



Harvest Sky Region

Agricultural Center Business Case

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HARVEST SKY REGION
ECONOMIC DEVELOPMENT CORPORATION

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Abbreviations

AAFC - Agriculture and Agri-Food Canada

ARECA - Agricultural Research and Extension Council of Alberta

CARA - Canadian Association of Research Administrators

CAT - Community Action Team

EDC –Economic Development Corporation

K – Thousands

M – Millions

PLSD – Prairie Land School Division

RCP – Rural Community Practice

RDAR – Results Driven Agriculture Research

SF – Square feet

SME - Subject Matter Expert

SWOT – Strengths, Weaknesses, Opportunities, and Threats

Supplemental Documents

Document	Purpose	Location
Preliminary Options Assessment	Catalogue of opportunities considered for the analysis to create a shortlist of projects for the inclusion in the Agricultural Center business case.	Appendix A
Site Summary	Details specific site requirements and the criteria needed to identify a site for the Agricultural Center.	Appendix B
Grant Funding Opportunities	List of relevant grant funding opportunities.	Appendix C
RCP Market Assessment	Market assessment to support the components of the Rural Community Practice.	Appendix D
Riding & Event Center Supplemental	Supplemental information such as the full needs assessment and detailed facility comparisons.	Appendix E
Assumptions	Outlines the key assumptions and source data used for the financial analysis.	Appendix F

Introduction

When a community experiences the loss of a key industry, the economic effects flow through the local economy and have a broad impact on local businesses, real estate, and the tax base. Likewise, the Provincial Government's Climate Leadership Plan and the phase out of coal fired electricity generation has had an undeniable impact on the town of Hanna and Special Areas No. 2. The good news is that the economic implications can be reversed. As the region pursues successful economic growth strategies, the benefits will multiply through the local economy and lead to increased levels of prosperity.

The *Agricultural Center Business Case* has assessed various aspects of the Harvest Sky Region and identified clear regional strengths that are tied to ranching and livestock production. Furthermore, two opportunities have been identified that show economic promise and fit within the framework of an *Agricultural Center*. The *Agricultural Center Business Case* introduces these opportunities, investigates regional alignment, and tests financial feasibility.

The report is structured as follows:

Part 1 – Agricultural Center Background

Provides context for the *Agricultural Center Business Case*. This includes site planning considerations and the analytical methodology employed.

Part 2 – Rural Community Practice

The business case begins with a made-in-Hanna idea for a veterinarian focused livestock hub and expands on that concept to propose a facility that not only includes animal health services, but also educational opportunities, and research prospects.

This is a unique proposal that has been tailored to the specific needs and attributes of the region, but it is not an entirely new concept. The idea has been developed based on feedback from the community and the pre-existing concept of a Rural Community Practice (RCP).

The RCP model aims to address all aspects of animal health and welfare while also maintaining a focus on delivering services that will benefit the region and the environment. This approach maintains a focus on supporting livestock producers while simultaneously generating incremental value by serving the greater community.

Part 3 – Riding & Event Center

This section evaluates market factors specific to the Hanna region and assesses the financial feasibility of a Riding & Event Center. The proposed facility is developed based on community needs assessment and comparable centers in other regions of the province.

Part 4 – Integrated Agricultural Center

Parts 2 and 3 evaluate two independent opportunities, while Part 4 considers the potential benefits of including both projects in the *Agricultural Center*. The potential for synergies and cost savings that could be achieved are considered under this scenario.

The *Agricultural Center Business Case* has considered a number of possible economic development opportunities in order to identify those that have the highest probability of success. It has evaluated both qualitative and quantitative factors, identified potential obstacles and suggested solutions. Regardless of the precise path forward, the *Agricultural Center* has the potential to be a significant draw to the area, would serve livestock producers and residents for years to come, and provide valuable economic stimulus to the region.



PART 1. AGRICULTURAL CENTER BACKGROUND

1. Background

Rural communities have come under increasing pressure in recent years as urbanization erodes population bases and impairs the ability to maintain the critical mass of people necessary to sustain economic activity. These factors have been exasperated in the Harvest Sky Region through the energy transition and the resulting closure of the Sheerness coal mine. The purpose of the *Agricultural Center Business Case* is to identify the existing regional strengths which can be leveraged to support economic development opportunities.

1.1. Project Details

The Harvest Sky Economic Development Corporation (EDC) hired Summit72, Schollie Research and Consulting, and Dillon Consulting Limited (Dillon) to evaluate the local strengths that support the economic development efforts of the Harvest Sky EDC. This includes identifying the agricultural assets in the region that are required to build the business case for an *Agricultural Center*. For the purpose of this report, the Harvest Sky Region includes the Town of Hanna, the Village of Youngstown, and Special Areas No. 2.

Work on the *Agricultural Center Business Case* was undertaken in conjunction with Harvest Sky EDC and incorporates their goals and objectives for sustainable economic development into the analysis. Specifically, Harvest Sky EDC envisions an *Agricultural Center* that capitalizes on the strong history of agriculture and incorporates initiatives proposed by local residents to harness the region's strengths in ways which generate long-term sustainable economic benefits.

Using this framework, the project team has developed a business case for the *Agricultural Center* that can be used to inform decision making and identify the feasible components of an *Agricultural Center* in the Harvest Sky Region.

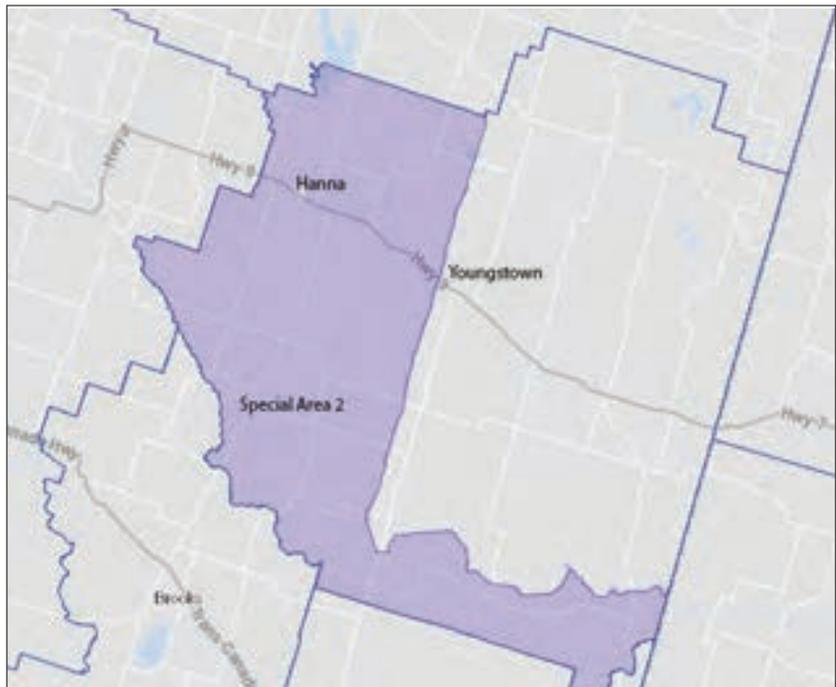


Figure 1: Sheerness Power Generating Station

Foundational to the *Agricultural Center Business Case* is the work that began in 2015 by Community Action Teams (CAT) to explore economic development opportunities for the region. This project picks up where the CAT process left off, by completing an in-depth review of the opportunities available for an *Agricultural Center* in the Harvest Sky Region. The following report includes a qualitative and quantitative review of the region, identification of regional strengths and comparative advantages, input from local stakeholders and industry experts, and research to identify market opportunities associated with an *Agricultural Center*.

1.2. Regional Characteristics

The Harvest Sky Region has many unique characteristics that make it a desirable place to live or visit and which make it amenable to agriculturally based economic development opportunities. Topographical features include wide open spaces that are home to wildlife, native prairie grass, seeded cropland, and livestock. There are also attributes which can make agricultural production challenging, such as lower than average levels of precipitation coupled with more sunlight hours than the rest of Alberta (an attribute that has led to the region being affectionately referred to as the Cactus Corridor).

The first steps taken for the *Agricultural Center Business Case* were the completion of a SWOT analysis, economic assessment, and agricultural review of the region. This approach helped the team assess which sectors of the economy could be expected to best respond to economic development initiatives. Results of this work are reported in Appendix A - *Preliminary Options Assessment*, where the strong rural culture, the importance of livestock production, and the need to increase the profitability of livestock producers are clearly laid out, and form the basis of the *Agricultural Center Business Case*.

2. Engagement

Recognizing the importance of local insight and industry knowledge for evaluating the economic potential of an *Agricultural Center*, stakeholder engagement was a key component in helping to articulate the business case. Drawing on the engagement previously completed by the CAT,¹ the project team canvassed local residents, municipal administrators, business leaders, ranchers, farmers, industry associations, and subject matter experts. In total, close to 30 interviews were conducted over the course of the project with information collected and integrated into the overall development of the *Agricultural Center Business Case*.

3. Site Planning

The *Agricultural Center* is a proposed multi-purpose facility providing grounds for agriculture related businesses and services, as well as shows and exhibitions. It would also have the capability to host small conferences and special events. The project team has identified the following planning, engineering, and cost considerations that should be evaluated when a site is selected for the *Agricultural Center*.²

- Approximately 30 acres of land is needed to accommodate the required buildings, parking, access, and loading.
- Site should be within 30 kms of the town of Hanna.
- Proximity to existing infrastructure and services including water, sewer, and utilities.
- The potential costs that could be incurred related to requirements for highway improvements to accommodate safe vehicle turning movements.
- Any other site related limiting factors or barriers which could hinder or prevent the development of the facility.

The *Site Planning Summary* is provided in Appendix B.

¹ For example, the review of a riding and event center makes use of the specific input from the community (e.g. desired facility functionality and amenities that could be included in a riding and event center).

² The team recommends that comprehensive due diligence and site analysis should be undertaken, and a pre-feasibility study should also be prepared prior to purchasing a site.

4. Sources of Funding

Considering the size, scale, and scope of the *Agricultural Center*, it is expected to require significant costs to construct. Once the facility is completed, the ongoing operating costs constitute a future monetary obligation that must be met in order to ensure the continued operation of the facility and the services offered. A number of funding options are available, with grant funding being one of the more favorable options available.

4.1. Grant Funding

Government grants may offer excellent opportunities to fund various aspects of the *Agricultural Center*. Available grant funding includes federal and provincial grants that focus on agriculture, innovation, education, recreation, and the environment. Appendix C provides a list of available grant funding opportunities that are aligned with the opportunities proposed in this business case.

4.2. Other Sources

Other sources of funding that can be considered for the *Agricultural Center* include local fundraising efforts, municipal support, and revenue from ongoing operations of the *Agricultural Center*. Debt financing is also a consideration. The Government of Alberta provides eligible municipal, regional, health and education authorities with financing for capital projects. Long-term loans at moderate interest rates are available through this program and may present a financing option for the project.³

5. Agricultural Center Analytical Approach

The goal of the *Agricultural Center Business Case* has been to identify the opportunities that best align with the Harvest Sky EDC's *Agricultural Center* concept and those which also have the highest probability of success. The analytical approach is provided below.

5.1. Opportunity Assessment

The opportunity assessment involved a detailed review of the Community Action Team process which had produced over twenty economic development ideas. Supplementing this research with the results of stakeholder engagement, market research and analysis undertaken for this project led to the shortlisting of opportunities that are likely to be a best fit for the Harvest Sky Region. The results are reported in the *Preliminary Options Assessment* report (Appendix A).

