

Business Prospectus: Abattoir Created by Battle River Economic Opportunity Committee (BREOC)

2021



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Overview

The Battle River Economic Opportunities Committee (BREOC) is a partnership of seven municipalities that have taken ownership of driving and leading economic prosperity in their region. This region spans two counties in East Central Alberta, the County of Paintearth County and Flagstaff County, which house the municipalities involved: Castor, Coronation, Halkirk, Forestburg, and Heisler.

BREOC has developed a comprehensive strategy to diversify and strengthen their local economy and create long-term success for their region. An aspect of this plan focuses on support for private sector development and inbound investment. This included creating business prospectuses for different opportunities within the region for potential investors to use and grow into fully realized ventures.

BREOC has identified eight (8) business ideas that they feel represent high potential opportunities in the region and created prospectuses that explore the details of creating and operating said venture. The following prospectus is focused around creating an abattoir, also known as a slaughterhouse, within the BREOC area. As is well known, Alberta, and specifically the BREOC region, is known for the high quality, great tasting beef they raise, butcher, and sell across Canada and internationally.

While there are large beef producers and manufacturers in Alberta, there are also a high number of smaller outfits that help supplement these larger businesses in their meat production, cutting, and packaging. Within this supply chain in the BREOC region, a reliable killing floor has yet to be established, despite the number of animals that are regularly taken outside of the two counties from all seven municipalities, to be slaughtered and processed.

With a significant rise occurring in the boutique livestock businesses, it comes as no surprise that an abattoir could be a successful venture in BREOC. So, while this seems like a high potential business opportunity, there may be some questions around starting this venture. This prospectus was created to answer these questions.

The Concept

Abattoirs are facilities in which animals are slaughtered for human consumption as well as for the creation of animal materials to be used for future manufacturing. Abattoirs are an early and key step in the meat processing supply chain, responsible for killing the animal, removing its innards, hide, and head.

After the animal is slaughtered and dressed, carcasses are transferred to a butcher and

meat packaging facility where consumer products such as cuts of meat, sausages, and other meat products are created.

Though they are specialized, abattoirs are a key step in the meat production supply chain. Due to their importance in a large-scale commercial supply chain, they are typically attached to a meat processing and packaging facility for process efficiency, such as Cargill





in High River, Alberta, which is the third largest meat processing facility in North America. However, since BREOC currently contains local butchers who work to serve the area's multiple cattle businesses, the model followed in this prospectus for the abattoir

will be a smaller-scale slaughterhouse offering service primarily to the surrounding region. Should the entrepreneur so choose, a processing and packaging facility can be added to this model in a future expansion effort.

About the Industry

Operators in the abattoir industry in Canada slaughter animals, and process and prepare the carcasses for further processing. Some of the most commonly butchered animals in Canada and Alberta are cattle, pigs, goats, and sheep (IBIS World, 2020).

Meat processing is a significant subset of the massive food industry in which Alberta is an international leader due to the supply of high-quality animals, as well as the presence of the Cargill Packaging Plant which is responsible for most of the meat processing in Western Canada.

In this industry, typically larger scale abattoirs such as Cargill are the only ones that are sustainable, because of federal and provincial regulation, as well as the high cost associated with abattoirs. This business model and the industry's reliance on limited abattoirs, has resulted in distancing rural remote areas from abattoir services. For this reason, a small-scale abattoir that efficiently accesses rural farmers in a specific geographical area can be a sustainable venture

As it is a massive global industry producing incredible amounts of cattle, the slaughter, butchery, and meat handling processes have always been under a social microscope for three main reasons. The first is the humane treatment of animals. Particularly, since the

1990s, there has been an increased awareness among meat consumers, vegetarians, and vegans alike, of the treatment of animals, the health measures taken in meat processing, as well as the humane measures with which animals are slaughtered. As such, the consumer market has trended towards more seemingly humane meat sources, such as free run/free-range poultry, or organic fed/grass-fed/free-range beef, among others.

