutgers University (Rutgers Livestock Processing Needs Assessment Survey) that demonstrated that a majority of livestock producers in New Jersey were dissatisfied with current processing capacity in the state and that availability of slaughter and processing limited their growth potential. A new livestock processing facility with greater capacity to process livestock than which currently exists in the state would alleviate a significant amount of the bottleneck which currently exists.

1. Livestock Supply:

As previously reported in II. F. 1, the number of cattle and calves and beef cows in the 4 counties in NW New Jersey represent 50% of the cattle in the state. The number of lambs and goats represents 43% of those produced in the state. The hog numbers remain quite small both in these four counties and in the state. Pennsylvania produces many more livestock than New Jersey and some of the livestock will from Eastern PA would be expected to use this new processing facility.

Nevertheless, these four counties are important to livestock production in the state and are quite representative of areas represented in the 2021 Rutgers study where livestock producers complained about lack of available capacity to process their livestock. Most of the survey participants claimed that they would increase their livestock production if more USDA-certified meat processing plants were available. All of the livestock needed for harvest and processing are commodities; they are fungible and are available. It may take a few years for all the livestock producers in the region

to know about FPIC but once the word is out and the plant satisfies its producer suppliers, there shouldn't be any supply issues.

2. Consumables:

During the recent COVID incident, the meat processing industry experienced a few shocks, to be sure. However, as meat is considered essential, almost all affiliated suppliers of packing plants did not experience any sustained disruptions in service.

The COVID incident is about the worst possible economic shock which could be experienced. As such, should another shock hit the market, these suppliers will be able to meet any demand from FPIC with only minor delays in deliveries of any consumables.

3. Finished Product Shipping:

As with Consumables (See # 2, above), the trucking industry weathered the COVID incident with only minor disruptions and delays. There should be limited bottlenecks for shipping of outgoing products from FPIC. And, as previously mentioned, delivery may be an add-on business with FPIC.

F. Evidence that Company's Systems are Resilient to Economic Health and Information Technology (IT) Shocks

1. Economic Shocks:

a. Retail / Owned Product:

As is evident with the Stress testing of the enterprise financial model, economic shocks which increase the cost of inputs, or the price of outputs will influence financial performance. However, under the given stressors, the 10 % negative deviations should not cripple the plant and it should be able to weather this level of economic shock. Further, as discussed, when one of the listed stressors hits the business, the other will usually follow; there may be some lag time, but the relationship usually normalizes. (See Stress Testing.)

b. Custom:

The plant has limited control over the custom supply of animals. However, the plant can shift towards owned animals and increase throughput for the retail

channels. The custom kill segment contributes up to 50% of the plant throughput. The operation could withstand this sort of economic shock for an extended period if they began to purchase, process, and sell the meat from purchased livestock provided meat sales can be increased.

2. Health Shocks:

During the recent COVID incident, one major packing plant shuttered its operation. However, meat supply is considered essential and most packing plants continued operation unabated.

3. IT Shocks:

Although the equipment to be used by FPIC will be state-of-the-art, it can be operated without direct access to an internet connection. The other business operations which are necessary to provide business continuity (Sales, Logistics, Maintenance) can be executed without direct access to an internet connection. Loss of internet access would be an undesirable condition, but losing the internet connection will not shut the plant down; the business will be hampered but should be able to continue indefinitely without access.

4. Utility Shocks:

The electrical and natural gas providers for the site have not yet been determined. Although it is unlikely that these utilities (Electric and Gas) will be suspended for any extended period of time, the loss of either one would shut down the plant until service was restored. Most meat processing plants work out a redundancy plan with their utility companies.

III. Market Feasibility

A. Competition

1. Competitors:

There are 16 small USDA inspected plants registered in New Jersey and many in Pennsylvania providing processing services to livestock producers. As previously noted, according to a published producer survey of New Jersey cattle, hog, and small ruminant producers by Rutgers University in 2021, the largest percentage of respondents traveled between 20 and 60 miles for processing, but there were a small percentage of respondents who transported their livestock over 100 miles for processing. This same study found that the average cost to harvest and process beef cattle was $114 + $0.78/lb.; hogs = $88 + $0.85/lb.; lambs = $46 + $0.57; and goats = $44 + $.60/lb. The largest complaints from producers are the extended wait times and the cost of processing. The reason for both complaints is the size and scale of these small plants.

A survey conducted by F&LPI in 2004 in New York interviewing 31 and 40 USDA inspected plants in New York and Massachusetts, respectively, found the range in beef cattle numbers processed (# hd / wk.): 5 – 375 with the medium being close to 10. This statistic emphasizes the point that regardless of the number of plants available, the fact they are very small still creates capacity issues for livestock producers in the state and region.

Competitors: USDA-FSIS Inspected Beef Plants located within an hour of Oxford Township, NJ. Note, the PA listed plants have been used by the principal of this project due their proximity to their livestock operation.

Facility location	Distance from Oxford, NJ
Lehigh Valley Meats, Nazareth, PA	22
Kingdom Provisions, Pipersville, PA	36
Springfield Meat Co., Richardtown, PA	41
Pasquilchio Bros., Scranton, PA (NOTE: they do not harvest, only process)	66
Mecca Halal, New York City, NY (sell Halal beef, lambs, and goats in NYC	78

ENA Packers, New York City, NY (sell Halal beef, lambs, and goats in NYC)	78
Azis Halal, New York City, NY (sell Halal beef, lambs, and goats in NYC)	78

2. Non-Competitors: Non-Competitors would consist of the three larger beef processing plants in PA all processing in excess of 700 cattle per day.

B. Type of Project: Service, Product or Commodity based

1. Product:

A major focus of the plant will be on Product – Custody (Owned) cattle, hogs, lambs, and goats will be purchased for harvest, processing, and sale of meat by FPIC.

After the plant is completely ramped-up and becomes fully operational, the Financial Model predicts that this sector of production will comprise approximately 50 % of the throughput.

2. Service:

Initially, the primary focus of this business will be Product-based. Once the owners get the plant through the initial commissioning and start-up "bumps", and once the line-workers become fully trained and are producing high-quality butchering services, the plant will begin adding Custom-kill services for local and regional beef cattle producers.

The ramp-up plan in the Financial Model indicates this addition of Custom-kill for beef and pork to begin in month 4 of operation, a conservative but reasonable expectation. It is expected that these custom-kill producers may be using the services for processing livestock for their own consumption but may also have their own down-stream customers who will be taking retail product.

Summary: The business will be both Product-based and Service-based.

C. Target Market, New versus Established

Any new processing plant must start with a reduced throughput during the first months of start-up. New employees will need to be hired and trained in new skills; there will be some lag-time in developing flow-through logistics (incoming livestock and outgoing product); and the new plant will need to have all the "bugs" worked out. Production for FPIC is projected to ramp-up over a two-year period.

As FPIC will be a completely new business, all animals processed through the new facility, all will be considered "New" markets. Each of these market sectors is described below.

a. Owned / Custody: Lean Cows: The intention is to start ramping-up the flow-through logistics with Lean Cows. Lean cows should be readily available as cull, reproductively unsound beef and dairy cows and should be relatively inexpensive. They make very good carcasses with which to teach a new labor pool about fabrication. If mistakes are made, the meat just goes into grinding for hamburger. For FPIC, once the employees are trained, the intention is to keep processing cull cows indefinitely because of their availability and the huge demand for ground beef.

Most of this product will go into the grinding markets – mostly hamburger, with some smokehouse products such as summer sausage and snack-sticks.

The hamburger will be targeted toward traditional hamburger markets such as HRI and school systems. One probable avenue is for MPIC to seek opportunities with the local and regional counties to supply school food programs.

Additionally, the trim can be sold to grinding operations in the East Coast grinding operations. An example is Pasquilichop Bros. in Scranton, PA. Further, MPIC plans to take whole muscle cuts from selected Lean Cows and process these whole muscle cuts into jerky. The percentage which will contribute to jerky will be selected from the younger cull cows and / or those with higher quality carcasses.

b. Cattle under 30 months and Market Hogs: Traditional subprimals for grain-fed and grass-fed cattle and fresh loins and ribs from market hogs will be sold through traditional retail and food service channels. Beef and pork trim will be ground and sold as ground items or further processed into precooked sausages. Pork bellies and legs will be cured and smoked.

c. Lambs and goats: There are many ethnic groups in the Eastern Seaboard desiring Halal certified lambs and goats. FPIC intends to design the processing plant to accommodate Halal slaughter. Largely, these carcasses will be sold as half and whole carcasses. Nevertheless, lamb carcasses can be broken down and cut into subprimals if desired by customers.

d Offal / Variety Meats: The plant will be designed to process and sell tongues from cattle and hogs, oxtails from cattle, and liver from all livestock. In addition, the plant will be designed with the space and equipment to manufacture and sell all tripe products from beef. These items are in high demand amongst ethnic populations.