5.2. Analysis

For each shortlisted opportunity, further review and analysis was completed. This included a market assessment, identification of the value proposition, review of possible operating models, evaluation of risks and dependencies, and a financial analysis.

Wherever possible, emphasis has been placed on utilizing the best data available to drive actionable insight. This data driven approach is heavily supplemented by the insight and experience of local residents, business leaders, and municipal administrators. In certain cases where the team faced challenges predicting the precise services that would be offered and/or timing of the implementation of opportunities are not known, professional judgement was used to make the problem tractable through

3 <https://www.alberta.ca/loans-to-local-authorities.aspx>

the use of assumptions and proxy data.

5.3. Results

Many of the economic development opportunities available in the Harvest Sky Region show excellent promise and alignment with the *Agricultural Center* framework. However, the following two projects were identified for further review:

1. Rural Community Practice (RCP)
2. Riding and Event Center

According to the 2016 Census of Agriculture, Special Areas No. 2 is home to over 138,000 head of cattle on 1.6 million acres of pastureland—ranking 8th and 2nd respectively as compared to 70 other census subdivisions.

In order to consider the individual merits, risks, and financials of each opportunity, they have been evaluated independently in Part 2 and Part 3 of this report. In Part 4, the opportunities are combined in an effort to consider how certain synergies could be realized by including both the *RCP* and *Riding & Event Center* within the *Agricultural Center*.





PART 2. RURAL COMMUNITY PRACTICE

1. Rural Community Practice Introduction

One of the outcomes of the CAT process was the concept for a *Livestock Hub*. The original proposal was developed by a team that included two local veterinarians who envisioned a livestock focused animal health center. The proposed facility was to be the base of operations for a multidisciplinary clustering of livestock businesses that housed professionals, paraprofessionals, and retail opportunities. The vision was for a center that provided animal services from “*Conception to Consumption*”.

The RCP model aims to address all aspects of animal health and welfare while maintaining a focus on delivering services that will benefit the region and the environment. This approach emphasizes the importance of supporting livestock producers while simultaneously serving community.

The CAT team outlined the following objectives that the *Livestock Hub* intended to achieve:

- Improve the viability, sustainability, and success of livestock producers in Special Areas.
- Strengthen local agricultural production.
- Diversify the regional economy.

It is well recognized that the livestock production industry faces many challenges, including some of the lowest levels of profitability observed in the agriculture sector.⁴ While economic factors are important, it is also becoming increasingly evident that animal and ecosystem health are closely linked. Therefore, a comprehensive approach has the potential to generate benefits to livestock producers, the economy, the environment, and society at large.

In the current context, incorporating a more comprehensive approach gave rise to an expanded *Livestock Hub* concept based on the notion of *Rural Community Practices (RCPs)*, as outlined in The Journal of Veterinary Medicine:

“The concept of rural community practice envisages combining traditional services provided in a “mixed-animal” veterinary practice with an expanded portfolio of public-practice and communication services that meet the emerging animal, public, and ecosystem health needs of the collective community, not just those of animal owners.”⁵

By implementing a customized *RCP* approach, the *Agricultural Center* could maintain a focus on supporting livestock producers while simultaneously generating incremental value through serving the greater community as well. In this way, the *RCP* would provide the operating model and overarching philosophy that would facilitate the successful implementation of the following three business streams:

- Livestock Hub
- Education and Training
- Research

Sections 1.1 to 1.3 provide an expanded view of the *RCP* concept and the three streams listed above.

4 Statistics Canada. <https://www150.statcan.gc.ca/n1/pub/95-640-x/2016001/article/14815-eng.htm>

5 Rural Community Practice (RCP) jvme.33.4.549.pdf

1.1. Livestock Hub

Building on earlier work, this report takes the original vision for a livestock center and outlines the animal health and welfare professionals that could be included. The veterinary practice is integral to the *RCP* as its presence is critical to the success of the other two business streams (*Education and Training* and *Research*).

Evaluating the components of the Livestock Hub involved extensive research and stakeholder interviews with local residents and Subject Matter Experts (SMEs). Additionally, a detailed RCP Market Analysis has been completed and the full report is provided in Appendix D.

The value proposition for the *Livestock Hub* is based on the generation of economies of scale and scope. Animal services would be delivered more efficiently as veterinarians would be able to draw on the expertise of other resident professionals and vice versa. The result is an array of animal health competencies and services across the three categories provided below.

Table 1: Livestock Hub Possible Service Offering

Animal Health Services	Feed and Land Services	Equine Maintenance
Veterinary Services	Animal Nutrition	Farrier Services
Breeding Services	Range Management	Horse Dentist
Lab Services		Boarding Services
Rehab and Therapy		

The following subsections provide an explanation of the three categories in Table 1.

1.1.1. Animal Health Services

The *Animal Health Services* that have been identified for the proposed *Livestock Hub* include the following health and welfare components:

Veterinary Services

Veterinary services for cattle and horses including illness diagnosis, surgery, and wound repair. Obstetrics is another potential service offering, including assistance with birthing and cesareans. The vet clinic could provide a base of operations for professionals to work out of and support farms in the region through a mobile clinic or on-site as needed.

Breeding Services

Genetic profile services can provide producers with insight into selection and breeding decisions to reduce inbreeding, minimize risk of genetic abnormalities, improve herd health, increase fertility, and address other performance traits and breeding objectives. These services can strengthen the herd and ultimately lead to increased profitability.

Lab Services

Tied to the veterinary services, the facility could explore in-house laboratory services. Rather than shipping test results to labs in Calgary, Edmonton, or Saskatoon, the *Livestock Hub* could conduct this work on site, reducing transportation costs and wait times. Services could include blood and tissue analysis, biopsy review, DNA testing, and disease testing (Cancer, Rabies, BSE, etc.).

Rehab and Assisted Therapy

Rehabilitation services include assessing injured, or post-injured, retired, or otherwise stressed horses, developing a rehabilitation strategy for the animal and executing it. Equine physical rehabilitation has numerous goals, including assisting in injury recovery, improving patient mobility, alleviating signs of illness, and maintaining health through strength training.

Rehabilitation services could be offered within the *Livestock Hub*, or the *Livestock Hub* could be used as a base of operations for instructors to travel to on-site farms and execute their work. Rehabilitation services are not only limited to horses, as rodeo stock animals can also require therapeutic care.

As mentioned earlier, it is anticipated that veterinarian services would be the cornerstone of the *RCP*, and that other professionals at the center would complement this core service offering. The *RCP Market Analysis* report (Appendix D) suggests there is sufficient demand to justify two to three new veterinarians in the region. A review of existing businesses indicated that large animal veterinarian care is limited in the region.⁶

Breeding services and genetics testing are also important professional services that are in high demand, and there is evidence to suggest that regional demand would support the inclusion of these services in the *Livestock Hub*. This could be an existing provider in the region that could be attracted to the center, a satellite office of a service provider in the greater region, or a new entity that sets up operations within the center.

In contrast, it is questionable whether demand is sufficient to support livestock rehab services. While these services are an excellent fit with the *Livestock Hub* concept, in discussions with local producers and those closely associated with the equine industry, questions were raised about the willingness or ability of horse owners in the region to pay for rehab services such as physiotherapy or massage. There is a belief that the veterinary services within the *Livestock Hub* would be sufficient to meet the needs of most horse owners. This could be an area of growth if animal owners express the desire for additional rehab services beyond what are offered by the resident veterinarians.

One possible option is to offer services like equine rehab on-demand. For instance, Maverick Large Animal Veterinary Services in Stettler often brings in Momentum Equine Veterinary specialists (from Sherwood Park) to supplement their own service offering. The *RCP* could take a similar approach as a starting point to gauge demand.

Over the course of this project, the desire for local laboratory services was raised numerous times. Without laboratory services in rural areas, animal care can be delayed as veterinarians have to send blood tests and lab work to Edmonton or Calgary and wait for results. Subsequently, there is a case to be made for laboratory services to be included within the *Livestock Hub*. However, one industry expert shared that this rural model had been attempted on numerous occasions and it has never been successful.

A partnership between the University of Calgary's Faculty of Veterinary Medicine and the Government of Alberta was recently announced for a pilot project aimed at enhancing livestock diagnostic capacity in Alberta. The fact that these laboratory services are being subsidized by the provincial government is an indication of the challenging economics of lab testing services. Funding for this program is in place until early 2024, but based on the results of the pilot project, it is possible that a regional approach with related funding could be considered.

⁶ Valley Vet Clinic operates out of Hanna offering large animal and companion animal services, with one part time veterinarian and a technologist on staff.

1.1.2. Animal Feed and Land Services

Supplementing the animal health services outlined in section 1.1.1., there is the potential for the *Livestock Hub* to also offer additional animal nutrition and land services. These options could include the following professional services:

Animal Nutrition

Livestock nutritionists work with producers to formulate balanced food rations in response to specific animal requirements related to performance, reproduction, lactation, or existing deficiencies. Typically, nutritionists work closely with veterinarians to ensure a well-rounded approach. By engaging a nutritional specialist, producers can increase animal welfare, animal productivity, animal product quality and ultimately farm profitability. This can be especially important in regions like the Canadian prairies where there are significant climate variations, along with the type and quality of feed available during different times of the year.

Range Management

With the native prairie grasslands and agricultural land in the region, there is value in considering range management services through the *Livestock Hub*. Rangelands are a valuable ecosystem and range management can help ensure the preservation of these areas. Services provided through the *Livestock Hub* can help ensure responsible grazing, regulate human use, and ensure that the use of rangeland ultimately supports a diversity of native plant species, reduction of erosion, and moisture conservation. Proper range management can support local producers as well as benefit the local ecosystem.

There are clear synergies between professional nutrition services and the animal health practices that are proposed for the *Livestock Hub*. Additionally, as noted in the *RCP Market Analysis* (Appendix D), nutritionists and range management professionals have a significant market that could be captured. However, these types of services can be considered non-discretionary and producers may not feel the additional expense can be justified.

In order to successfully penetrate this market, marketing efforts may be needed to inform producers on the return they can expect on their investment. The goal of the center should be to identify and attract professionals with a proven track record of improving animal health and increasing farm profitability. Likewise, as large feed companies often offer nutritional services, another option might be to attract a feed company to the *Livestock Hub* or pursue a partnership with an existing feed company in the vicinity.

Range management can be particularly important in regions facing climate, precipitation, and grazing pressure. These services would be a valuable addition to the *Livestock Hub* but the main concern is related to producer uptake of these services and whether the demand would be sufficient to support a year-round, full time range management professional. One potential option is that the *Livestock Hub* work to bring these services into the center on a part time or ad hoc basis. This might involve working with an existing consultant to set up a satellite office, thereby allowing the *Livestock Hub* access to range management services and also allowing the range management professional the chance to increase their client base.