The second reason is the health hazards and potential bacterial outbreaks presented by the processing of raw meat. Companies have had to increase process management guidelines, and quality control to meet new consumer and government standards.

The third and main trend to be aware of is the movement away from traditional meat products in the classic North American diet. Due to multiple health studies released concerning the effects of red meat on the cardiovascular system and its links to heart disease, cancer, and diabetes, there has been a decrease in overall consumption. There is a general societal shift away from red meats.

However, despite all of these impacts, meat processing and production continues to be a powerhouse in the North American food production industry, who's demand is





expected to stay strong, and even increase as pandemic restrictions subside.

The following are key external drivers to be aware of as they directly affect an abattoir's revenue and profit generation.

Per capita meat consumption. As more individuals reduce meat intake in their diets, monitoring per capita meat consumption is becoming increasingly important.

Per capita disposable income. A high per capita disposable income will lead to increased revenue for all industries, this includes meat processing.

Canadian effective exchange rate index. Due to the high amount of trade between Canada and the US within this industry, the exchange rate between their currencies will influence trade volume and demand.

Per capita seafood consumption. Many individuals will use seafood as a replacement for beef, pork, and poultry. The more seafood that is purchased, the more meat sales will be affected.

Market

The market for abattoirs was analyzed by assessing expected industry trends and the customer base within the BREOC region.

Industry Trends

Currently, the number of small provincially licenced abattoirs are decreasing. Rising costs, increased regulations, lack of succession plans, and shortages of labour have driven these small operations out of business. Typically, the larger abattoirs have succeeded as they are able to push enough volume through to meet the significant operating and start-up costs. JBS and Cargill, two massive meat production companies, currently control the flow of beef through Canada.

The COVID-19 pandemic showed Canada how much of a detriment the monopolization of meat processing was to the agricultural supply chain. COVID outbreaks were experienced by both JBS and Cargill processing plants causing production shutdowns, and as such, there were massive

setbacks. There are dangers associated with a meat processing system in which two major players control 85% of a country's meat supply. Should one of these companies fail, there will be major ripples in the entire food supply chain. For the industry to maintain an effective supply chain flow, there needs to be a diversification within Canadian abattoirs.

Another case for the diversification of the abattoir industry, is that it is essential for smaller ranchers and individuals living far from large abattoirs to have access to a slaughter system for their animals. If farmers are forced to wait to butcher their animals and sell their meat, it can have a potentially serious financial impact on the rancher, the effects of which, ripple even further through the agricultural supply chain and consumer economy. A cow that is ready for butcher





must be fed, and kept healthy through veterinarian care, which increases the overall cost to the animal's owner. Additionally, the cow is not processed into sellable meat for the owner. Therefore, the rancher spends operating dollars while losing potential revenue.

The bright side of the struggles in the abattoir industry is that, since there is a decrease in smaller abattoirs, there is a large demand for professional slaughter, even more so in rural areas.

Customers

Abattoirs are a business-to-business venture, and their customer segment must be strategized as such. Seldom do abattoirs deal directly with retail customers but rather sell their services to companies, organizations, and individuals who require their animal's

meat to be processed. Some examples of these customers are small independent ranchers, hobby farmers, large scale ranchers, and butcher shops who have connections with local ranchers, and thereby may refer customers.

BREOC Regional Market and Trade Area

In 2016, the number of farms containing cattle within Flagstaff County and the County of Paintearth, were 286 and 279 respectively, for a total of 565 cattle farms in the BREOC region. This does not account for farms that contain pigs, poultry, sheep, bison, goats, or other alternative sources of animal products that may require the services of an abattoir. While this information is from 2016, it provides a valuable insight into the popularity of farming and ranching as a profession within the area.

In assessing the trade area that an abattoir could service, the number of farms grows from the 565 in BREOC alone. Research suggests that cattle owners will transport their animals up to an hour away for quality slaughtering services. Figure 1 shows a one hour driving radius within BREOC, using Alliance as the point of origin as it is the geographical centre of the region. This trade area includes a large list of communities,



Figure 1 - BREOC Trade Area (1 hour driving radius)

including Bawlf, Daysland, Strome, Killam, Sedgewick, Lougheed, Hardisty, Amisk, Hughenden, Galahad, Forestburg, Heisler,





Bashaw, Stettler, Gadsby, Halkirk, Castor, Fleet, Hanna, Coronation, and Veteran.