4. Custom:

As previously stated, there is a dearth of Custom-kill service available in New Jersey and Pennsylvania (See previous table). However, the Rutgers study previously mentioned found that New Jersey livestock producers possessed a huge frustration as to wait times from these small plants to a point where they claimed it restricted the number of livestock they could raise. With this pent-up demand for Custom-kill services, this aspect of the business will grow rapidly and may continue well into the foreseeable future. The initial, primary target will be regional producers in New Jersey and Pennsylvania.

Depending on the owners' future goals, this sector may possibly attract customers even from other nearby East Coast states. Food & Livestock Planning is aware of another custom kill processing plant located in Florida which attracts customers from as far away as Ohio.

D. End User Analysis, Captive versus Competitive

1. New Products from Beef, Hogs, Lambs, and Goats:

End-users of these products will be traditional meat customers – strictly competitive. These customers are classified into the typical Retail and Restaurant trade with product moving through traditional trade channels: direct to grocery, direct to restaurant, and through distributors to the same end-user outlets. Furthermore, it is expected that many of the lambs and goats will be sold directly to consumers.

2. Custom:

Due to the size of the FPIC facility, local and regional custom-kill clients with need for larger throughput will become *de facto* captive end-users. There are few other slaughter & processing facilities within the trade territory that can handle these volumes.

E. By-product Revenue Streams

1. Hides:

As previously mentioned, Boston Hides may have the closest hide processing facility. AJ Hollander and Tasman Hides operate processing facilities in Kentucky and Tennessee. The Financial Model has a modest price of $10 for under 30-month beef cattle and $5 for cull cows per hide included. Once the plant is under construction, an off-take agreement will be pursued with a hide company.

2. Offal / Variety Meats:

The current plan is to sell all of the offal which can be processed and sold into food production channels. This includes hearts, liver, oxtails, tongues, lips, and tripe from beef cattle. These are included in the enterprise financial model. The only offal which will not be sold as food will be lungs, condemned livers, and intestines; all of which will be rendered or composted. If it is too difficult to bone the heads of beef cattle, customers will be sought to purchase the entire head. Otherwise, tongues will be removed, and the entire head rendered or crushed for composting.

3. Rendering:

Darling has a rendering facility in Newark, NJ and several in Pennsylvania. Initially, rendering may be a cost since the volume will not be very large. After the plant is fully

operational, hopefully rendering should not be added cost but it will be dependent on the distance to the rendering plant and the volume picked up.

4. Compost:

There is a cost associated with disposing all waste products into the rendering stream. However, FPIC will pursue composting of paunch manure and blood – the two items which make typical rendering undesirable.

As has been noted, the blood and paunch material will be separated from other waste streams and will (likely) be composted somewhere near the site. An additional source of organic matter (i.e., wheat straw, yard waste, wood shavings) will be needed to serve as the substrate for this operation. If bones (skulls, feet, and carcass bones) are going to be composted, the compost facility will require a grinder to reduce the particle size of bones otherwise they will not break down.

The associated composting operation will provide value to the operation through the production and sale of organic fertilizer – both directly, through a revenue stream, and indirectly, through increased value of rendering material. However, as this aspect of the project has not been fully defined, the model takes a conservative approach and does not include any revenue from this by-product.

F. Industry Risk

1. Livestock Supply:

The data in the following table represent Warren County and surrounding counties in New Jersey.

Table III F 1. Livestock numbers in New Jersey (USDA – NASS 2017)

	Cattle and Calves	Beef Cows	Hogs & pigs	Sheep & Lambs
Warren County, NJ	4,012	1,450	502	1,691
Sussex County, NJ	3,952	1,255	919	1,263
Morris County, NJ	602	439	165	1,578

Hunterdon County, NJ	4,007	1,655	761	3,177
Statewide New Jersey	27,599	9,370	9,000	17,791

As of January 01, 2017 (the latest recorded livestock census) the number of cattle and calves and beef cows in the 4 counties in NW New Jersey represent 50% of the cattle in the state. The number of lambs and goats represents 43% of those produced in the state. The hog numbers remain quite small both in these four counties and in the state. Pennsylvania produces many more livestock than New Jersey and some of the livestock from Eastern PA would be expected to use this new processing facility.

Nevertheless, these four counties are important to livestock production in the state and are quite representative of areas represented in the 2021 study where livestock producers complained about the lack of processing capacity to process them. Most of the survey participants claimed that they would increase their livestock production if more USDA-certified meat processing plants were available.

2. Population – Metro Areas Served:

Oxford Township is approximately 60 miles from Newark, NJ and the New York City metropolitan area. FPIC is well-positioned to deliver primals, sub-primals, portion cuts, and ground beef and pork within an easy drive to all market sectors; there is, virtually, an unlimited market demand.

There is minimal Industry Risk due to shifting demographics and population decline.

3. Sub-Standard Product:

In the unlikely event that FPIC is subject to a recall or other liability incident, the company will carry recall insurance.

G. Pricing

1. Input – Costs:

Costs for live animal inputs were obtained from USDA AMS MPR DataMart. These were summarized for Calendar Year 2022.

Other input costs include typical entries; for example: loan terms, labor & pay scale, number of employees, plant overhead, and others. These pricing data were determined from current market values and general industry knowledge.

2. Output – Prices:

Meat Prices: Prices were obtained from USDA AMS MPR DataMart for complete carcass cut-outs (primals and sub-primals). These were summarized for Calendar Year 2022. Additional pricing for specialty items (e.g., Bacon, Ham, Summer Sausage, Snack-Stix, and Jerky) were obtained from general industry knowledge. Due to the large volume of these products going to be produced by the facility, conservative-low numbers were input into the model.

H. Distribution Channels

1. Custom:

The custom kill customers will take finished product for their own consumption or for their own, down-stream customers. Some of these customers have their own freezers for sale of "freezer meats"; some may also have their own E-Commerce marketing channels.

Shipping: Customers will pick up their product at the plant dock doors. FPIC may consider delivery with the company-owned refrigerated truck as a service for a fee.

1. Local Markets:

FPIC will service this market sector with direct sales to local grocers and some restaurants through the plant. Shipping will be with the company owned refrigerated truck or some of this distribution may go through local distributors. FPIC will have discussions with local and regional distributors.

Shipping costs are typically an add-on to the price. The addition of a shipping business is not within the scope of this report.

2. Distributors:

Although distributors have been mentioned as providing access to some channels, this topic needs just a bit more definition.

Two of the national distributors have facilities in the region: Sysco and US Foods. Both of these distributors routinely reserve some capacity for "locally produced"

products. Certainly, meat from FPIC will qualify for this reserve capacity. However, due to the preliminary nature of the project, actual contract negotiations have not yet begun.

Bottom Line: FPIC will explore several distribution options for the supply of meat coming from the new plant. The plant will not be finished for some time; there is still ample opportunity to develop customers and distribution channels before they realize the actual production.

I. Marketing Plan

As the project is still in the preliminary / planning stage, no marketing plan has been developed yet. However, FPIC is planning to use several avenues to market the products.

1. Label:

FPIC intends to develop their own label for marketing portion cuts, sub-primals, and specialty products (bacon, ham, summer sausage, snack sticks, and jerky). As of this writing, the plan is to use an innovative and attractive name for the product labels. However, this decision can be delayed until actual marketing campaigns are due to begin.

2. Private Label:

MPIC will investigate several outlets for private label production of the specialty products – especially, snack sticks and jerky.

3. Media Advertising:

Both the FPIC operation and the labeled products will be advertised through traditional print and radio media spots as well as creating an on-line presence through established channels.

For print, they will advertise in the local and regional newspapers. For radio, spots will be targeted at appropriate audiences with the assistance of the radio marketing personnel. For the on-line presence, they will create websites and Facebook pages for both the plant and the product lines.

4. Sponsorships:

One traditional marketing channel which will be pursued is through sponsorships. Providing financial support will return either signage, print ads, or screen print on uniforms.

These sponsorships will be targeted at youth and agriculture-oriented activities. For example, some recipients may be youth sports (uniforms and other donations), livestock shows in surrounding counties, livestock association youth events, and chamber of commerce type activities (golf tournaments, etc.).

5. Good Will.

This company will also be able to market its "Good Will". Warren County Community College and a High School Vocational School are expected to offer educational programs that utilize FPIC. The Vocational School has a Culinary Arts program and the community college has a Precision Agriculture program where training can be extended by the use of FPIC. This new plant will be used to assist in training the students about meat quality, buying standards, and meat cutting skills. The Vocational Agriculture program will be utilizing the facility for training and generation of meat processing skills in case students are interested in the meat processing industry.