1.1.3. Equine Maintenance

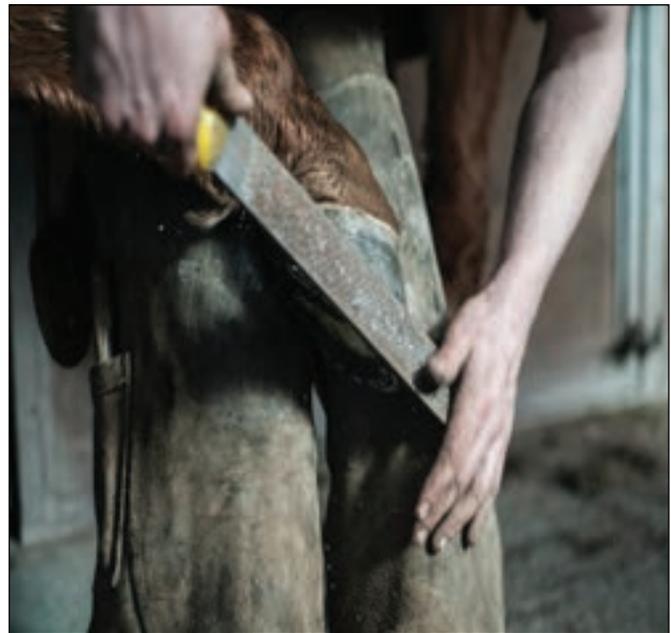
Horses and horse care form an industry specialized enough to be considered on their own, and there are a series of services exclusive to horses:

Equine Maintenance

This is a broad category covering farriers, horse dentists, and boarding facilities tailored explicitly for the care of horses and ponies. Boarding facilities can offer indoor shelter or outdoor paddocks and pastures to contain the animals, and ensure water, food, and exercise are offered to the animals. Boarding offers added security to owners who are unable to personally care for their horses every day.

As outlined in the *RCP Market Analysis* report, the estimated market for these services in Special Areas No. 2 is relatively small and may not support inclusion within the *Livestock Hub*. Furthermore, equine veterinarians often include dental and hoof care in their service offering.⁷ These services could also be provided by a veterinary technologist. Dental and hoof care could be services included in the *Livestock Hub*, and thereby further diversify the services offered to the producers in the region.

While numerous local residents spoke of the opportunity related to boarding, one facility operator spoke of the high operating costs, onerous insurance requirements, and the lack of sufficient ongoing demand. It may be possible that a boarding facility would be a good fit with the Riding & Event Center proposed in Part 3. This may be something that could be investigated in the future if consistent demand materializes.



7 <https://www.vetvoice.com.au/ec/horses/equine-veterinarians/>

1.2. Research Facility

The next component of the *RCP* to be considered is a *Research Facility*. In the *Preliminary Options Assessment*, research opportunities ranked high in terms of economic contribution and alignment with the *Agricultural Center* concept. Based on this assessment, the project team considered how the Harvest Sky Region's characteristics and the unique ecosystem could be leveraged in order to attract researchers and research projects.

The value proposition for a research facility in the Harvest Sky Region is the proximity to the ecosystems and animals that would be the subject of study. Compatibilities with the Livestock Hub and fit within the overall RCP model presents an excellent long-term opportunity for research activities.

Potential areas of research focus:

Cattle production

The prevalence of cattle production in the Harvest Sky Region presents an opportunity for agriculture research focusing on improved animal health and welfare, innovative production techniques, forage production, and ways to increase the profitability of livestock operations. For example, one study being conducted in Alberta is investigating smart cow technologies that track location and behavior of the herd in an effort to optimize profitability and identify the genetic attributes that are best suited for different regions. Another study completed at the University of Missouri investigated how existing cattle breeding practices have unintentionally reduced cattle tolerance to heat and humidity. Attracting this kind of research to the region could have the added benefit of exposing producers to information and techniques that help them manage productivity and ensure cattle can thrive in any environment.

Climate Research

Some climate scientists predict that temperate regions in North America will become hotter and drier over time. As such, the Harvest Sky Region's climate may be of interest to researchers and scientists that are studying the effects of climate change and working to mitigate the impacts to farmers, cropland, livestock, and society in general. While the hot and dry regional climate is often considered a disadvantage of the region, it may be of interest to researchers evaluating new hardier crop varieties, developing techniques to increase heat tolerance in cattle, reducing water consumption, and exploring ways to increase environmental sustainability.

Another climate topic that is related to cattle production is the issue of methane release from cattle. A recent report from the UN Intergovernmental Panel on Climate Change highlighted the need for "strong, rapid and sustained reductions" in methane emissions in order to reduce the impacts of climate change.⁸ There are currently studies underway that are looking at feed variations and other solutions. More research funding is likely to be directed to this problem as methane becomes an area of increased focus.

Native Grasslands

Native prairie is a unique ecosystem that is becoming increasingly threatened. In Western Canada only 20% of native grasslands remain.⁹ In addition to supporting a diverse range of plants and animals, native prairie also has the ability to sequester carbon from the atmosphere. Interestingly, research has shown that there are benefits to cattle grazing on native prairie as it contributes to the grasslands ability to capture and store carbon. As long as the prairie grass remains unbroken, the carbon remains locked in the soil.

8 Sixth Assessment Report (ipcc.ch)

9 https://www.youtube.com/watch?v=_CG4ROvCu0Y

Discussion with research associations, industry experts, and local residents identified areas of ongoing research to quantify the level of carbon that native grasslands capture. There is a growing narrative that native grasslands present an excellent opportunity to attract research funding and/or the researchers investigating the natural attributes of native grasslands. Areas of interest could be biodiversity, plant ecology, carbon sequestration, and the positive effects of cattle on the carbon storage potential of the grasslands.

Producers in the region may have the opportunity to participate in both industry and academic research and benefit directly from the insight and innovation that arises out of it. In fact, access to herds could be a key factor in attracting research to the region and ultimately contribute to the success of a *Research Facility* within the *RCP*. A University of Alberta researcher interviewed for this project mentioned the challenges that researchers can face identifying suitable research project participants (i.e. gaining access to livestock herds and land where they can conduct their research). Dedicated research locations and herd access are considered a valuable asset to researchers and could help to attract long term projects to the region.

Facilitating introductions and relationships between producers, land owners, and researchers could be an important role for the *RCP*. This approach also aligns with the idea of living labs which is gaining support in research circles. For example, Agriculture and Agri-Food Canada (AAFC) have created the Living Lab Initiative to encourage the coordinated development and adoption of innovation.

“The Living Laboratories Initiative is a new approach to agricultural innovation in Canada, that brings together farmers, scientists, and other collaborators to co-develop and test innovative practices and technologies to address agri-environmental issues.”¹⁰

The AAFC’s Living Lab’s initiative places a priority on climate change initiatives such as carbon sequestration and greenhouse gas mitigation through nutrient management, feeding strategies, etc. An important aspect of the Living Labs Initiative that is relevant to the *RCP*, is that it aims to create long-term comprehensive research projects in collaboration with producers.

Another area of potential opportunity for the *Research Facility* is to attract private sector research. As outlined in the *RCP Market Analysis*, the private sector in Canada spends over \$15B on external R&D across all sectors every year, with close to \$1.5B of that happening in Alberta. On average over 90% of this research funding has been devoted to Natural Sciences and Engineering disciplines. Further breakdown into specific areas of research is not available but it goes without saying that research facilities should focus on multiple, broad areas of research in order to maximize the probability of success. Additionally, the value proposition of these facilities is tied to the proximity to the subject of study. In the case of the *RCP*, this would include the ecosystems, agricultural activities, and animals within the Harvest Sky Region.

It should be noted that there are existing research facilities near the Harvest Sky Region. The Chinook Applied Research Association (CARA) operates near Oyen in Special Areas No. 3. The Mattheis Research Ranch is located just outside the southern border of Special Areas No. 2. and includes a ranch which has large tracts of native prairie, cattle herds, and research facilities that include basic accommodations. Olds College operates an applied research facility called the Technology Access Center for Livestock Production. This facility offers resources and services to advance the needs of the livestock industry.¹¹

The identification of facilities with a number of similar components to the concept that has been developed for the *RCP* helps to validate the value proposition, but the fact that research facilities

10 Living Laboratories Initiative - agriculture.canada.ca

11 <https://www.oldscollege.ca/research/areas-of-focus/livestock-meats/index.html>

currently exist less than two hours from Hanna is an important consideration. While competition alone is not a reason to abandon the research facility opportunity, the research component of the *RCP* could place it in direct competition with Olds College – an institution which has previously been identified as a potential education partner.

Possible solutions could include:

- Investigate opportunities to partner with the Technology Access Center and create a satellite location.
- Offer a different suite of research services.
- Pursue the opportunity regardless of competition.

In spite of potential regional competition, it is believed that the success of a *Research Facility* will be largely dependent on how closely regional attributes coincide with research themes and available research funding. Areas of potential alignment have been established above (cattle, climate, and grasslands), but success is not a certainty. Effort will be needed to develop a network that includes research institutions, researchers, funding agencies, industry associations, and the private sector. The *Research Facility* will need to have the amenities that researchers require such as laboratory room and equipment, and accommodations for researchers. Marketing the region and the *RCP* amenities will bolster the *RCP's* reputation as a research facility and be a key success factor.

A research facility within the *RCP* could take a number of different forms. Firstly, the facility could simply provide the amenities required for researchers to complete their research. This would include laboratory space, work stations, high speed internet access, and lodging. In this case the operating model would involve attracting researchers with existing funding already in place. An alternative model would be to not only provide the facilities, but to partner with researchers, and work to attract the funding for specific research projects. The most practical approach would start with the former with the intent to grow into the latter. In either case, a facility is required and there is a need to establish collaboration with researchers, universities, and industry groups.



1.3. Education, Training, and Extension

From the beginning of the CAT process, the concept for a livestock hub has always sought to leverage the core group of professional services within the facility in order to provide educational services. Under the expanded scope of the *Rural Community Practice*, education would remain an important aspect of the facility's mandate. Additionally, partnerships with academic institutions could create opportunities for student training, practicums, and internships that would be facilitated by *RCP* staff. This would create additional revenue streams while also providing benefits to the local community and beyond.

The Hanna Learning Center (HLC) is a community resource center that has partnered with Campus Alberta Central to deliver training and workshops across various disciplines. It is recommended that the education component of the *RCP* build off of the foundation that the HLC has already established in the community and look for partnership opportunities. This could include:

- Hosting workshops, grazing schools, tours, seminars, conferences.
- Extension activities covering a wide variety of topics from crops, forages and livestock to agroforestry, medicinal and other special crops.
- Working directly with producers to improve agricultural practices for long-term economic and environmental sustainability.

Youth mentorship programs also present a potential opportunity for the *RCP* to partner with the local school division and other youth focused programs like 4-H or the Young Agrarians. The HLC and Lakeland College currently offer a dual credit program where high school students can earn credit toward a college level agriculture certificate. The *RCP* could present opportunities to expand this program. Stakeholder engagement included a discussion with the manager of youth education programs with the Calgary Stampede Foundation. This conversation highlighted the potential for the *RCP* to partner and collaborate with a wide range of organizations to advance youth training and education.

The Altario School of Excellence and Irvine School Agricultural Discovery Centre are examples of regional success stories. Discussions with school administrators and the Dean of a regional college, pointed to the need to attract people into agriculture disciplines. The *Livestock Hub* and *Education* components of the *RCP* can help further this goal by partnering with schools and youth organizations to support agriculture related career pathways.

Harvest Sky EDC has a number of economic development projects that are currently being assessed, one of which is a proposal for an *Education Center* which would include dormitories. This presents parallel educational opportunities for the *RCP*, specifically related to the accommodation services that could be offered. Possibilities include:

- Medium-term internship opportunities for post-secondary students.
- Lodging for itinerant animal health professionals and researchers.
- Expansion existing dual credit programs in an effort to attract international students.¹²

Furthermore, Part 3 of this report evaluates a *Riding & Event Center*, which could lead to the development of other educational programs such as a rodeo academy similar to the Badlands Baseball Academy in Oyen.