Operations

Operations of an abattoir can be divided into three (3) subcategories;

- Rules and regulations
- Facility operational considerations
- Human resources

Rules and Regulations

Rules and regulations within the meat processing and packaging industry are numerous and stringent due to the various health issues that can arise with meat and food in general. Mad-cow disease changed the industry in 2003, and multiple E-Coli While the operational needs and requirements will need to respect the specific business model that the entrepreneur(s) wishes to pursue, the following have been provided for key operational considerations.

breakouts forced companies throughout the supply chain to adhere to strict regulations. The following section outlines Federal and Provincial regulations, with links to more detailed information. ¹

Canadian Federal Regulations

The humane handling and slaughter of animals for food in Canada is a shared responsibility of the Canadian Food Inspection Agency (CFIA) and all players in the industry including transporters, operators, other stakeholders, and every person who handles live food animals. The entire supply chain is expected to play their part in safe handling and processing. They are all held accountable by federal legislation.

The Government of Canada requires operators of abattoirs to follow the Livestock Identification and Traceability program which has extensive guidelines to follow for all types of animals that may be processed.

These guidelines are observed in conjunction with Part XV of the Health of Animals Regulations, which ensures that the location history of the animal is traceable before they are processed and consumed.

As an abattoir operator, you must:

Identify: Be able to identify the carcasses of livestock in the abattoir (which carcass came from which animal) until a carcass is either approved for human consumption or condemned

Record: Keep a record of the identification number(s) of the approved and revoked tag(s) on any animals that are slaughtered or die for any reason on your site

adherence and knowledge of all pertinent rules and regulations.



^{1 1} The Rules and Regulations were determined using secondary research and are subject to change. The entrepreneur is responsible for the



Trace the Origin: Keep a record of information to enable the origin of any bison, cattle or sheep carcasses, not bearing an approved tag being received, and disposed at your site, to be traced.

Tag: Ensure that bison, bovine and sheep carcasses transported off your site are identified with an approved tag, and to identify those carcasses with an approved tag

Province of Alberta Regulations

The Government of Alberta is heavily involved in the slaughter and processing of raw meat. The process must follow the Meat Inspection Act which outlines the Meat Inspection Regulation.

A meat inspector must be present at the death of each individual animal to clear it as 'not sick' before it is slaughtered and processed. Unhealthy, or even slightly abnormal animals are identified and, depending on the issue, are either segregated for separate slaughter and special inspection, or not allowed to enter the human food chain. Carcasses, or portions thereof, are condemned if they are deemed unfit for

if they do not already bear one if transported off-site.

More information can be found in the provided link.

https://inspection.canada.ca/animal-health/terrestrial-

<u>animals/traceability/description/requireme</u> <u>nts-for-</u>

operators/eng/1398951633117/1398951666534

human consumption because of disease or contamination.

Humane slaughter is conducted by ensuring that animals are treated respectfully and are stunned properly prior to slaughter to ensure that they experience no pain or distress. Every carcass is subject to a thorough postmortem examination, which includes an examination of the carcass, head, and internal organs, including the lymphatic system. These guidelines and more can be found here.

https://www.qp.alberta.ca/documents/Regs/2003_042.pdf

Facility Operations Considerations

The following section defines factors that must be considered when it comes to site selection, operational process, and facility size. Within each step of the process, there is extensive equipment that is needed. It is suggested that this equipment be researched and priced out by the entrepreneur as it will vary widely depending on operational size, type of animal, and transportation availability.

Site Selection Considerations

Prior to defining specifics, or laying out blueprints, the site for the abattoir must be chosen correctly for proper operational success and eventual scaling. The following factors must be considered:





Distance from Developments: The abattoir should not be located close to dwellings, schools, churches and other public or commercial buildings due to possible nuisance from noise and smell congestion. Future commercial and residential developments should also be considered.