J. Self-certification of Market Share

This plant's capacity is too small to register any type of market share. The market demand will be virtually unlimited compared to supply. Further, building this new plant will provide much needed processing capacity without being disruptive to the overall marketplace.

IV. Technical Feasibility

A. Site Selection Criteria

The following section details the typical site location criteria, which should be considered for the new plant site selection.

- The proposed site must be easily accessible to trucks and trailers bringing in live animals and loading out finished products.

- Heavy consideration should be given to communities with a prevalent attitude of acceptance and support for agricultural processing.

- The location of the site relative to its proximity to major shipping lanes is critical. Getting inbound and outbound trucks and trailers to a facility located off the beaten path is difficult and expensive.

- The major criterion in site selection is finding land suitably zoned for operation of a food processing plant. There should be minimal impact on the local community visually, ecologically, and environmentally. An all-around buffer zone is desirable including landscaping.

- Soil types subject to large expansion and contraction or water logging should be avoided. The site should lend itself to construction of sound and separate drainage systems for process wastewater, storm water and sanitary waste. A suitably qualified engineer should be engaged to prepare a report on the proposed land's suitability as a food-processing site.

- The availability of land area sufficient for the envisioned operation with space for future expansion is another issue worthy of consideration.

- There must be availability of a clean, fresh water supply, which is potable or can be made potable easily (a requirement of USDA licensed premises).

- The waste effluent system will be a huge issue, whether the plant effluent utilizes the local authority systems, or the plant carries out treatment on site.

- The availability of suitably skilled labor for processing, maintenance support and management of the plant is critical. The arrival of a meat processing plant in a community, which alters the social balance, may not necessarily be welcomed.

- Consideration must be given to the available supply of energy (electricity, natural or LP gas) and if it is currently already at the boundary of the site.

- The prevailing wind direction and the absence of wind born emissions of gas/condensate/smoke/dust from existing industries on the boundary can place the new plant at risk. Equally, the plant must control emissions both within the site (non-food to food) and to the boundary, which may be urban.

- The suitability of the land for the proposed operation should include consideration of the water table and natural drainage. The water table activity could have an immediate bearing on the decision for subterranean floors.

- Road transport connection to the site for both livestock received and dispatch of finished products should be paved or sealed to minimize dust and to enhance appearance.

- An all-round buffer zone of 0.3 miles (500 meters) minimum from residential, light industry or commercial premises is desirable.

- Areas where there are noxious industries or processes, which are likely to lead to the contamination of the meat product, must be avoided.

B. Roads, Rail, Airport Infrastructure

1. Road:

   The site sits along Route 46 outside of Oxford, NJ. It has easy highway access to facilitate inbound traffic (live cattle, supplies, and labor) and outbound traffic (meat). Further, good highway access will be important for employee access.

2. Rail and Air:

   No in-bound product will be received by Rail or Air; no out-bound product will be shipped by Rail or Air.

C. Need for Local Transportation

1. In-Bound – Cattle Transport to Plant:

The owners anticipate that the livestock will be purchased from either: (1) private treaty direct from the farm (2) Local and Regional Sale Barns, (3) Direct off-the-farm from local ranchers and feedlots.

It is expected that all these purchases will be on terms of Delivered to the Plant. If other transportation needs for in-bound cattle are found in the future, appropriate arrangements will be pursued at that time.

Out-Bound – Meat Delivery to Customers:

The only need for local transportation of out-bound product will be for servicing local grocers and restaurants. FPIC will deliver product to these customers with their refrigerated straight truck. Also, as other outlets (i.e., local and county school programs) are established, delivery routes may be established and executed using a company-owned refrigerated truck.

D. Labor Market

The Financial Model estimates that the FPIC plant will employ approximately 37 people (See Appendices 1 and 2).

Labor is one of the biggest challenges for multiple industries right now, including meat processing. Sourcing skilled labor from the local community is a concern. Hiring the right people at start-up to fill key roles will be a priority so that the plant can get online as soon as possible. A deliberate focus will be on hiring a highly skilled General Manager (GM) that can provide critical oversight to the entire process.

Another key skill set is Sales and Marketing to efficiently and profitably move the finished product. As with the GM, a highly skilled and experienced individual will be identified and on-boarded early in the process.

Other key management roles will be identified and filled by the GM. Finding floor workers will then follow as the plant construction nears completion.

The enterprise financial model provides for above-average wages in the area and has room to increase those wages as necessary while easily remaining profitable.

Along with the skilled labor, the plant will be as automated as possible to reduce the amount of human capital required.

1. Local and Regional – Resident Employees:

Oxford Township is located in Warren County. It is expected that the local community will provide most of the necessary workers for the plant.

2. Management:

It is expected that most of the line workers and some mid-level management will come from the local and regional Labor Pool. However, the GM and a few other skilled positions may have to sourced outside the area.

Small Town Staffing (STS): STS is a recruiting company located in Omaha, NE focused on identifying and recruiting mid- and upper-level packing plant management. Also, STS has experience in training employees at all levels within the plant on equipment and manual processing – from harvest through portion cutting. Food & Livestock Planning[3] has a relationship with STS and intends to engage STS for assistance with Management hiring as well as initial training of production employees.

E. Availability of Materials

At full-scale operation of the plant, the availability of livestock will be critical for success. For a detailed analysis, see Section III.F.1. The FPIC plant is designed larger than other plants in NJ but still is considered small with only 88 beef, 25 hogs, and 150 lambs and goats projected to be processed per week.

Custom supply will be dictated by local and regional livestock producers.

F. Use, Age, and Reliability of Technology

All equipment in the FPIC facility will be in new condition and will be state-of-the-art. For example: some may be supplied by Ultra-Source. Many pieces of equipment from UltraSource are installed with full access to the plant's network and will provide operational feedback into the ERP / Data collection system. Further, if there is an operational issue with that piece of equipment, a technician from UltraSource is able to access that equipment through the internet and perform diagnostics and, many times, repair with this access. Many of these pieces of equipment have cameras installed for this very purpose: the UltraSource technician can actually observe the operation from

[3] F&LPI was instrumental in hatching the idea of STS as well as bringing on the primary executive search partner.

afar. UltraSource provides 24/7 internet access service to current customers as part of their maintenance contract.

G. Construction Risk

1. Weather:

The plant will be located in NW New Jersey. There is the possibility of snow in winter and severe weather events throughout the year. Any of the Design/Engineering/Construction companies which will be considered by FPIC for this project are involved in multiple agricultural construction projects across the U.S. They are all very aware of weather effects on construction. There may be minor winter weather delays for outside construction in Oxford Township. However, these are anticipated to be sporadic and short-lived – a snowstorm may cause a slight delay. If the outside shell is completed when one of these snowstorms' hits, inside construction can continue.

Further, any company recommended by F&LPI and selected by FPIC for construction will carry a full Builder's Risk Insurance Policy.

2. Availability:

a. Construction Materials: Availability of traditional construction materials has slowed due to several factors: (i) lower supply – due to supply chain issues and other related factors, and (ii) increased demand.

b. Labor: COVID has slowed the available construction labor pool. Even though this event has passed, labor remains an issue.

The Project Manager / GC will need to be pro-active in oversight of both tradesmen scheduling and ordering of construction materials in order to keep the project moving forward.

c. Equipment: Generally, Food Processing equipment runs about 6 months out from ordering to delivery. Even though this will be a small project, there is nothing terribly complex about the processes; there will not (likely) be any pieces of equipment which will take extremely long order to delivery times. Regardless, with the overall slow-down in manufacturing and material supply, the Design/Engineering Team will do well to coordinate closely with the Project

Manager / GC to order the equipment as soon as the exact configurations are finalized.

V. Financial Feasibility

A. Commercial or Project Underwriting

Introduction:

Raising debt and equity for building the plant and funding operations is quite unique under this company's business model. Because the business is organized as a 501-C-3 non-profit corporation, the county can offer a long-term lease to host the plant site. There are several funding sources available that could donate money to build and equip the plant as will be discussed in the next section. The funding of the facility and the business is being coordinated by Richard Cotton.

There are three major benefits to FPIC being organized as a 501-C-3 non-profit corporation.

a) This structure will allow the county to legally own the site where the plant sits and will enter into a long-term lease with FPIC.
b) It will be much easier to solicit contributions from large donors because of the benefit to the local and regional community and regenerative agriculture.
c) Livestock producers utilizing the facility to process their livestock will anticipate adequate capacity thereby reducing wait times for processing and can expect more competitive rates than other small meat processors in PA and NJ.

1. Lead Lender – Bank:

FPIC will need to begin discussions with Lenders to fund working capital and whatever capital remains to build and equip the plant. There is an effort underway to attract additional contributions to earmark as working capital.

Food & Livestock Planning will be able to assist Ag Lenders who are unfamiliar with the meat packing business in understanding the Enterprise Financial Model. This company will explain the structure of the model, describe the origin of the data, and provide overall guidance on the meat packing industry.