¹² The Alberta Dual Credit Framework identifies dual credit as programming that is authorized and funded by Alberta Education in which grade 10, 11, or 12 students can earn both high school credits and credits that count toward a post-secondary certificate, diploma, or degree, including a journeyman certificate.

One of the attractive aspects of the *Education and Training* component of the *RCP* is that it could make other marginally attractive services feasible. For example, as mentioned in Section 1.1.1, questions remain about the market for equine rehab services. However, if this service for horse owners were to be cross-subsidized by related educational training, there may be a case for inclusion of a rehab specialist at the facility.

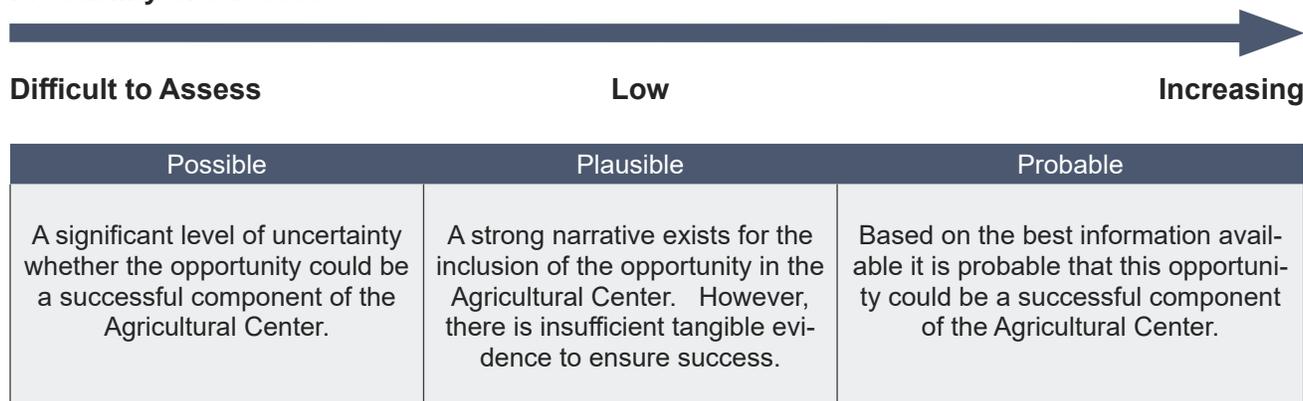
Successfully integrating education into the *RCP* will be contingent on developing formal relationships and arrangements with academic institutions. The key to doing this will be the ability to leverage the agricultural focus and professional expertise present in the center and link it to the needs of education providers. Most importantly, these arrangements will need to ensure some form of revenue sharing between the academic institution and the *RCP*. Representatives from various regional colleges were optimistic about the opportunities that could arise out of the *RCP* concept but were hesitant to discuss revenue sharing models at this stage in the process.

1.4. RCP Summary and Assessment

A simple ranking indicator called Three P is used to evaluate each opportunity based on both qualitative and quantitative factors. As shown below, moving from left to right on the scale, it becomes easier to determine the probability of success.

Figure 1: Three P Assessment Description

Probability of Success



The following table provides a summary and Three P assessment of the *RCP* components.

Table 2: Opportunity Summary

RCP Component	Narrative	Probability of Success	Recommendation
Veterinary Services	Sector shows excellent levels of profitability combined with strong demand in the region	Probable	Pursue
Breeding Services	Sector shows excellent levels of profitability combined with strong demand in the region	Probable	Pursue
Lab Services	Demand exists but may not be economic within a rural setting. Monitor outcome of the pilot project.	Plausible	Monitor
Rehab and Therapy	Services can benefit the community but may be seen as discretionary. Opportunities exist to test the market through ad hoc clinics or through a part time practitioner	Plausible	Investigate
Animal Nutrition	Nutrition is an important component of animal health. Therefore, opportunities to include a level of animal nutrition should be pursued.	Probable	Pursue
Range Management	Questions persist related to demand for these services. Could be a component of RCP and should be investigated even if on an ad hoc basis	Possible	Investigate
Equine Maintenance	Questions persist related to demand for these services. Could be an important component of RCP service offering and should be investigated even if on an ad hoc basis	Possible	Investigate
Research	A research facility is compatible with Livestock Hub and fits well within RCP concept. Market research shows that there is significant activity taking place in Alberta, and that the Harvest Sky Region has the unique attributes needed to attract certain types of research.	Plausible	Investigate/Pursue
Education and Training	Education programs can build on the existing relationships the Hanna Learning Center has and leverage the professionals in the Livestock Hub.	Probable	Investigate/Pursue

2. Operating Models

The veterinarians are the cornerstone of the *Livestock Hub* and equally important to the *Rural Community Practice*. Therefore, attracting a veterinarian practice is key to successfully implementing the *RCP* model. The veterinarian who originated the *Livestock Hub* concept has moved from the region, but the desire to see a similar facility developed still exists within the community. This raises legitimate questions as to who would lead or champion an *RCP* in order to bring it from the concept phase, to completion.

The *RCP* requires a manager which comes from either a committed veterinarian practice, or a business/individual that takes responsibility for coordinating the animal health professionals and other services within the *RCP*. In any case, the manager would be required to pursue the vision of an *RCP*, coordinate the various components, and grow the business. Management and oversight of the *RCP* is a very important consideration and could be provided by one of the following:

1. **Agricultural Society** – in many regions of Alberta, Agricultural Societies take an active role in the provision of agricultural related services and activities within the community. However, the *RCP* would likely be beyond the scope of typical Agricultural Society activities. To date, there is no indication that the Hanna and District Agricultural Society has the capacity to provide the needed services for the *RCP*.
2. **Private Business** – Having a business take responsibility for the management and operations of the *RCP* is another attractive option. However, it may be difficult to attract a private investor that will support the full *RCP* model and vision and be willing to invest in such a novel concept.
3. **Veterinarian Practice** – attracting a veterinarian practice to manage the *RCP* is a sensible and pragmatic approach resulting from the relative importance of animal health to the facility. That said, the facility is envisioned to be much more than a veterinarian clinic. The overseer of the *RCP* must be an individual/organization that can see beyond the *Livestock Hub* alone. The *RCP* concept is very broad and it may be difficult to identify a veterinarian clinic that is willing or able to support the full vision.
4. **Representative of the Harvest Sky EDC** – This would be a hybrid model that brings together positive aspects of both the public and private sector. The representative would be tasked with managing the day-to-day operations of the facility and ensuring it has the resources needed to support all three streams of services offerings. This would ensure a balanced approach that places equal importance on *Research, Education and Training*, and the *Livestock Hub*.

It is the opinion of the project team that number 3 and 4 present best options.

It may be possible to identify an existing veterinarian practice that is philosophically aligned with the *RCP* concept, one that has the capacity to pursue its broad mandate, and shows a willingness to work collaboratively with the Harvest Sky EDC. While the EDC would ultimately relinquish a level of control, this would be an attractive outcome in terms of preserving the original vision for the facility and with regards to risk management. The main dependency in this scenario is identifying a veterinarian practice with the desire and capacity to pursue the *RCP*.

In the absence of an acceptable private sector participant, it is believed that another very favorable option involves managing the *RCP* through the oversight of a representative of the Harvest Sky EDC. Private sector involvement would still be required in terms of the businesses and/or private contractors that offer services through the center (e.g. animal health, education, and research), but the EDC would provide oversight and maintain control of the overall direction of the *RCP*.

In this way, the facility would fall under the banner of Harvest Sky EDC and the manager would adhere to the existing governance structure and be accountable to the EDC Board of Directors. The goal

would be to attract private sector participants to the facility under the umbrella of the Harvest Sky EDC. Businesses would likely recognize the benefits of being a part of the *RCP* but the fact that they are independent business entities would reduce the risk to the Harvest Sky EDC and the community.

The broad *RCP* mandate supports the notion that the center's oversight should be filled by a dedicated manager. In this scenario, the *RCP* manager would be responsible not only for maintaining the *RCP*'s service offering, but also for the following:

- Growing the operation into the full-scale *RCP* vision.
- Pursuing business development opportunities.
- Fostering partnerships with animal health and agriculture professionals.
- Developing relationships with research organizations.
- Attracting research opportunities.
- Developing relationships with academic institutions.
- Providing oversight of the education component.

Although there would be involvement from the Harvest Sky EDC and Board, it would likely make sense for the *RCP* to be set up as an independent company. In terms of business structure, the most suitable model would be to incorporate as either a for-profit corporation or a non-profit corporation (also known as a part 9 company). This would ensure the appropriate reporting and governance structure required under law, and afford the benefits of limited liability and favorable tax status (in the case of for-profit) to the *RCP*.

3. Risks and Dependencies

Beef cattle production is a complex industry that can often be impacted by many different market forces. Over the long-term, meat consumption is a key driver of cattle prices and ultimately the revenues that producers realize. There are also numerous other factors that can impact cattle prices. For instance, in 2020 the Covid-19 pandemic resulted in a reduction in slaughter capacity as processing facilities were closed due to outbreaks. This resulted in a sharp reduction in slaughtered animals, and price increases for consumers at the grocery store. Unfortunately, this price increase was not enjoyed by producers as the decreased slaughter capacity resulted in oversupply of cattle at the farm gate.

Since the success of the *RCP* will in part be tied to the fortunes of local beef producers, industry risk factors translate into risks to the success of the agricultural center. Some key risks to note:

- Disease
- Drought
- Supply chain disruptions
- Consumer preferences

Many of these factors are beyond the control of the producer, however, actions that improve efficiency and overall productivity can lead to more resilient farms. One of the main goals of the *RCP* is to provide the animal services, knowledge base, education, and training that supports livestock producers in the good times and will also help them weather industry downturns.

Considering that the proposed *RCP* is ultimately a service provider—whether it be animal or education services—attracting professionals to the region will be a key success factor. With veterinary services being central to the facility, identifying practitioners with both the education and the mind-set commensurate with this broader role in the *RCP* will be important.

Of concern to the *RCP* is the reported large animal veterinary shortage that many rural areas face. The Canadian Cattleman's Association has stated that creativity is needed to address the rural veterinarian shortage and the *RCP* could help to serve that purpose.¹³ The unique service offering, potential for collaboration between professionals, and additional opportunities to be involved in research and education programs could all help to attract and retain animal health professionals.

In 2020, the federal government announced that the current carbon tax of \$40/tonne will increase to \$170/tonne by 2030. While farm fuel is exempt from the carbon tax, many industry experts anticipate that indirect effects of the tax will negatively impact farm profitability.¹⁴ It may be possible for producers to pass some of this cost on to consumers, however, beef is an elastic good, meaning that a price increase could cause a decrease in consumption. It remains to be seen whether consumers will be able to substitute beef for less expensive alternatives. In the meantime, producers need to identify on-farm efficiencies and ways to reduce carbon footprint (and thereby reduce the impact of the carbon tax). This could present an opportunity for both the *Research* and *Education and Training* components of the *RCP* to help producers address these risks.

The largest risk that has been identified is the ability of the *RCP* to generate the revenue needed to sustain operations. The *RCP Market Assessment* identified the facility components that are most likely to have sufficient demand, but questions still remain around whether producers will be willing to spend money on the services offered—particularly those services that may be viewed as discretionary. The research and education sectors of the economy show strong overall demand, but the difficulty for the *RCP* may be related to attracting researchers and students to the region.

As noted earlier, it is believed that a focus on business development will be key to the success of the *RCP*. Marketing the facility to producers, and building the relationships needed to grow the *Research* and *Education and Training* components of the *RCP* will be paramount. During interviews with industry participants numerous individuals recognized the potential of the *RCP*. Some even spoke of a willingness to partner or work with the facility. There is however, no certainty that partnerships will materialize just because a facility is built.