Accessibility: The site should be accessible from a permanent road to allow ready transport of both livestock and meat.

Water Supply: An adequate water supply is essential. While mains water is preferred, well or bore water is also suitable provided the water meets drinking water standards. Quantities of 1,000 litres per large animal, 100 litres per small ruminant, and 450 litres per pig are suitable.

Sanitation and Wastewater: The facility needs access to sewage systems and adequate waste disposal for refuse and condemned products

Solid Waste Disposal: There should be sufficient space available to bury inedible waste and condemned animals and provide for compost stacks, hide drying frames, etc.

Electricity: Connection to a municipal electricity supply is desirable especially if chilling carcases or on-site water pumping is required.

Operational Process and Facility Size

Defining operational processes before discussing facility size will provide a greater understanding of what is needed for a complete abattoir. Figure 2 lays out a typical process within a red meat abattoir.





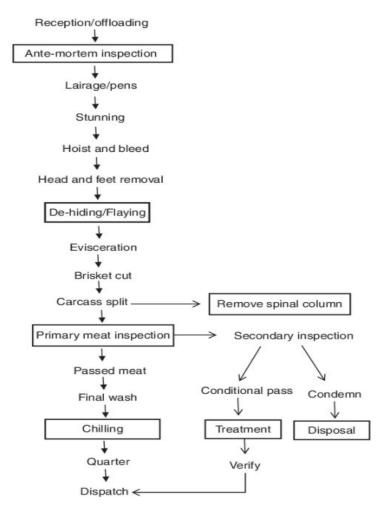


Figure 2. A typical operational process for an abattoir

The boxed steps in Figure 2 above are health inspector check points. At these points of the process, a health inspector is required to pass the product through to the next stage.

While these are required for universal product safety across the industry, they are bottlenecks within the process, that the entrepreneur should be aware of and mitigate where possible.





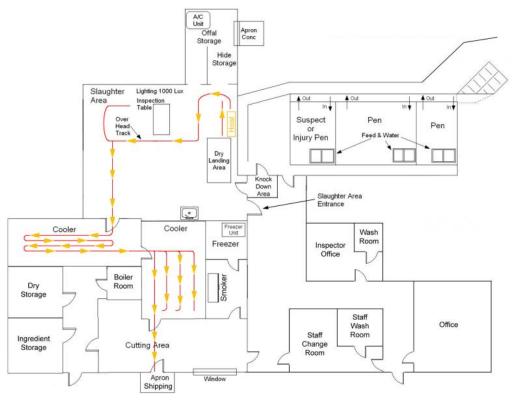


Figure 3. The typical layout of a red meat abattoir, outlining a typical operational process

To accomplish the process defined in Figure 2 within a typical layout as suggested in Figure 3, at least 1-2 acres of land is needed for the building and surrounding roads. The building can be expected to be between 20,000 to 30,000 square feet. A 30,000 square foot facility can typically process 100 head of

cattle per day, meaning it can process over 100 pigs, goats, or sheep per day. There are cases of 2,000 square foot abattoirs, but their scale is so small that it limits the maximum revenue, operational capacity, scalability, and overall sustainability.

Human Resources

The following section defines and describes the required roles that need to be filled within an abattoir for successful operation. The individuals required are management, production staff, quality control, warehouse storage facility manager, merchandise manager, and administration/logistics.

Management/Owner

Abattoirs need strong leadership to oversee production, sales, inventory management, strategic planning, human resource management and more. Since these operations require comprehensive planning, it would be wise to incorporate multiple managers in different roles and departments. A typical abattoir should have between 1-4 upper-level managers depending on size.





Production Staff

There may be as many as 20 employees for a small operation. For a micro-operation, ten (10) production individuals should be able to operate the business efficiently. Typical production staff duties include slaughtering and processing the animal, disposing of waste properly, maintaining equipment, as well as cleaning the facility at the end of each day. For this reason, there may be two staff teams; one who focuses on production, and one who focuses on cleaning.