2. USDA and State Grants, and USDA FSC Loan Guarantee, and State Incentive Money:

There have been two rounds of competitive grants from the USDA to expand meat processing capacity. The USDA Meat and Poultry Expansion Program, Round II is open for applications and this project will be a candidate for this grant.
As previously noted, the USDA FSC Loan Guarantee program has been discontinued. Whether or not it will be reinstated remains to be seen. Anecdotal evidence indicates that it will not be part of the new Farm Bill. If that is true, it will need to come back through Congress; with the COVID incident in the distant past, this does not seem likely.

Most states offer state incentive programs with qualifications based on the number of employees. The money is typically designated to worker education and training and to offset overhead expenses. The state of New Jersey will be solicited for as much incentive capital as can be raised.

3. Principal Source of Funds

The following includes a list of funding sources for the project. Again, these sources are a possibility solely because the company is organized as a 501-C-3:

- The New Jersey Economic Development Authority
- Bonds set up for the purpose of funding the project
- Doris Duke Foundation
- William Penn Foundation

B Management's Assumptions

1. Structure:

FPIC is legally organized as a 501 C-3 corporation guided by the Board of Directors Richard Cotton (Chairman), Glenn Fohr, and William Rymon. The board of directors will hire the General Manager and will serve as the main administrative body for the meat processing business. The company set up as a non-profit is one way in which it can be of greater service to the producers who utilize it.

2. Key Personnel:

The following positions will be required to run the plant once it comes up to full operating capacity:

- General Manager
- Operations Manager
- Fabrication and Further Processing Foreman
- Financial Controller
- QC Manager / Food Safety
- Accounting / Data Processing Sales & Marketing
- Personnel Manager

Initially, not all these positions will be required (at plant start-up). However, it will be imperative that a well-qualified GM be hired early on in the project. This GM will have responsibility for the day-to-day operations and will report directly to the Board of Directors. The GM will also oversee the hiring of the other Key Personnel. For details of the potential labor required for the plant, see table in Appendices 1 and 2.

C. Accounting Policies

1. GAAP:

   The new business will operate under Generally Accepted Accounting Principles (GAAP) issued by the Financial Accounting Standards Board (FASB). One of the Key Personnel will be the Controller who will be responsible for the execution of these policies.

2. CPA: Tax Preparation / Reporting & Annual Audit:

   The Company will employ an outside accounting firm to provide oversight of the GAAP execution as well as provide Tax Preparation and Annual Auditing services. The accounting firm has not yet been determined.

D. Source of Repayment

All loan repayment, primarily short-term debt in the form of working capital, and any long-term debt will be funded by cash generated from operations, which are demonstrated in forecasted financial statements (Tables V.O. 3, V.O.4, V.O.5).

E. Dependency on Other Entities

FPIC will be dependent on Warren County, the official owner of the land, plant, and equipment where the plant is located. They also may own the site of the compost program of substrate generated by the plant. It is expected that the GM and management team of FPIC will communicate well with the county and will create a good working relationship with the county.

F. Equity Contribution

Because the business is legally organized as a 501 C-3, it will not be raising equity *per se* but rather collecting funds for the building and equipping of the facility and funding its operational expenses. Section V. A. 3 lists the possible sources of funding.

G. Market Demand Forecast

The current population for the three nearby Newark, NJ and New Yor City metropolitan area have been detailed elsewhere – see Section III.F.2. – The population of end-user / consumers in these areas, alone, is on an increasingly upward trajectory. The Market Demand for FPIC's finished products is projected to increase along with the increasing population.

H. Peer Industry Comparison

The Competitive Analysis shown in Section III.A – Competition clearly describes the HACCP Small and Large size facilities operating under USDA FSIS inspection which are considered Competitors or Non-Competitors. Within a 100-mile radius, there are no other HACCP plants that have the size and scale that MPIC will have. Existing very small size plants which provide the same services will not be able to process the same throughput volume of animals as FPIC.

The FPIC plant will be the newest, most sanitary beef processing plant in its trade territory.

Pricing for Custom kill services has been previously detailed (see Section III.G.2.b – Custom Kill Services).

I. Cost-accounting System

When the new FPIC facility is completed, the company will execute an accounting software package appropriate for the business. The plan is to seek advice from the CPA / Accounting firm and use a recommended software package. It is expected that the company software will integrate with the CPS's accounting and tax prep software for seamless oversight, tax preparation, and auditing functions.

J. Availability of Short-term Credit

It is expected that regional banks as well as the New Jersey EDA will provide short-term financing and that there should be no issues in receiving competitive terms. The New Jersey EDA is very supportive of this project and is actively evaluating short term debt financing.

K. Adequacy of Raw Materials and Supplies

The Raw Materials for the Owned / Custody animal processing are all commodities – live cattle, hogs, and sheep and goats. As such, they are fungible and readily available.

Raw Materials for the Custom kill services will depend on local and regional producers bringing animals for this service. This has been discussed in detail in Section III.F.1. – Cattle Supply – Custom Kill.

Other supplies will be provided by long-standing companies who have contingency plans in place to ensure adequate supplies of materials required to keep the plant operating.

L. Sensitivity Analysis

A Summary Table showing the effects of each stressor is included in Section V.O., below.

M. Use of MPPEP Grant Funds

Whatever is granted from the USDA will be used to offset the plant and equipment costs represented in Table V. P.1.

N. Other Secured Sources of Funding

Other than what has been reported in this Feasibility Study, no other funding sources are expected.

O. Introduction to Financial Statements

The following pages contain an estimated Use of Capital along with 3-year projected Financial Statements derived from the Enterprise Financial Model: (1) Income Statement, (2) Balance Sheet, and (3) Cash Flow.

Assumptions: Most of the assumptions which went into the model have been described previously in various sections. Further assumptions, specifically animal throughput numbers, are listed here. Complete details have been provided to FPIC Beef in an accompanying MS Excel workbook.

Animal Class	Year 1	Year 2	Year 3
Lean Cull Cows	270	475	600
Cattle (<30 mo. of age)	635	1,500	1,800
Custom Beef	395	1,450	1,800
Market hogs	345	495	600
Custom Pork	270	495	600
Lambs & goats	760	2,210	3,600
Custom lambs & goats	760	2,210	3,600
Total Beef	1,300	3,425	4,200
Total Hogs	615	990	1,200
Total Lambs/goats	1,520	4,420	7,200

The plan is to harvest and process the numbers of livestock listed above once the plant is completely ramped-up to full production capacity. Because new packing plants take some time to hire employees, establish markets, and work out all the “bugs” inherent in a new facility, the model projects a steady, two-year ramp-up plan. By the start of the 3rd year, the plant is predicted to be operating at full capacity.

NOTE: All prices for incoming Animal Cost and outgoing Meat Price were obtained from the USDA DataMart Mandatory Price Reporting system. Data were summarized from Calendar Year 2022. Individual Cut-Out sheets are included in the accompanying Enterprise Financial Model.

Table V.O. 1 Plant, Property and Equipment Cost Estimates

Alternate Total Plant Cost Breakdown	
Site prep, dirt work, connections, concrete, plumbing	4,814,100
Building	1,449,000
DAF and DAF building	250,000
Fire suppression	120,000
Refrigeration & HVAC and air makeup	1,500,000
Total Plant & Property	8,133,100
Rail system	133,625
Equipment - UltraSource	1,598,000
Forklifts	100,000
Bone grinder & skid steer loader	75,000
Total Fixtures & Equipment	1,906,625
Total Plant, Property & Equipment	**10,039,725**

Table V.O. 2 Estimated Use of Capital[4]
(all figures in $ unless otherwise noted)

Plant, Property and Equipment			
Plant and Property		$	8,133,100
Fixtures and Equipment		$	1,906,625
Total P, P & E		$	10,039,725
# of months in Pre-Op Period			12
Debt & Equity			
Long-term loan	60%	$	4,880,000
Assumed Interest Rate			7.00%
# of years			30

[4] Input for Property, Plant, and Equipment Costs were estimated by Diligent Innovations and UltraSource.

Monthly Lease Payment			54,110	
Long-term loan Equip)	60%	$	1,144,000	
Assumed Interest Rate			7.00%	
# of years			7	
Monthly Lease Payment			28,776	
Equity	40%	$	4,015,725	
G&A Expenses and Working Capital Financing:				
Working Capital		$	1,400,000	
Pre-op G&A:				
Admin Costs		$	150,000	
Pre-op Lease Payments		$	-	
Total Capital/Donations Required		$	1,550,000	
Inventory Purchases				$ 25,462
Additional working capital from model				$ 1,173,176
Total equity/donations to be raised		$	5,415,725	
Line of Credit				
Cash Buffer		$	25,000	
Maximum borrowings available		$	670,000	
Maximum borrowings used		$	80,000	
Collateral:				
Inventory			50%	
Accounts Receivable			80%	
Interest Rate			7.00%	
Equity		$	1,400,000	OK, Equity is sufficient.