It is the view of the project team that a staged approach should be pursued. One which aims to grow the *RCP* organically out of its core service offering—starting with the animal health related services and then layering on the *Research* and *Education and Training* programs. This approach will allow a level of flexibility, by establishing the core features of the *RCP* first, and then allowing the facility to evolve into the center that key stakeholders desire.

Lastly, but in many ways most importantly, is the physical building that would house the *RCP*. A multifunctional facility will need to be built or an existing facility will need to be renovated and retrofitted. In either case, there will be significant associated costs. While it may be difficult to attract private sector investment to build the facility, the promise of a new center tailored to the services proposed for the *RCP* may prove to be a strong incentive to help attract the needed professionals to the region.

13 <https://www.canadiancattlemen.ca/features/creativity-needed-to-address-veterinarian-shortage/>

14 <https://westernfinancialgroup.ca/Why-are-Canadian-farmers-worried-about-the-carbon-tax>

4. Financial Analysis

A financial review has been completed to test the economic feasibility of the *Rural Community Practice*. Previous sections of this report and the *RCP Market Assessment* both outline the justification for the types of services offered at the *RCP*, and it is the recommendation of this report that these services should be provided by independent businesses and contractors. While this model would reduce the *RCP's* exposure to market risk, it will require the presence of a facility to house these independent professionals. The following financial review considers the type of facility that would be required, the related costs, and the revenue required to break even.

4.1. RCP Facility

The proposed facility has been developed to include space to house multiple animal health care professionals, to accommodate education and training, and a research area that could include lab space and remote work stations. The breakdown of the facility is provided in the following table.

Table 3: RCP Facility Components

Function	Estimate (sf)	Quantity	Total (sf)
Mechanical	200	1	200
Storage	200	1	200
Offices	100	5	500
Washrooms	300	2	600
Kitchen (non-commercial)	250	1	250
Lobby	500	1	500
Classroom/Conference Space (30 people)	1,500	1	1500
Vet Exam rooms	1,000	2	2000
Research Space	500	1	500
Total			6,250

4.2. Financial Assessment

The costs associated with the proposed facility are provided in the table below.

Table 4: RCP Facility Costs (\$)

Construction Costs	
Land Cost	18,000
Site Prep	51,037
Facility Costs	1,000,000
Total Capital Cost	1,069,037
Debt	
Down Payment (25%)	264,634
Total Debt	793,903
Annual Expenses	
Utilities	12,500
Property Taxes	18,380
Insurance	2,500
Janitorial	2,500
Professional Services	3,000
Contingency	8,000
Operating Expense Subtotal	46,880
Debt Expense (Interest)	43,376
Facility Expense Subtotal	90,255
RCP Management Expense	85,000
Total Expense	175,255

List of assumptions are provided in Appendix F

Based on the above parameters, the financial analysis indicates that in order to break even (i.e. cover the annual facility expense of \$90,255), the *RCP* would need to secure a lease rate of \$14.44/sf.

It is important to note that the lease rate excludes the RCP Management expense of \$85,000 which is considered a non-facility expense.

RCP Management expense could be covered by the Harvest Sky EDC, or the *RCP* business streams (since they ultimately benefit from the manager's efforts), or a combination of both.

It is assumed that the *RCP* would seek to enter into lease agreements with the *Livestock Hub* professionals, and while these types of arrangements would also be preferable for the *Education and Training* and *Research* streams, it is more likely that the facility would be rented on an as needed basis for the latter.

4.3. Sensitivity Analysis

The required annual revenue is the amount of revenue that the *RCP* needs to generate in order to cover all facility expenses. It is calculated based on the proportion of space that each of the three *RCP* streams will require within the center. Revenue could be achieved through lease agreements, ad hoc rentals, or any other revenue generating activity that the *RCP* identifies. For that reason, Table 5 provides two perspectives, the lease rates required to break even and the overall required revenue that the facility needs in order to break even. Each stream's required revenue is based on the building square footage that is allocated to its use.

Table 5: Financial Break Even Based on Down Payment

Down Payment	Required Lease Rate (\$/sf)	Total Required Revenue (\$)			
		Livestock Hub	Education	Research	Total
0%	16.75	58,174	34,905	11,635	104,714
25%	14.44	50,142	30,085	10,028	90,255
50%	12.13	42,109	25,266	8,422	75,797
75%	9.81	34,077	20,446	6,815	61,338
100%	7.50	26,044	15,627	5,209	46,880

The above table indicates that a facility which is fully funded by debt would require an annual lease rate of \$16.75/sf in order to break even. This would translate to a cap rate of 5.4%.¹⁵ Comparing the cap rate to other properties can provide insight into whether lease rates are in line with market realities. For instance, it is estimated that an appropriate cap rate for commercial real estate in Hanna would fall between 4.5% and 5.0%.¹⁶

Cap rate analysis indicates that a competitive lease rate for the *RCP* would fall in the \$14.00-15.00/sf range. If the total debt could be reduced through grant funding or local fundraising, it would reduce the resulting debt service costs. This reduction in costs means that lower lease rates would be needed to achieve break even. To that point, the facility could still break at a lease rate of \$14.50/sf as long as it corresponded with an initial down payment of approximately 25% (all else equal).

The break even analysis provides a perspective on the facility's operating financials under a scenario where the municipality or another group were to build the *RCP* facility under a non-profit business model. However, a private sector investor would not be satisfied with simply breaking even and would require a reasonable return on their investment in the *RCP* facility. Under that scenario the analysis should be updated accordingly.

¹⁵ Capitalization rates (cap rates) are a simple and common metric used to provide context to real estate investments. They provide an estimate for a potential return on a real estate. Investors will gravitate towards real estate investments that generate higher cap rates, all else equal. Cap rate is calculated by dividing a properties net operating income (lease revenues minus expenses and property taxes) by the capital cost or current market value.

¹⁶ Colliers, Canada Cap Rate Report Q2 2021 (based on low estimates for Calgary and Edmonton)

5. Conclusion

The value proposition for the proposed *Rural Community Practice* lies in the synergies that are created between the service offering streams. The *Livestock Hub* component of the *RCP* is envisioned to be more than a group of independent professionals simply sharing the same facility, but instead be an integrated animal-health team.

This same vision is extended to the *Education and Training* stream as well as the *Research* stream. The core group of professionals and knowledge base in the center could help attract partnerships with educational institutions and could also be leveraged to draw researchers conducting animal and environmental studies.

There are numerous opportunities for the *RCP* to offer services that would be a valuable addition to the community and beyond. It is believed that demand exists for these services, but the concern is that this demand may not instantly materialize. Therefore, marketing and business development efforts will be important to the success of the center.

The goal of the *RCP* business case has been to present a model for a center that enhances the probability of success, while also minimizing the risk to the community. The recommended focus and approach are provided below:

Maximize Private Sector Involvement

Attracting private sector businesses to the *RCP* is key to the model being presented (specifically the *Livestock Hub* business stream). This eliminates the need for the *RCP* itself to employ animal health professionals and reduces the risk to the owner of the facility.

Attract The Private Sector

The *RCP* model may be a strong motivator for some practitioners but it will need to be more than a concept to attract them. Commitment to build a facility that houses the *RCP* will signal that the community believes in the center and has a long-term vision for it. This will help to create the environment that attracts both the private and public sector.

Foster Partnerships

Expanding the Livestock Hub into a full *RCP* requires more than just private sector participation. Education and research are the key components that expand the vision for the center into one which not only addresses the needs of producers and livestock, but also the community and surrounding ecosystems.

Creating working relationships with academic institutions (PLSD, regional colleges, universities), research organizations (RDAR, CARA, ARECA), industry associations (Cattleman's Association, ACFA) and environmental groups (Ducks Unlimited, Guardians of the Grasslands) will be very important. Developing these partnerships will increase exposure of the *RCP* and improve the probability of success.

Support the RCP

Considering that the *RCP* is to some degree a novel concept, highlights the need for strong oversight and direction for the facility. While this could come from a business that fully embraced the *RCP* vision, it may be the case that this role will need to be filled by the community. As previously mentioned, this could fall within the oversight of the Harvest Sky EDC and be executed by an *RCP* Manager. This incremental position could be justified through the economic, social, and environmental benefits that could accrue to the community from the *RCP*. Ensuring the center has a strong focus on sound management, maintaining the vision, and growth of the business, will be key to its success.

While this business case has established a foundation for the *RCP*, questions still remain. This is to be expected for a project of this nature, at this stage of development. The best path forward is to recognize that the vision is not fixed. If Harvest Sky decides to pursue this opportunity, it is expected that the idea will grow and evolve in order to meet the needs of all involved.



PART 3. RIDING & EVENT CENTER

1. Riding and Event Center Introduction

In addition to the many leisure activities available in rural communities, residents in the Hanna region also have access to a number of municipal recreation facilities. This includes a hockey area, curling rink, pool, gymnasium, and a fitness facility. The town of Hanna also has a multi-purpose community hall that can host a variety of community events. According to some of the residents of the region, the one facility that is missing from the service offering is a riding arena.

A riding arena would certainly add value to the community and many of its residents, however the fact is that many similar facilities across the province struggle to generate the revenue needed to be self-sufficient. This business case evaluates the fiscal realities of riding arenas and works to identify the best path forward for the region.

1.1. Opportunity Description

The desire for a multi-purpose agricultural facility in Hanna has been a topic of discussion for many years. In 2015, members of the community created a Community Action Team (CAT) to discuss the potential for a recreation facility that could host grassroots agricultural programs, events, and basic competitions. The process outlined the needs of the community, potential facility functionality, and gauged the level of community support. A summary of the needs assessment that arose out of the CAT process is outlined in the below table. The detailed list developed by the CAT is provided in Appendix E.

Table 1: Riding Area Concept Development

Desired Functionality	Potential Users	Potential Events
All Season Facility	Hanna Professional Indoor Rodeo	Rodeo Events
Multi-Purpose	High School Rodeo	Ag shows / Cattle / Horse Shows
Central Location	4-H Club	Community Events
Spectator seating capacity	Public Riders	Sporting Events
Animal Wash Bays	Rough Stock Practice	Horsemanship Clinics/Ag. Education
Ample Parking	Schools and Academies	Events and Fairs
RV hook-ups	Livestock Industry	Concerts
Concession	Veterinarians and Rehab Specialists	Livestock Auctions
Retail Space	Rural Community Practice	Stock Dog Events

The community members leading the efforts for a recreation facility continued to develop the *Riding & Event Center* concept, but for various reasons the initiative lost momentum over time. As part of the *Agricultural Center Business Case*, the project team spoke with individuals that were part of the original CAT process. The outcome of those discussions was an understanding that the desire for a *Riding & Event Center* still exists, as many of the items outlined in the original needs assessment have maintained relevance through time.

Furthermore, community members spoke of the potential benefits such a facility would produce, including increased tourism, strengthening the local economy, engaging community residents, and providing more opportunities for residents. Ultimately, the view is that this type of facility would be a centerpiece for the town of Hanna and Special Areas No. 2.

2. Facility Concept

The Riding & Event facility will require a significant piece of land that can accommodate the arena, barns, animal pens, as well as room for vehicle, trailer and RV parking. Based on these considerations, it is anticipated that 25-30 acres would provide sufficient space for the facility, while also being able to accommodate future growth. The following subsection and related tables outline the needed facilities and provide a breakdown of specific components.