Quality Control

Quality control professionals should always be on the production floor to ensure that staff are adhering to regulation and acting in accordance with the Government of Alberta appointed meat inspector who will be on site at all times.

Warehouse Storage Facility Manager

The Warehouse Storage Facility Manager is responsible for organizing the safe and efficient receipt, storage and dispatch of slaughtered animals and by-products. They control meat, beef and poultry distribution and supply inventory. They may also load the transportation trucks.

Merchandise Manager

A merchandising manager will look for customers in need of abattoir services. They will manage vendor relations, make farm market visits, and continue the ongoing education and development of potential customers both upstream and downstream from them in the supply chain.

Administration and Logistics

Administration staff will be required to fill a variety of roles, including ordering materials, organizing incoming and outgoing trucks, preparing invoices, and ensure that customers are engaged and communicated with.







Marketing

Marketing is unique within business-tobusiness service ventures, because typically, outward promotion is not as key as the quality of the service. As such, due to an abattoir's role within the supply chain, the quality of customer service, timeliness, and quality of final product are key to its overall marketing strategy and venture success.

Product/Services

A typical abattoir provides the following services:

Slaughtering: Slaughter of cattle, pigs, bison, sheep, goats, and other alternative animal sources **Cleaning:** Cleaning and processing of carcasses to quartered sections

Hanging: Hanging and storage of processed carcasses

Additionally, abattoirs could further butcher and process carcasses with supplementary services. However, since this is a different business entirely with different licencing regulations, and professional requirements, it has not been addressed within this document. Many butchers exist within the BREOC region with whom a partnership can be made.

Pricing

The following table outlines typical pricing for abattoir services.

Table 1. Typical products and prices at an abattoir

Abattoir Services	Cost per Animal (\$)
Slaughter	\$175.00/\$195.00
Slaughter over 1000lbs	\$220
Bison Slaughter	\$185/\$205
Extra Hanging	\$3/day
Cutting	\$0.85/lb
Bulk Trim Cutting	\$0.75/lb





Promotions

The following are promotional strategies that could be effective for an abattoir within the BREOC region.

Logo Development: Develop a logo that represents the business and will be used within the rest of your promotions.

Social Media: Facebook and Instagram are the most effective platforms in the BREOC region. To maintain brand awareness, ensure that your presence is consistent on these to develop a local following. For business-to-business sales and networking, Linkedin is an

effective tool to identify industry players, partners, and potential clients.

Website: A website will be key for providing information on your services to the larger trade area.

Centres of Influence: Creating a relationship, or providing marketing materials to local centres of influence, such as the auction house, 4H club, and local agricultural consultants, can increase the business's positioning in the local economy.







Financials

The following are tables outlining basic financial information for an abattoir start up in the BREOC region.

Start-Up Costs

Generally, abattoirs range from \$160,000 to \$1,000,000 in start-up costs. The cost of starting an abattoir, however, will depend on the business model of the entrepreneur(s) and the size they envision the abattoir to be.

The largest difference in the start-up costs will be an entrepreneur's decision to rent, purchase, or lease an operational facility.

Table 3: Estimated start-up costs for an abattoir

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Item	Cost
Building Rent (Average Cost per Square Foot)	\$8.00-\$12.00
Building Purchase	\$500,000-\$750,000
Building Build	\$600,000-\$1,000,000
Operational Costs (First Three Months)	\$60,000
Storage Hardware	\$4,000
Distribution Trucks	\$25,000
Website Creation and Launch	\$3,000
Insurance	Dependent on business model
Liability	Dependent on business model
Errors and Omissions	Dependent on business model
Building and Equipment	Dependent on business model
Licencing/Regulations	Research
Packaging Materials	\$10,000
Raw Materials	\$50,000
Professional Fees	\$2,500-\$4,500
Legal	\$3,300
Accounting	\$1,000
Consulting	\$0-\$2,500
Marketing Budget	\$3,500
Total	\$160,000 - \$1,000,000

Operating Costs

Operating an abattoir can be expensive due to the cost of utilities, which include significant amounts of electricity and water, as well as the wages of the employees that operate the facility. As shown in the table below, it is estimated that an abattoir will cost approximately \$89,000-\$95,000 per month to operate without insurance and licencing fees considered. The operating costs will depend heavily on the business





model chosen by the entrepreneur. Monthly operating costs represent an operational break-even point. This is the amount of

money needed monthly to 'keep the lights on'. This does not consider breaking even on an initial investment.