Table V. O 3. Projected Income Statement[5]

Head Processed Per Year,	Yr 0 Pre-Operations	Yr 1 3,435	Yr 2 8,835	Yr 3 12,600
Revenues				
Meat Sales - Cows, Lean	-	405,070	712,623	900,155
Meat Sales - Beef, Grain-fed		1,633,518	3,858,705	4,630,445
Meat Sales - Cows, Fed				
Hides, < 30 mo.		6,350	15,000	18,000
Hides, > 30 mo.		1,350	2,375	3,000
Custom Beef - Processing		308,258	1,131,580	1,404,720
Custom Beef - Offal		31,159	114,381	141,990
Custom Beef - Hides		3,950	14,500	18,000
Meat Sales - Hogs, Owned		205,191	294,405	356,855
Custom Hogs - Processing		73,575	134,888	163,500
Lambs, Owned		305,839	889,349	1,448,713
Custom Lambs - Processing		114,000	331,500	540,000
Total Revenue		2,933,848	7,499,305	9,529,125
Cost of Revenue				
Cattle Cost		1,252,846	2,845,390	3,435,492
Hogs Cost		58,782	84,339	102,229
Lambs Cost		176,707	513,847	837,035
Processing costs				

[5] All figures are in $, unless otherwise noted. Same for following tables 2 and 3.

Direct labor	-	891,894	1,396,008	1,551,120
Rendering Tip		9,000	12,000	24,000
Utilities	-	66,240	126,000	144,000
Warren County Payment	-	12,000	24,000	36,000
Other costs	-	230,880	432,075	493,800
Marketing costs	-	44,876	77,852	73,593
Total cost of revenue	-	2,743,225	5,511,510	6,697,269
Gross Profit	-	190,623	1,987,795	2,831,856
General and Administration	-	537,300	630,450	736,800
EBITDA	**-**	**(346,677)**	**1,357,345**	**2,095,056**
Depreciation expense	-	(543,478)	(543,478)	(543,478)
Interest income	-	295	5	463
Interest	-	(415,156)	(404,369)	(387,821)
	-	(958,339)	(947,843)	(930,837)
Net income (loss)	-	(1,305,016)	409,502	1,164,219

Table V. O 4. Projected Balance Sheet and Ratios

	Yr 0	Yr 1	Yr 2	Yr 3
Head processed per year				
Total	**Pre-Operations**	3,435	8,835	12,600
Cattle	Pre-Operations	1,300	3,425	4,200
Hogs	Pre-Operations	615	990	1,200
Lambs/goats	Pre-Operations	1,520	4,420	7,200
Statements of Financial Position				
Assets				
Current Assets				
Cash	1,374,538	86,071	270,472	1,757,797
Accounts receivable-trade	-	397,162	788,304	802,115
Inventories	25,462	42,578	73,064	76,749
	1,400,000	525,811	1,131,840	2,636,661
Property, plant and equipment	10,039,725	10,039,725	10,039,725	10,039,725
Less: Accumulated depreciation	-	(543,478)	(1,086,957)	(1,630,435)
Net property, plant and equipment	10,039,725	9,496,247	8,952,768	8,409,290
Total assets	11,439,725	10,022,058	10,084,609	11,045,951
Liabilities and Net Assets				
Current Liabilities				
Accounts payable	-	68,986	141,840	147,936
Line of credit	-	-	-	-

Current portion of lease liability	49,572	53,155	56,998	61,118
	49,572	122,141	198,838	209,054
Long-term lease liability, less current portion	5,974,428	5,789,207	5,590,539	5,377,446
Net Assets				
Without donor restriction	5,415,725	4,110,709	4,295,232	5,459,451
Total liabilities and net assets	11,439,725	10,022,058	10,084,609	11,045,951
Ratio Analysis:				
Profit margin on sales		-44%	5%	12%
Return on total assets		-12%	4%	11%
Return on equity		-28%	10%	24%

. Table V. O 5. Projected Cash Flow

Statements of Cash Flows				
Net income	-	(1,305,016)	184,523	1,164,219
Depreciation	-	543,478	543,478	543,478
Changes in operating assets and liabilities:				-
Accounts receivable	-	(397,162)	(391,143)	(13,811)
Inventory	(25,462)	(17,116)	(30,486)	(3,685)
Accounts payable	-	68,986	72,854	6,096
Net cash provided by (used in) operating activities	(25,462)	(1,106,829)	379,227	1,696,297
Investing activities				
Purchase of PP&E	(10,039,725)	-	-	
Financing activities				
Lease proceeds	6,024,000	-	-	
Lease payments	-	(181,638)	(194,826)	(208,972)
Borrowings on line of credit	-	-	78,417	-
Repayments on line of credit	-	-	(78,417)	-
Donations	5,415,725	-	-	-
Net cash used in financing activities	11,439,725	(181,638)	(194,826)	(208,972)
Net increase (decrease) in cash	1,374,538	(1,288,467)	184,401	1,487,325
Cash at beginning of period	-	1,374,538	86,071	270,472
Cash at end of period	1,374,538	86,071	270,472	1,757,797

Table V. O 6. Net income per animal processed

Cattle, Total *(Weighted Average)*	(690)	65	188
Cows, Lean	(760)	(7)	116
Beef, Grain-fed	(657)	96	220
Cows, Fed	0	0	0
Beef, Custom	(695)	58	181
Hogs, Total *(Weighted Average)*	(164)	78	119
Hogs, Owned	(97)	154	195
Hogs, Custom	(249)	2	43
Lambs, Total *(Weighted Average)*	(101)	25	45
Lambs/goats, Owned	(91)	35	55
Lambs/goats, Custom	(111)	15	35

Summary of Financial Results:

The overall capital cost of the project is estimated to be $10 million plus an additional $1.4 million in working capital.

The company is projected to have a negative EBITDA (-$347,000) with a negative Net Income (-$1.3 M) in its first year of operation. In the second year, EBITDA increases to $1.4 M and Net Income becomes positive at $433,000. The plant is projected to begin cash flowing in month 22 of operation. When the plant is fully ramped up, the third year performance is projected to yield an EBITDA of $2.1 M with Net Income at $1.2 M. In Year 3, the Return on Sales (ROS) is projected to be 12 % and a Return on Equity (ROE) is 24 %; both ratios are outstanding for a food business.

Beginning the second year of operation, cattle under 30 months of age, hogs, lambs, and goats resulted in positive net income as custody animals (animal purchased and meat sold by company) and custom processed for a fee. In the third year, the net income per animal processed increased significantly with all types of livestock.

P. Sensitivity Analysis:

Stressors:

The model was subjected to 4 different stressors. These stressors consisted of: (1) Input Cost (Animal) going up 5 %, (2) Output Price (Meat) going down 5 %., increase of custom fees by 10%, and removal of the smokehouse from processing beef and pork.

Generally, markets do not exhibit one of these stressors completely independent of each other. For example, when Input Costs for raw materials go up, the Output Price for finished goods will also normalize in an upward fashion. However, for pure comparison purposes in this test, each of these stressors is considered completely on its own merit with resulting effects on the financial performance of the project.

Net Income on a per head basis is also listed. These numbers predict the performance of each animal class. As the plant encounters various stressors, there will be options for shifting throughput profiles in order to ameliorate the negative effects.

Table V. P. 1 Effect of specific stressors on company profitability

Stressor	Impact of annual EBITDA averaged over 1st 3 years
+ or - animal purchase price by 5%	$151,000
+ or – meat prices by 5%	$828,500
+ or – custom processing fees by 10%	$139,000
Impact of the smokehouse	$596,000

Table V. P. 2 Impact of the smokehouse on individual species net income in the third year of operation

Species	Base Net Income with a smokehouse, $/animal	Net income without selling smoked items, $/animal
Cull cows	120	-266
Cattle (<30 mo. of age)	223	-32
Hogs	196	-70

Note: Lamb products are routinely not smoked

The above sensitivity tables demonstrate the impact of sales price on the bottom-line profitability of the company. Animal purchase prices are also significantly impacted but not to the same extent. A significant discovery of the sensitivity test is the importance of the smokehouse on the profitability of each custody animal processed. If specific meat

products were not smoked to manufacture further processed items such as hams, bacon, cooked sausages, and jerky, the meat would have to be sold as fresh subprimals or ground. Nevertheless, smoking these items allows for much higher margins and is a critical step in the business.

Q. Use of MPPEP Grant Funds

The Plant, Property and Equipment total cost represented in Table V. O.1 is $10,093,725. Thirty percent of these eligible expenses would be $3.01 MM. Therefore, if the grant was awarded at the 30% rate, the adjusted total plant, property, and equipment capital requirement would be $7.08 MM and would reduce the amount of funding required from donors.