2.1. Arena and Amenities

The concept for the *Riding & Event Center* has been based on the community needs assessment and modeled off of the Rimbey Agrim Center for which building design information is publicly available.¹⁷ Where possible, cost savings opportunities have been identified and unneeded components removed from the arena proposal.

The proposed *Riding & Event Center* includes 45,000 sf of arena space that can accommodate a 125'X180' (22,500 sf) riding area, seating for 500 spectators, holding pens, livestock chutes, and animal wash bays. Also included in the estimate are separate spaces for common areas, cafeteria, retail, and washrooms.

Table 2: Riding Arena Components

Arena Components	Estimate (sf)	Quantity	Total (sf)
Lobby/Ticketing	600	1	600
Kitchen	300	1	300
Cafeteria	1,500	1	1,500
Common Areas	3,500	1	3,500
Retail Space	300	1	300
Office Space	200	2	400
Hallways, storage etc.	1,500	1	1,500
Washrooms	700	2	1,400
Mechanical	400	1	400
Arena	45,000	1	45,000
Net Area			54,900

In addition to the indoor facility, outdoor pens, holding areas and loading pens will also be required to facilitate various livestock events. A 5,000 sf barn with animal stalls has also been included in the design and costs estimate. Pole barn design has been selected in order to minimize costs.

17 <https://rimbeyagrimcentre.com/wp-content/uploads/2015/04/Rimbey-Ag-Case-Study.pdf>

3. Operating Models

Riding Arena type facilities operate across the province under a number of different models. The following section lists a few of the more common examples and highlights some of the benefits they offer and challenges they face.

Community Ownership

Under this model, facilities are owned and operated by an Agricultural Society or other community group. Examples include the Silver Sage Community Corral and the Claresholm Agriplex. These organizations typically include a group of passionate individuals with a vision for the center and the services being offered. They often have strong ties to the community and the ability to successfully host community fundraisers. Additionally, Agricultural Societies are able to access certain types of grant funding that would not otherwise be available.

While community organizations are good at advancing projects, they can sometimes face operational challenges once those projects are built. Even with proper policies and procedures in place, there can still be problems related to proper scheduling, marketing, and event attraction. Furthermore, these organizations often rely on volunteer labor, which can over time lead to volunteer fatigue.

Within the community ownership model, projects like the *Riding & Event Center*, require a strong champion. The Hanna & District Agricultural Society has voiced support for a riding arena, but not as an owner/operator. Therefore, this project would require another group in the community to take hold of the vision and advance it.

Municipally Owned and Operated

Municipalities provide many different types of recreational facilities and while riding arenas are less common under this model, there are examples such as the Pointe-aux-Pins facility under construction in Strathcona County.

Municipalities are proficient at providing recreational amenities for the public and while they typically have the financial capacity to own and operate recreation facilities, there are often more potential projects than funding. Furthermore, Recreation facilities create long-term ongoing financial obligations and local political factors could affect the willingness of municipalities to participate.

The proposed *Riding & Event Center* would be a place where local residents could engage in many types of recreational activities. However, the typical riding arena business model expects a significant proportion of facility revenue to come from events held at the center. This requires marketing and business development efforts that may fall outside the municipality's realm of expertise.

Private Ownership

Under this model, facilities are privately owned and operated. Examples include the Silver Slate Arena in Stavely and the Spur West Event Center in Alhambra. Private facilities are often owned by enthusiasts that understand livestock, equestrian, and rodeo, who actively seek to create popular events that bring people to the community. In an effort to generate profits, owners may also be willing to take on more risk and pursue opportunities to include additional services. One example is the Steakhouse at the Silver Slate Arena.

Under either the community or private ownership models, there is still room for a level of municipal support and varying degrees partnership may be important to the success of a *Riding & Event Center*. In any case municipalities can help to de-risk the venture through business and/or tax incentives.

4. Risks and Dependencies

It is the opinion of the project team that one likely path forward would be a community owned facility that receives a level of municipal support. There are however, many pieces that would need to come together for an arrangement like this to succeed.

It is anticipated that prior to discussing committing public funding, local municipalities would expect to see a significant level of progress toward advancing the *Riding & Event Center* project. This would include:

- The formation of a group of project champions.
- Formalization of the project team within a non-profit organization and the commencement of fundraising activities.
- The development of policies, procedures, and governance structure that would support the operation of a *Riding & Events Center*.
- Track record of willingness to work collaboratively with the municipality.

An example of a partnership model is provided by the Rimbey Agrim Center. The Agricultural Society provides governance and oversight, with significant municipal funding coming from Ponoka County. The day-to-day operations of the facility are carried out by a General Manager, reporting to both the governance board and the municipality. This type of arrangement is not without its challenges, but it can be successful under the right circumstances and within an atmosphere of cooperation.

Another case study that can inform *Riding and Event Center* decisions, is the facility that has been proposed in Yellowhead County.¹⁸ The local Agricultural Society has successfully owned and operated a smaller facility in the region since 1975 and they have proposed a 71,000 sf arena and sought municipal financial support. While the county has expressed support for the facility, a Yellowhead County Governance Committee document from 2019 states:

“Administration would not recommend investing in this project without ensuring [the facility] has a reasonable expectation of success - which only occurs when [Yellowhead Ag Society] has little to no debt associated with the project.”

“Taking a multi-million-dollar loan will result in annual payments of nearly \$200,000 over the next 30 years, which as Administration and Council noted would stress the business/service model considerably. To make these loan payments requires the Best-Case financial model at a minimum, and would likely severely restrict any future development if it was successful at all.”¹⁹

This example highlights the financial challenges related to building and operating multi-million-dollar recreational facilities. The financial analysis in Section 6, evaluates the *Riding and Event Center* under a similar lens in order to inform future decision making.

18 Yellowhead Ag Society, Jan 2017, <https://edson.civicweb.net/document/25820>

19 Yellowhead County Governance and Priorities Committee Agenda, October 15, 2019

Through research and engagement with other facilities and subject matter experts, the project team has identified the following additional risks, dependencies, and recommendations:

- Current volatility in construction materials such as steel, creates additional cost uncertainty.
- Riding and event centers require sound management and a level of attention that often cannot be fully provided through volunteers.
- A facility that is open to the public has to be built and operated to a very high standard.
- Attracting and retaining a qualified manager may be difficult, but is a key success factor.
- Appropriate planning is paramount and unfavorable outcomes may be avoided through public engagement and consultation with existing facilities.
- Project champions are important, but can have a narrow focus.
- It is critical that the facility is the right size for the community.

5. Market Assessment

In order to inform the business case for a *Riding & Event Center* in the Hanna region a market assessment was undertaken. This includes a qualitative and quantitative review of numerous regional features such as population demographics, economic factors, industry characteristics, and other attributes specific to the community. Similar facilities in other jurisdictions were also considered in order to provide additional context.

5.1. Regional Review

The first step to determining the financial viability of a *Riding and Events Center*, is to understand the size and structure of the market that the facility would serve.

Evaluation of possible site requirements for a *Riding & Event Center* was completed for this project and Section 4 of Part 1 outlines the various options considered. The recommendation coming out of that process is that the potential *Riding & Event Center* should be located within 30 kms of the town of Hanna. The scope of the market assessment was therefore expanded to include the greater community of Special Areas No. 2 as well.

According to the most recent census, the town of Hanna and Special Areas No. 2 have populations of 2,673 and 2,025 respectively for a total of 4,698.²⁰ This represents an approximately 5% decrease since the 2011 census. With the recent closure of the Sheerness coal mine, it is expected that the region will have experienced further population decline.

A review of business activity in the region indicates there are 350 farms in the region whose primary activity is livestock production. There are over 138,000 head of cattle in Special Areas No. 2, which ranks 8th in the province out of 70 census subdivisions. Horse populations are not as significant as cattle in terms of quantity or economic impact, but Special Areas No. 2 sits well above average in the province with a little over 1,700 head of horses and ponies, ranking 21 out of 70 census subdivisions.

Discussions with local residents confirmed that rural culture is deeply embedded in the region and revealed numerous attributes that anecdotally support the notion that a *Riding & Event Center* would be well received.

20 Statistics Canada, Population and Dwelling Count Highlight Tables, 2016 Census

5.2. Market Comparables

One way to understand overall market size and latent demand is to look at other regions and services offered and relate them to observable characteristics such as population size, economic base, cultural characteristics, and existing infrastructure. This approach is used in the following section to gain better insight into the expected costs of a riding center and potential demand for its services. Similarly, operating models employed at other facilities can be used to gain understanding into the long-term operating costs associated with a riding arena.

For the purposes of this analysis, the following three facilities were identified as being particularly relevant to the current study: ²¹

1. **The Silver Sage Community Corral in Brooks**
Proximity to Hanna and facility amenities provide an excellent case study.
2. **The Rimbey Agrim Center**
Facility presents an excellent case study due to recent construction (2015) and functionality that is similar to that identified during the CAT needs assessment.
3. **Crossroads Center in Oyen**
Facility is of interest due to its proximity to Hanna.

The following table provides details for these three facilities.

Table 3: Market Assessment Comparable Facilities²²

Region	Facility	Ownership & Operating Model	Facility Size (sf.)	Seating Capacity	Capital Costs
Rimbey	Agrim Center	Ag. Society & Municipality	Total - 60,000 Arena - 22,500	500 permanent ~200 temporary	\$5.9M
Brooks	Silver Sage	Ag. Society	Total - 55,000 (est.) Arena - 18,500 Warm Up - 8,000	~350 flexible seating	\$3M (est.) in 1997
Oyen	Crossroads Center	Ag. Society	Total - 30,000 Arena - 20,000	~ 200 temporary (est.)	N/A

5.3. Demand

Considering the significant capital costs and the ongoing operating expenses of a riding arena, creating financial forecasts for the facility is an important exercise. However, generating financial estimates is challenging, since it cannot be assumed that people and events will materialize from a constructed facility. The approach that has been taken in this business case is to produce a view of the regional market and use case studies from other regions for additional context.

Households typically have fixed budgets and limited spending that can be allocated to non-discretionary purchases. Recreation and entertainment falls into this category, and as a result, various entertainment options will compete for consumer spending.

According to the Statistics Canada Household Spending Survey, the average Alberta Household

²¹ Appendix E provides the full list of 10 facilities considered when selecting relevant comparable facilities.

²² <https://www.albertafarmexpress.ca/news/rimbey-agricultural-societys-new-multi-purpose-facility-set-to-open/>

spends 2.6% of total income on entertainment and recreational facilities use.²³ This data can be used to estimate the total market for recreation and entertainment in the Hanna region and provide insight into the potential revenue that a *Riding & Events Center* could generate.²⁴

The following table provides regional demographics and estimates of the recreation and entertainment market as a function of the number of households in a region and their average household income.

Table 4: Regional Demographics and Market Size

Region	Population	Average Age	Average Household Income (\$)	Recreation & Entertainment Market (\$)
Harvest Sky	4,698	42	68,733	3,220,897
Rimbey & Ponoka County	11,234	43	65,075	7,810,055
Brooks & Newel County	20,814	36	76,183	14,795,713
Oyen & Special Areas No. 3	2,095	44	65,888	1,346,527

While it is natural to initially compare population sizes in an effort to gauge feasibility, this metric can be misleading. Population alone is not necessarily a good indicator of the market that can be captured for a product or service. The following table provides a relevant example from the Canadian Football League (CFL).