Table 4: Operating for an abattoir venture

Item	Cost
Rent/Lease/Mortgage	\$4,000-\$7,000
Salaries/Benefits	\$50,000 - \$80,000
Building Maintenance and Pest Control	\$2,000
Utilities	\$4,000-\$6,000
Cleaning Supplies	\$1,500
Equipment Maintenance and Upgrades	\$1,000
Insurance	Dependent on business model
Ongoing Licencing and Fees	Dependent on business model
Cost of Goods – Raw Materials, Packaging	\$3,000
Total	\$89,000-\$95,000

Income Statements

The following table shows an income statement describing the abattoir industry's average financials. The numbers represent percentages of revenue with the goal of determining net profit. While the industry produces an average of 4.0% profit, it should be noted that the top 25% of businesses make

an average of 46% net profit. This reflects the large slaughtering companies that dominate the industry in and around urban centres. The entrepreneur should pay close attention to the Critical Success Factors in the next section to begin a successful small abattoir.





Table 5: Income statements based off the industry average of physical therapy offices, presented in percentages of revenue

in percentages of revenue	
Revenue	100%
Cost of Goods Sold	62.5%
Wages and benefits	8.8%
Purchases, materials, and sub-contracts	53.3%
Opening inventory	5.2%
Closing inventory	4.9%
Operating expenses	33.6%
Labour and commissions	13.6%
Amortization and depletion	2.8%
Repairs and Maintenance	2.4%
Utilities and telephone communication	2.6%
Rent	2.0%
Interest and bank charges	0.8%
Professional and Business Fees	1.2%
Advertising and Promotion	0.7%
Delivery, shipping and warehouse expenses	0.45%
Insurance	0.9%
Other Expenses	6.3%
Total Expenses	96.0%
Net Profit/Loss	4.0%

Critical Success Factors

The following section explores different factors that are critical to success and survival once the business is operational.

Quality Service: Cattle are important to their owners. They represent a key income source, and an investment. For a rancher to trust an abattoir with their investment and future revenue source, the quality of their service must be top notch. It is crucial that the service is impeccable, and the business's reputation with local ranchers is prioritized.

Business Expansion: When deciding if or when to expand, do not expand beyond the means

of the business. Abattoirs are known for exorbitant operating, renovation, and regulation costs. Ensure that the capacity that is intended to be built will be able to be met by potential revenue.

Adherence to Regulation: During operations, having a comprehensive understanding of regulations, and adhering to them will be crucial. Not adhering to regulation will result in suspension, fines, or shutdown of the operating facility. Consult professional, peers, and individuals employed by regulation industries such as the CFIA.





Conclusion

The meat processing industry is one that is changing rapidly. The centralization of operations to urban centres has created gaps within the supply of abattoir services and the demand of potential customers within rural areas. This allowed for the identification of a high potential opportunity in the BREOC

region to begin an abattoir. If it is run correctly with the proper steps taken to acknowledge legislation, high costs of operation, and multiple logistical factors, it is a venture that could provide real benefits to not only the entrepreneur, but also to BREOC.





Contact Us

The Battle River Economic Opportunity Committee is here to help. If you are interested in further exploring this or any business opportunity within the region, contact us today. There are tailored one-onone business supports for business start-ups, buying/selling a business, growth and expansions of businesses. The first step is to contact your local Economic Development Officer using the information below.

Economic Development Department – Flagstaff County
(780) 384-4100
ecdev@flagstaff.ab.ca

Carol Thomson

Economic Development Officer – County of Paintearth
(403) 882-3211
cthomson@countypaintearth.ca