R. Other Secured Sources of Funding

The sources of funding listed in this section (V.A.3) are currently classified as the principal sources of equity funding for this project along with debt financing. There are no other secured sources of funding being solicited.

VI. Management Feasibility

Food & Livestock Planning, Inc. has been in business since 2000 providing technical service to small and medium-sized food companies and conducts feasibility studies and business plans for future and current food companies. The company also commercializes new technologies in the food and livestock industries and will assist in the commissioning of new company start-ups.

Personnel: The following Food and Livestock Planning, Inc. personnel participated in conducting the feasibility study:

- Matt Gibson, Ph.D. – Project Leader, Business Enterprise Modeler

  Matt has a breadth of strategic and business planning experience across several agricultural sectors: large feed, food, biologicals, and pharmaceuticals, ethanol and their coproducts, and meatpacking. He has been a C-Suite executive in several of these companies.

- Ph.D. – Washington State University. M.S. and B.S. – Texas Tech University.

- Keith DeHaan, Ph.D. – Managing Principal; Project Oversight. Primary author of this feasibility study (resume listed in Section VIII)

  Dr. DeHaan has been in the meat packing industry since 1993. He has held executive management positions within three large packing companies and provides executive management services to several existing meat companies.

  Ph.D. – University of Nebraska. M.S. and B.S. – South Dakota State University.

- Samantha Egolf, Ph.D. – Meat Scientist Associate

  Dr. Egolf provides technical service to meat processing clients, builds food safety programs, works with clients on processing equipment and technology, develops research protocols, and assists with grant applications.

- Ph.D. – South Dakota State University. M.S. and B.S. – Pennsylvania State University

- Scott Webb, MBA – Strategy and Business Structure

  Scott has held executive leadership positions with Farmland Foods, Smithfield Foods, Seaboard, Foods, and for the past four years was the CEO of Wholestone Farms. Additionally, he has worked on numerous acquisitions, expansion projects, new

startups and turnaround across both fresh and processed meat businesses. MBA – Rockhurst University. B.S. – Fort Hays State University

- Tracy Christian – CPA

  Financial statement consulting for business planning and establishing prospectuses for investing. Development of numerous financial enterprise models.

  University of Tulsa – Honors graduate

Board of Director Management

As previously mentioned in this feasibility study Richard Cotton, Glenn Fohr, and William Rymon make up the board of directors. Their credentials and experience to manage this business are included in Appendix 5.

Operational Management

Food and Livestock Planning Inc. and Small-Town Staffing together will help locate a well experienced GM and management team to run the day-to-day business. The future GM through networking will locate and hire experienced personnel to round out the management team. Because all candidates for the GM position are currently employed by other companies, there will be not disclosure of candidates.

VII. Recommendation

Recommendation: This project should be funded.

Food and Livestock Planning, Inc. has been conducting feasibility studies for ventures in the meat processing business since the year 2000. This FPIC feasibility study predicts a very nice return on investment in the predicted outcome even though the business is designed as a non-profit. Excess proceeds will be re-invested in the business to improve processes, lower processing costs, and to save participating livestock producers money. This prediction is due to both the outcome from financial modeling and the structure of the business.

We would consider this project as both “feasible” and “sustainable”.

A. Market Feasibility:

FPIC is focused on several product markets and one service market.

Products:

The future FPIC meat processing plant will be located in Oxford Township, Warren County in NW New Jersey and is strategically positioned to exploit all the various market sectors available.

1. Fresh and further processed beef: (fresh subprimals, offal, ground beef, sausages, jerky products) from both under 30-month cattle and over 30-month cull cows.

2. Fresh and further processed pork: (Fresh pork ribs, loins, ground pork, sausages, cured hams and bacon).

3. Fresh and frozen lamb and goat. (Fresh and frozen whole and half carcasses of lamb and goat, some fabricated cuts of lamb ribs and legs).

Service:

4. Custom: The local and regional market for custom kill service has a tremendous pent-up demand. This results in local producers having to wait for months to get livestock slaughtered and processed. FPIC will provide custom kill services to address this pent-up demand.

B. Technical Feasibility:

As this facility will be a greenfield construction, it will be outfitted with the latest, state-of-the art equipment providing the highest level of energy efficiency, sustainability, labor savings, and food safety.

Further, the waste products typical to beef packing plants will be reclaimed and converted to compost – thereby creating an additional sustainable revenue stream while reducing local farmers' reliance on chemical fertilizers.

C. Financial Feasibility:

The Enterprise Financial Model and projected financial statements predict a very solvent, profit-generating company that brings a high rate of return to the company which will indirectly flow through to participating producers through reduced processing costs.

VIII. References

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- ESI Group. Design/Build. https://esigroupusa.com/
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- USDA FSC Loan Guarantee. www.rd.usda.gov/food-supply-chain-guaranteed-loans
- USDA Grant. Additional / Coming Soon. www.usda.gov/meat See “Coming Soon” button
- USDA National Agricultural Statistics Service (NASS). https://www.nass.usda.gov/

Resume of Primary Author, Dr. Keith DeHaan

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1998 – Present **Managing Principal, Food & Livestock Planning, Inc., Kansas City, MO.**

Food and Livestock Planning, Inc is a technical service company providing research, business planning and management services to the meat and livestock industries.

1. Technical service and management services to start-up and start-over meat companies and plants.
2. Feasibility research and business planning for new or changing food companies.
3. Food related market research for companies and agencies.
4. Commercialization of new technologies into the meat and livestock industries.

Projects have been conducted in 34 U.S. states and 6 foreign countries.

2021 – Present Partner, Protein Processing Services, Columbus, NE.

Business planning, feasibility analysis, livestock production and meat processing technical specialist for a four-company conglomerate. This conglomerate provides all services for turnkey meat processing plants and collectively involves business planning, full meat plant processing design, wastewater design, permitting, construction, and start-up process training.

Oct. 2013 – May 2017. President, DemKota Ranch Beef, Aberdeen, SD

Chief planner and administrator of a 1,500 per day beef processing plant. Managed day-to-day startup operations and developed entire management team.

1995 – 1998 Vice President, Technical Operations, Beef America Packing, Omaha, NE and COO Beef America Specialty Foods Division, York, NE.

V.P. - Managed food safety/quality/regulatory, product development, and performed new business development.

COO – Managed operations for specialty portion cutting, specialty processing and packaging of beef and pork.

1993 – 1995 Manager of Beef Production Systems, Farmland Industries, Kansas City, MO.

Managed a production business serving as a liaison amongst cow/calf producers, feedlot owners, and National Beef Packers.

1983 –1985 Research Scientist, Farmland Industries

Managed research on Farmland Industries' Research Farm and cooperating university trials.

Education:

Ph.D. Nutrition / Biochemistry, University of Nebraska.
M.S. Animal Science (Reproductive Physiology), South Dakota State Uni.
B.S. Animal Science. South Dakota State Uni.

Personal

Raised on a family farming and ranching enterprise in Charles Mix County, SD. Wife, Jennifer, is an elementary teacher. Resides in Kansas City, MO and on a family farm in South Dakota.

APPENDIXES

Appendix 1. Labor Profile and Costing

Total Labor Profile

Beef Equivalent *(Hogs = Beef x3)* ➜	hd/day	**25**	
*(Lambs = Beef * 4)*	hrs / day		8
	Work d / mo		21
Direct Labor	$/h rate	# workers	$/d
Yards	18.00	1	144
Skin line	22.00	2	352
Gut table	22.00	1	176
Trim Line	22.00	1	176
Offal/tripe/heads	22.00	1	176
Total Slaughter		**6**	**1,024**
Carcass coolers	22.00	1	176
Break chain	22.00	1	176
Chuck line	22.00	2	352
Rib line	22.00	1	176
Loin line	22.00	1	176
Round line	22.00	1	176
Packaging	22.00	3	528
Grinding	22.00	1	176
Curing/smoking	22.00	2	352
Shipping	22.00	0	0
Total Fab & Furt. Proc.		**13**	**2,288**
Plant cleaners	21.00	3	504
Maintenance	24.00	1	192
QA	25.00	0	0
Warehouse	22.00	1	176
Wastewater	22.00	0	0
Gen'l Office	25.00	2	400
Total Other		**7**	**872**
Direct Plant Labor- Base		**26**	**$4,184**
Payroll taxes	9.00%		$377
Workman's comp	6.00%		$251
Worker's health insurance	8.50%		$356

Total Direct Plant Labor - Fresh			**$5,167**
Further processed labor - base	20.00	5	800
Payroll taxes	9.00%		$72
Workman's Comp	6.00%		$48
Worker's health insurance	8.50%		$68
Total Direct Plant Labor - Furth. Proc.			**$988**
Total combined fresh and Furt. Proc.		**31**	**$6,155**