Table 5: CFL Market Size vs. Attendance²⁵

Team	Population	Average Gate Attendance
Saskatchewan Roughriders	1,174,000	30,723
Toronto Argonauts	5,928,000	12,491

Toronto has a market with nearly 6 times the number of people as Saskatchewan, but fails to generate even half the number of people per game. This simple example highlights the fact that in addition to population, local culture, tastes, and preferences need to be considered. Also, of importance is competition. In the above example, local preferences and competition for entertainment dollars are likely the main contributors to attendance variations in the two regions.

A review of the riding arenas in Rimbey and Brooks, estimates that event gate revenues and membership fees generate approximately \$150,000 annually. This means that in order to generate similar revenue from gate revenues and membership fees, the Hanna Riding Arena would need to capture approximately 7% of the total Hanna recreation and entertainment market.²⁶ Considering that many people in the Hanna region currently travel to other regions for rodeo events, it seems reasonable that a facility in Hanna could capture this proportion of local spending.

While some residents would continue to travel to other regions for specific events, local residents would most likely prefer to support their local facility whenever possible. Furthermore, with the nearest facility being over an hour away, distance would also limit the amount of competition the *Riding & Event Center* would experience.

23 Table 11-10-0222-01 Household spending, Canada, regions and provinces

24 In this context, Hanna region includes statistics for both the town of Hanna and Special Areas No. 2

25 Population is based on the province of Saskatchewan and the Greater Toronto Area (GTA)

26 Calculate based on the total estimated market of \$3,220,897 from Table 4

Another important income stream for riding arenas are industry events and trade shows. This could include cattle auctions, trade shows, and conferences. Companies and organizers of these events will be seeking markets where they can reach the largest audience and maximize sales revenue for the product and services being offered. They will also be considering the amenities that are available in the region.

There are questions as to whether Hanna could compete with larger towns and cities such as Brooks (Silver Sage), Ponoka (Calnash Center), or Strathcona (planned agriculture facility) in attracting events. However, it is also the case that the Rimbey Agrim center is less than 50 kms from the larger Calnash Center in Ponoka. Therefore, it is believed that a facility in Hanna could achieve comparable revenue from industry events as the Agrim Center. Regardless, marketing and business development efforts will be key to achieving this outcome.

6. Financial Analysis

A financial review has been completed to test the economic feasibility of the *Riding and Event Center*. The analysis considers the type of facility that would be required, the related costs, and the revenue required to break even.

6.1. Financial Assessment

The estimated construction costs associated with the proposed facility are provided in the table below. Estimated construction costs for a Riding Arena in the Hanna region include facility materials and installation, as well as interior fit and finishing. Facility costs include the cost of a small barn adjacent to the arena. Land cost estimates are based on market data for unserviced land in the general vicinity of the town of Hanna. Site prep includes earthworks and estimates for serving the lot (i.e. utility hookup).

Financial projections have been developed for the *Riding & Event Center* based on a range of available data which includes the following:

- Discussions with existing facilities and subject matter experts.
- Industry data (sourced from industry Canada on the operating costs of the average facility).²⁷
- Financial statements filed with Canada Revenue Agency for facilities that operate under specific non-profit status.²⁸
- Alberta Association of Agricultural Societies

As previously stated, this business case produces a view of the regional market and uses case studies from other facilities for additional context. Using this approach, three financial scenarios have been developed for the facility:

1. Base Case

Agrim Center and Silver Sage Community Corral are used as case studies with conservative adjustments made to the financial projections based on factors specific to the Hanna area. The proposed facility has been developed with the community needs assessment in mind.

2. Favorable Case

Agrim Center and Silver Sage Community Corral are used as case studies for financial projections. Forecasts presume that the facility can attract higher revenue from rentals and

27 Statistics Canada - Small business profiles, 2019

28 Canada Revenue Agency, <https://apps.cra-arc.gc.ca>

events than in the *base case*. The proposed facility has been developed with the community needs assessment in mind.

3. Pared-Down Case

Crossroads Center is used as a case study for estimating capital costs and financial projects. Limited information is available related to facility specifics, however capital costs, operating revenue, and expenses have been adjusted for a 30,000 sf facility.

Table 6: Capital Costs (\$)

Construction Costs	Base and Favorable Cases	Pared-Down Case
Land Cost	135,000	135,000
Site Prep	918,673	918,673
Facility Costs	6,227,000	3,488,000
Total Capital Cost	7,280,673	4,541,673

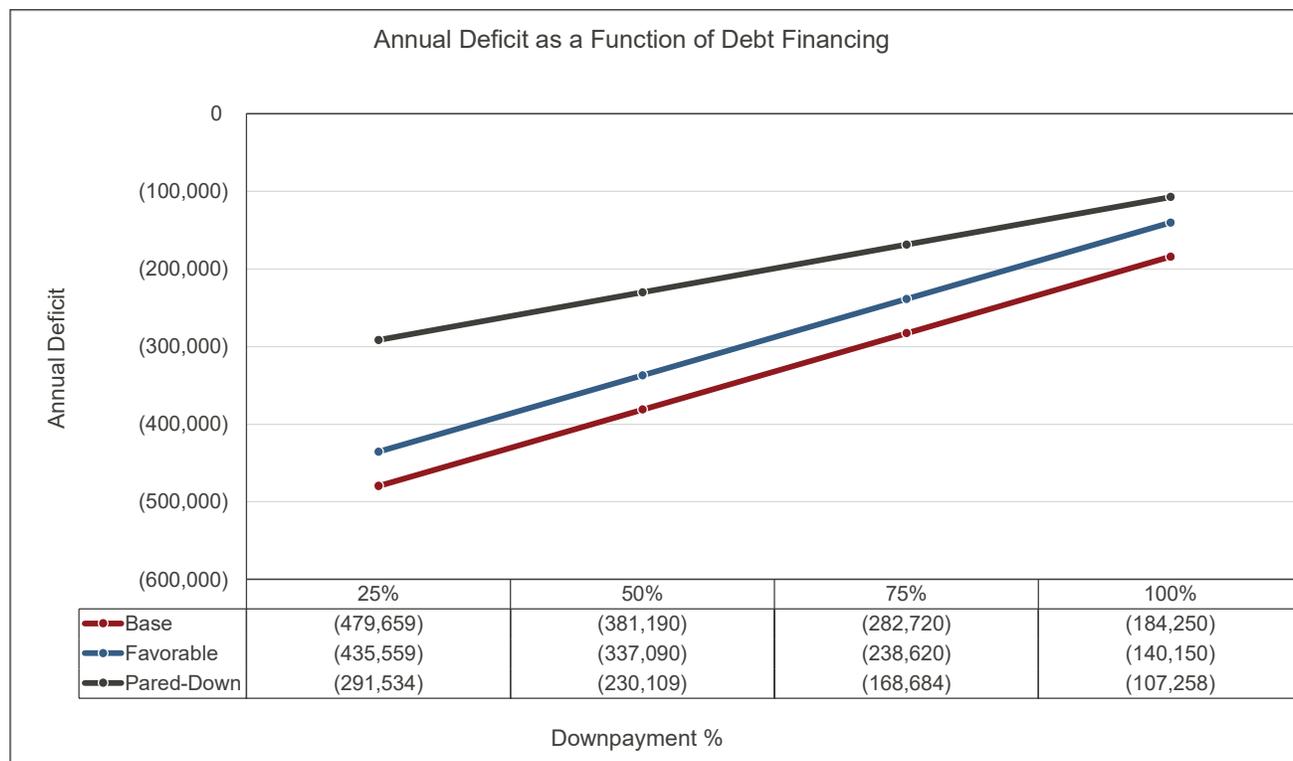
The following table provides financial estimates for the three *Riding & Event Center* scenarios. In each case it is assumed that capital costs are funded by debt, with a 25% down payment (acquired through grants and fundraising efforts).

Table 7: Riding & Event Center Financial Statements

Revenue	Case (\$)		
	Base	Favorable	Pared-Down
Riding & Memberships	22,000	30,000	22,000
Rentals	55,000	80,000	49,500
Events	75,000	100,000	56,250
Sponsorship & Fundraising	30,000	50,000	30,000
All other revenues	10,000	10,000	10,000
Total Revenue	192,000	270,000	167,750
Expenses			
Cost of sales	66,500	91,900	55,900
Labor and commissions	91,500	94,000	90,400
Repairs and maintenance	31,800	31,800	17,300
Utilities and telephone	33,500	35,000	18,300
Professional and business fees	8,000	8,000	6,500
Advertising and promotion	6,000	10,000	6,000
Shipping and warehouse expenses	500	500	500
Insurance	12,000	12,000	8,000
Other expenses	4,000	4,500	3,000
Property Taxes	114,450	114,450	64,108
Contingency	8,000	8,000	5,000
Total Operating Expenses	376,250	410,150	275,008
Debt Expense (Interest)	295,409	295,409	184,276
Total Expense	671,659	705,559	459,284
Surplus/(Deficit)	(479,659)	(435,559)	(291,534)

The main items to note are the substantial amount of property taxes and debt servicing costs. Debt in particular has a significant impact on the financial feasibility of the *Riding & Event Center*. The following chart shows the annual deficit as it relates to the level of debt utilized.

Figure 1: Debt Financing Sensitivity Analysis



The above sensitivity analysis shows how total capital cost and the resulting amount of debt impacts project financials. The following insight derived from the data:

- At 50% debt financing, the *base case* facility would still require over \$380K in external annual funding. The *favorable* and *pared-down* cases would require \$337K and \$230K respectively.
- The more optimistic revenue projections for the *favorable case* do not translate into a significantly lower deficit – for both the *base case* and *favorable case*, it is debt expense which is the major contributor to the deficit.
- From a deficit management perspective, 100% down payment of the *pared-down* facility is the most preferable option.
- Under an arrangement with the municipality to waive property tax, the *pared-down* facility with 100% down payment would come the closest to break even with an annual deficit of approximately \$45K.

Even under a fully funded scenario, the facility that best meets the stated needs assessment of the community would still have an estimated \$210K annual shortfall (under the *base case* scenario).

It should be noted that there are many sources of additional funding that have not been included in the analysis. For comparison purposes a review of other riding arena facilities was completed to better understand potential levels of grant and or community support.

Table 8: Riding Arena Funding^{29 30 31}

Facility	Provincial Capital Funding (\$)	Municipal Capital Funding (\$)	Grants and/or Municipal Operating Support (\$)	Property Tax Relief
Rimbey Agrim Center	Community Enhancement Program	2.0M	200K for 3 years	Yes
Brooks Silver Sage	N/A	N/A	~100K/year	Yes
Cochrane Riding Facility	N/A	N/A	~150K/year	N/A

It is evident from this analysis that if the project is to proceed, then some form of external funding will be required. This could take the form of property tax relief, operational support, grant support, additional fundraising, or all of the above.

7. Conclusion

Part 3 of this report has discussed the overall market size and latent demand in the Hanna region for a *Riding & Event Center*. It has also clearly established the challenges that can be expected moving the project forward. This includes factors such as the lack of a clear project champion, the significant capital costs to construct an arena facility, and the ongoing managerial and financial obligations related to operating the *Riding & Event Center*.

As noted from the outset, this scenario is not unique to the region. Other jurisdictions face similar challenges balancing the desire to support the efforts of local agricultural societies and residents with the need for fiscal responsibility. There is however, no question that a *Riding & Event Center* would make an excellent centerpiece to the *Agricultural Center*. This is a facility that would not only add value to the community but also be a source of local pride.