Appendix 2. Indirect Labor Positions and Expense

Indirect Labor - Mgt team	Annual	#	Extended
General Manager	$140,000	1	$140,000
Operations Manager	$95,000	1	$95,000
Fab Foreman	$85,000	0	$0
Further Proc. Foreman	$75,000	0	$0
Engineer	$80,000	0	$0
Controller	$90,000	1	$90,000
QC Manager	$80,000	1	$80,000
Data processing	$60,000	0	$0
Sales & Marketing	$95,000	1	$95,000
Procurement and scheduling	$80,000	0	$0
Personnel manager	$70,000	1	$70,000
Total		**6**	**$570,000**

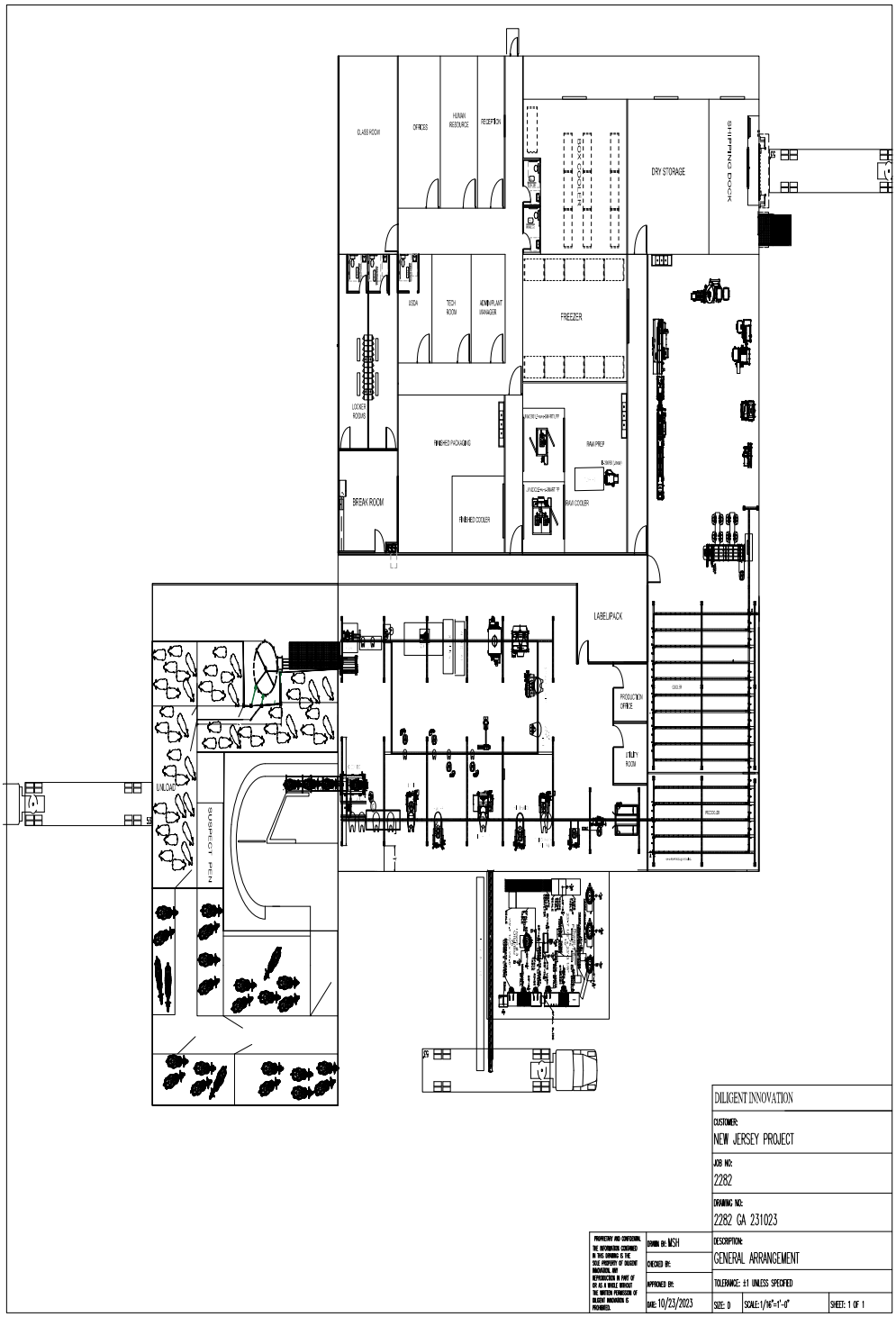
Appendix 3. Projected overhead expense.

Item	Fixed Expenses	per week	per hd.
Utilities			
Propane		3,375	2.25
Electricity		18,750	12.50
Water		2,850	1.90
BOD & TSS		4,800	3.20
Total Utilities		29,775	19.85
Other Plant Exp.			
Overtime insp.		300	0.20
USDA grading[6]		*0*	*0.00*
Offal packaging		3,000	2.00
Audits/compliance		1,500	1.00
Packaging		45,000	30.00
Laboratory		3,000	2.00
Outside Security	4,200	4,200	2.80
Pest control	300	300	0.20
Laundry		2,250	1.50
Repairs, Maint.& Supplies		22,500	15.00
Plant vehicles main.	150	150	0.10
General insurance	1,500	1,500	1.00
Total Other Plant Exp.		83,700	56
G&A			
Professional fees	500	500	0.33
Office supplies	200	200	0.13
Postage	75	75	0.05
Telephone	700	700	0.47
Travel & entertain.	100	100	0.07
Housing /Relocation	288	288	0.19
Advertising	300	300	0.20
Bank charges	100	100	0.07
Misc.	300	300	0.20
Total G&A Expense	2,563	2,563	1.71
Property Taxes[7]	0	0	0.00
Total Weekly Overhead		**116,038**	**77**

[6] Since the plant is small, fee based USDA Grading will not be justified. If the Custom-kill customers desire USDA Grading, it will be added as a straight pass-through cost; it will not be a corporate expense.

[7] As of this writing, Property Taxes are unknown.

Appendix 4. Preliminary Design (Diligent Innovations Co.)



Appendix 5. Bios of Board of Directors

Richard C. Cotton is the Managing Partner of Hawk Pointe Golf Club and Asbury Farms Real Estate Development. A fourth-generation area resident, Richard has spent most of his professional life land planning, serving agricultural organizations and effectuating a balance between economic development and environmental conservation in the community.

In the early 1980's, Richard worked as an independent consultant to individuals and companies in repositioning projects encouraging the placement of scarce land into preservation. In the late 1980's Richard became involved in many community organizations and was a founding member of the Musconetcong Watershed Association (MWA). The MWA was the driving force behind parts of the Musconetcong River designated as part of the National Wild Scenic Rivers System. Also, during this time, Richard worked with the South Branch Water Shed Association, creating and running the Hunterdon Heritage Land Trust. In 1992, Richard was appointed by then Governor Florio to the first Highlands Council.

In 1996 Richard first became aware of the availability of the parcel of land where Hawk Pointe is now located. A developer purchased the acres with the intent of building out the land. The housing project originally planned for this property was over 1,000 units. Eventually the developer lost control and gave the property back to the bank, at which time Richard acquired the land. In creating Hawk Pointe Golf Club, the goals were simple, maintain 80 percent of the open space, preserve the property's historical components, design around the land's natural areas and create a climate of environmental, economic, and social sustainability, along with creating local jobs.
Richard has evolved into a new breed of business enviropreneur who creates new and insightful ways to turn environmental problems into economical assets by promoting sound environmental strategies. Richard continues to make his environmental strides with energy, water and food. This is clearly evident with his numerous endeavors at the Hawk Pointe Community, which includes the implementation of a 1,900-panel solar array at Hawk Pointe which powers 100% of the Club's energy consumption, as well as a new 2mega watt system that will provide enough power for the commercial component of the Hawk Pointe Village. Richard's wastewater management approach was to design an environmentally friendly system. Treating water was a critical asset not a waste to be disposed of. A system was designed and built respecting the environment and reusing water on site. The storm water system cleans all the storm wastewater on site through vegetated swales that then recycles the water to provide irrigation means to the Community at Hawk Pointe. Richard is currently working with the Warren County Economic Council and State and Local Officials to develop a community-based food system and strategies to produce, process, and market locally grown food to the many community-based food systems within the county.

Awards/Accomplishments:

- **2015 Golf Course of the Year** – Hawk Pointe Golf Course
- **Warren County Presidential Strategic Thinking Award** - Recognized for his vision of the Hawk Pointe Community.
- **Good Scout Award** – Awarded for outstanding community service in Warren County, for leadership and commitment to many community organizations.

- **Conservation Service Award** – Awarded for excellence in construction site erosion, and control measures.
- **National Resources Award** – Recognized for taking special care of planning and managing our natural recourses.
- **Outstanding Accomplishment Award** - Vocational Agricultural
- **CASA SHaW Award** - Child Advocacy to our Community.
- **American Farmer Degree** - FFA members who have demonstrated the highest level of commitment to FFA.

Richard Cotton resides in Hunterdon County with his wife Monica, son Bryce and daughter Alayna.

Glenn Fohr
488 Allens Mill Rd., Phillipsburg, NJ 08865

Highlights of Qualifications

Multi-task-oriented marketing, sales and management executive with experience in targeting, corresponding and successfully selling.
Dedicated, self-motivated achiever who is committed to success and adept at juggling multiple projects and product lines of varying scope.
Experienced communicator, presenter and team member with strong leadership skills.
Possess outstanding listening skills & ability to adapt quickly to clients' wants, needs, likes and dislikes.
Strong follow-up and closing skills, with the ability to identify and bond with potential clients.
Ability to recognize market trends and make fact-based recommendations.

Professional Experience

Regional Sales Manager - East **January 2018 – Current**
Bush Hog Inc. Selma, AL

- Lead a team of 14 sales professionals to achieve annual sales of $88M in 2022.
- Develop and implement annual, quarterly and monthly sales goals and promotions.
- Strategic planning of territory sizes and scope of business.
- Develop training aids and tools for sales force, S.W.O.T analysis and best practices.
- Provide competitive feedback to upper management, identifying key opportunities in the marketplace.
- Work with suppliers and manufactures to develop, launch and market new products.
- Conduct monthly administrative reports and measurements of sales team to align with core company goals.
- Maintain expenses within budget.
- Plan and execute trade shows locally and nationally.
- Hire and train new sales team members.

Sales Representative **April 2010 – January 2018**
Bush Hog Inc.• Selma, AL

- Supports the consistent implementation of company initiatives and sales goals.
- Works closely with dealers to ensure customer satisfaction and high levels of field sales support.
- Evaluate competitor products, pricing and sales promotions to ensure accurate forecasts for products and production.
- Meets and exceeds assigned team quotas for sales and assists customer/dealers with account credit line inquiries.

- Evaluates sales forecast and develops effective sales strategies.
- Proactively assesses and validates customer requirements and satisfaction by building strong customer relationships.
- Conducts monthly audits of dealer inventory, perform administrative duties and manage expenses to company policy.

National Sales Manager June 2008 - July 2009
Wood-Mizer Inc.• Indianapolis, IN

- National sales manager for the LasTec division, $6M in annual mower and tractor sales.
- Development and implement the restructuring of sales department and selling strategies.
- Establish criteria for doing business under contract through dealership network.
- Development and implement marketing tools, promotional items and programs.
- Development and implementation of strategic marketing strategies and rebranding of key products.
- Creation of innovative sales and marketing tools for product education and market penetration.

General Manager August 2003 – March 2008
Eastern Engineering • Indianapolis, IN

- General Manager of a reprographic production facility, $5M in annual printing sales.
- Achieved an average annual increase in overall printing volumes of 3% – 5% over prior year through hands on education and the promotion of teamwork and a dedicated work ethic.
- Oversaw daily workflow of production, distribution, delivery, customer service, human resources, shipping & receiving, billing and building & equipment maintenance.
- Achievements include the creation and implementation of company policies, procedures and safeguards.
- Profitably managed largest reprographics facility in the company.
- Maintained communication with client contacts regarding production deadlines.
- Organized annual budget and expenditures for production facility, which increased profits and decreased costs.
- Enhanced the public image and recognition of the firm's name within the business community through new business development, community outreach, and aggressive networking.

Regional Account Manager June 1990 – June 2003
The Valvoline Company • Lexington, KY

- Exceeded $15M in sales as territory manager overseeing12 states in the Midwest selling to key customers CARQUEST and NAPA Auto Parts.
- Achievements included development of profitable dealer sales programs and promotional activities in support of multiple product lines.
- Territory sales growth achieved 4% - 10% annually.
- Direct training of distribution and dealer sales personnel through field sales training and trade show events.
- Development of customer/corporate hospitality events and incentive trips to promote products and increase business relationships.

Education

Bachelor of General Studies: Emphasis in business, marketing, criminology, psychology.
University of Kentucky, Lexington, Kentucky

Associates of Arts Degree: Emphasis in Automotive/Ag Technology.
Hudson Valley Community College, Troy, NY.

William Rymon

1993 – Present. President of Frank Ryman and Sons, Washington, NJ. Agriculture and farming.

1983 – 1991 Founder, Rymon Construction. Residential and commercial builders and real estate development.

Impact Scenario

Meat Processed from Carcasses in 5 Counties. Lightcast Q4 2023 Data Set

November 2023

Lightcast

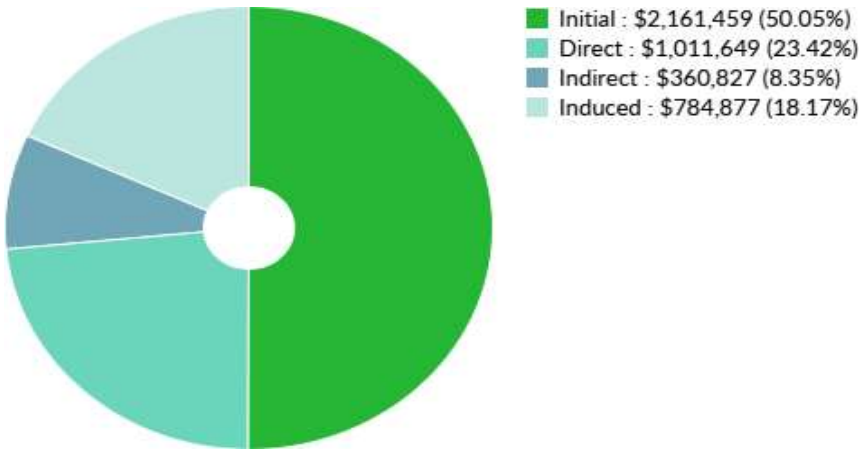
232 N. Almon St.
Moscow, Idaho 83843

Changes to Meat Processed from Carcasses using Type Lightcast Model

$4,318,812	72	$538,429
Change in Earnings	**Change in Jobs**	**Change in Taxes on Production andImports (TPI)**
2.00 Multiplier	1.80 Multiplier	

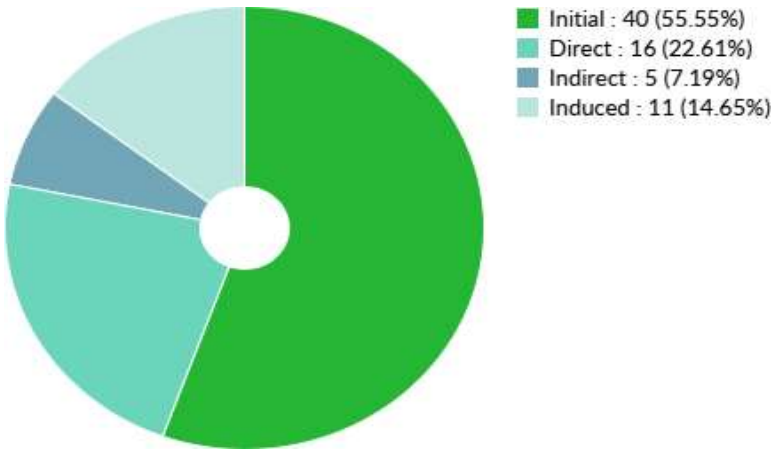
Effect on earnings from adding 40 jobs to Meat Processed from Carcasses

$2.2M	$1.0M	$360,827	$784,877
Initial	**Direct**	**Indirect**	**Induced**
1.00 Multiplier	0.47 Multiplier	0.17 Multiplier	0.36 Multiplier



Effect on jobs from adding 40 jobs to Meat Processed from Carcasses

40	16	5	11
Initial	**Direct**	**Indirect**	**Induced**
1.00 Multiplier	0.41 Multiplier	0.13 Multiplier	0.26 Multiplier



Effect on taxes on production and imports from adding 40 jobs to Meat Processed from Carcasses

$214,827	$186,181	$137,421
Local	**State**	**Federal**

Input-Output Data

The input-output model in this report is Emsi's gravitational flows multi-regional social account matrix model (MR-SAM). It is based data from the Census Bureau's Current Population Survey and American Community Survey; as well as the Bureau of Economic Analysis' National Income and Product Accounts, Input-Output Make and Use Tables, and Gross State Product data. In addition,

several Emsi in-house data sets are used, as well as data from Oak Ridge National Labs on the cost of transportation between counties.

State Data Sources

This report uses state data from the following agencies: New Jersey Department of Labor and Workforce Development; PA Department of Labor and Industry, Center for Workforce Information and Analysis