29 <https://www.reddeeradvocate.com/uncategorized/ponoka-county-providing-final-installment-towards-agrium-centre/>

30 <https://www.ponokanews.com/local-news/ponoka-county-to-pony-up-funds-for-agrim-manager/>

31 Canada Revenue Agency, <https://apps.cra-arc.gc.ca>



PART 4. INTEGRATED AGRICULTURAL CENTER

1. Integrated Agricultural Center Introduction

The previous sections considered two distinct components of a proposed *Agricultural Center*. The final scenario evaluates the benefits of integrating both components within the same center. The case for this approach being the potential for synergies that could be achieved by concurrently pursuing both projects.

1.1. Value proposition

The previous sections of this business case have evaluated the potential for a *Rural Community Practice* and a *Riding and Event Center*. While the review of the projects and related financial analysis has been completed independently, these two opportunities are not mutually exclusive. In fact, it is expected that benefits that could be achieved under a scenario where both projects are advanced. These potential benefits relate to the following:

Land Costs

Land price estimates for the region surrounding Hanna range from approximately \$5,000 to \$12,000 per acre. The independent project assessments (Part 2 and Part 3) only considered the specific land requirements of each project and the associated costs. However, it is expected that the *RCP* could achieve land cost savings if it was included within the much larger *Riding & Event Center* site.

Labor Costs

Under the independent scenarios, the need for a dedicated general manager was highlighted for both the *RCP* and *Riding & Event Center*. In each case, the related labor expense was included in the cost forecasts. Since both facilities require similar managerial oversight related to administration, marketing, and business development, there may be the opportunity for labor efficiencies under the integrated scenario. In this case there is still the requirement for two full time employees, however, one of the positions is support staff which would have a substantially lower annual salary.

Construction Costs

The integrated scenario assumes that a small percentage of overall construction costs could be avoided if construction of both projects was single sourced and happened concurrently. These anticipated savings relate to engineering, procurement, and construction, as well as savings related to feasibility studies and design. These savings not only impact facility construction costs, but also flow through to certain operating costs. For instance, lower capital costs would translate into reduced annual interest expense.

The following section quantifies these cost savings and provides a view of the impact on the *Agricultural Center's* financial viability.

2. Financial Analysis

For both components of the Agricultural Center, an assessment has been completed to evaluate the financial viability of the integrated scenario and to also compare it to the previously calculated independent scenarios.

2.1. Integrated RCP Assessment

The below table provides two views of *RCP* financials, the first is the independent *RCP* that was explored in Part 2 of this report. The second view incorporates the savings that are anticipated under the integrated scenario.

Table 1: Comparison of RCP Scenarios (\$) ³²

RCP Expenses	Independent RCP	Integrated RCP	Total Potential Efficiencies
One Time Construction Costs	1,069,037	1,032,261	36,776
Annual Expenses			
Annual Operating Expenses	46,880	46,358	522
Annual Financing Expense	43,376	41,883	1,492
Management Expense	85,000	56,000	29,000
Total Annual Expense	175,255	144,241	31,014

In Part 2 of this business case, the financial analysis calculated that a lease rate of \$14.44/sf would be required to cover annual facility operating expenses and debt expense under an independent *RCP* scenario. Under the integrated *RCP* scenario, the savings in these two categories are minimal (slightly over \$2,000 a year) and as a result there is little change to the required lease rate. However, under the integrated plan, management expense can be significantly reduced (~45% of the costs related to the independent facility). More information regarding management expense savings is provided in Appendix E – Assumptions.

2.2. Integrated Riding & Event Center Assessment

Similar to above, the below table provides two views of the Riding & Event Center. The independent scenario is based on the base case that was evaluated in Part 3 of this report. The second view incorporates the savings that are anticipated under the integrated scenario.

Table 2: Comparison of Riding & Event Center Scenarios (\$)

Riding & Event Center Costs	Independent Riding & Event Center (Base Case)	Integrated Riding & Event Center (Base Case)	Total Potential Efficiencies
One Time Construction Costs	7,280,673	7,102,031	178,642
Annual Expenses			
Annual Operating Expenses	291,250	288,389	2,861
Annual Financing Expense	295,409	288,161	7,248
Management Expense	85,000	74,000	11,000
Total Annual Expense	671,659	650,550	21,110

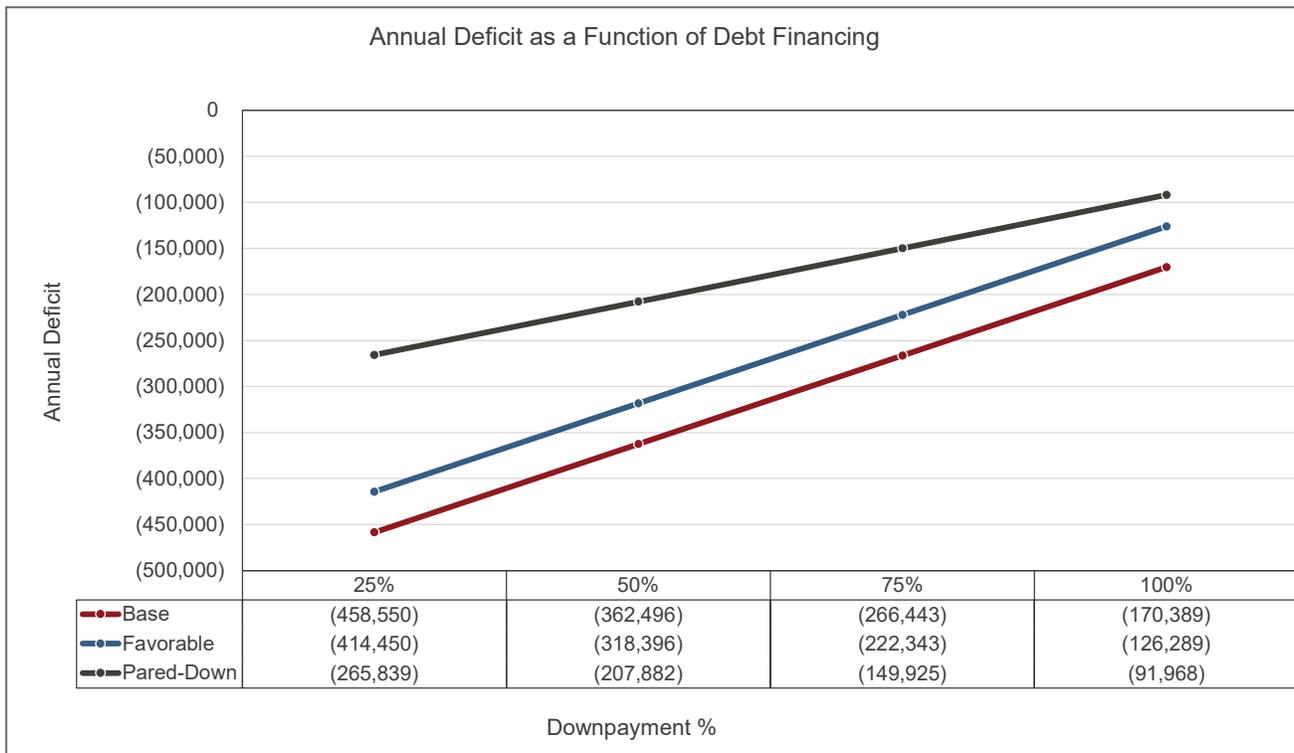
Management expense savings are lower for the *Riding & Event Center* due to the expectation that the support staff position will be more heavily utilized by the arena than the *RCP* (i.e. assisting with event

³² Specifics related to the sharing of labor efficiencies between the RCP and Riding & Event Center are explained in Appendix F - Assumptions

setup and take down, and other maintenance activities). It should be noted that this support position could potentially be eliminated if the *Agricultural Center* had access to a group of capable and reliable volunteers.

The following chart is a reproduction of the sensitivity that was provided in Part 3, but this time the analysis considers the synergies and efficiencies that the *Riding & Event Center* could potentially achieve if it was part of an *Agricultural Center* that also included the *RCP*.

Figure 1: Debt Financing Sensitivity Analysis



Sensitivity analysis reveals the following:

- At 50% debt financing, the *base case* facility would still require \$360K in external annual funding.
- Purely from a deficit management perspective, the 100% down payment of the *pared-down* facility is the most preferable option (similar to the independent case).
- Under an arrangement with the municipality to waive property tax, the *pared-down* facility with 100% down payment would come the closest to break even with an annual deficit of approximately \$30K.

While there are benefits to an integrated *Riding & Event Center*, the facility is still expected to operate at a significant deficit. For example, under a fully funded scenario, the facility that best meets the stated needs assessment of the community would still have an estimated \$170K annual shortfall (under the *base case* scenario).

3. Conclusion

The integrated *Agricultural Center* offers all the same benefits as were outlined under the independent scenarios, with the additional promise of operational advantages and cost efficiencies. Specifically, the analysis anticipates that there are savings of \$215K in one-time construction costs and over \$50K in annual operating expense that could be achieved by pursuing both facilities.

It is also recognized that there are additional advantages to this approach that have not been quantified in the above analysis. This includes the value that the *RCP* could potentially capture due to proximity to *Riding and Event Center*. The sheer volume of traffic (both human and animal) that can be expected to attend events would undoubtedly have positive effects on the *RCP* through increased exposure and opportunities to reach clientele. Additionally, access to an indoor arena can assist in the assessment and rehabilitation of injured animals. These factors have the potential to improve *RCP* revenues and would likely play a factor in attracting professionals to the *RCP*.

The objectives of the *Agricultural Center* are broad, yet the stated goals are focused on local producers and the community. This business case identified the services that are in demand locally and that will also attract businesses and organizations from beyond the Special Areas No. 2. Boundaries. Whichever components are included in the *Agricultural Center*, the driving priority should be leveraging regional strengths in a way that has long-term economic sustainability benefits for the region.

Appendix A

Preliminary Options Assessment



Cactus Corridor Agricultural Center

Preliminary Options Assessment

April 16, 2021

SUMMIT72
Business Advisory Services



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1 Introduction

The Cactus Corridor Economic Development Corporation (CCEDC) has hired Summit72, Dillon Consulting Limited (Dillon), and Schollie Research and Consulting to evaluate local strengths that support the economic development efforts of the CCEDC. This includes identifying the agricultural assets in the region that are required to build the business case for an Agricultural Centre.

For the purpose of this report, the area identified as Cactus Corridor includes the Town of Hanna, the Village of Youngstown, and Special Areas No. 2. The data, information, and analysis contained in this report provides insight into the current state of affairs in the Cactus Corridor region. This information is intended to be foundational to the Cactus Corridor Agricultural Center business case, and guide the opportunity evaluation process.

2 Economic Assessment

A data gathering exercise was undertaken to assess the current economic environment in the Cactus Corridor region. This work is intended to provide insight into the economic strengths of the region and identify the sectors of the economy that are expected to best respond to economic development initiatives.

2.1 Assessment Methodology

Business activity and labor force estimates for the Cactus Corridor region have been developed based on Statistics Canada business patterns data. These data sets provide establishment¹ counts by NAICS industry codes (North American Industry Classification System). The data source is the Federal Business Register, which is a repository of Canadian business population information.

This economic assessment also evaluates the level of diversification in the regional economy by considering the level of diversity in Gross Domestic Product (GDP). The metric used to evaluate the level of diversification in the economy is the Diversity Index (DI). DI has a scale from 0 to 1 and the closer to 1 the index is, the higher the level of diversification.² GDP estimates, business information (based on establishment counts), and labor force estimates provided in this report are from 2018. More information related to the statistical methodology used to prepare this report can be found in Appendix C.

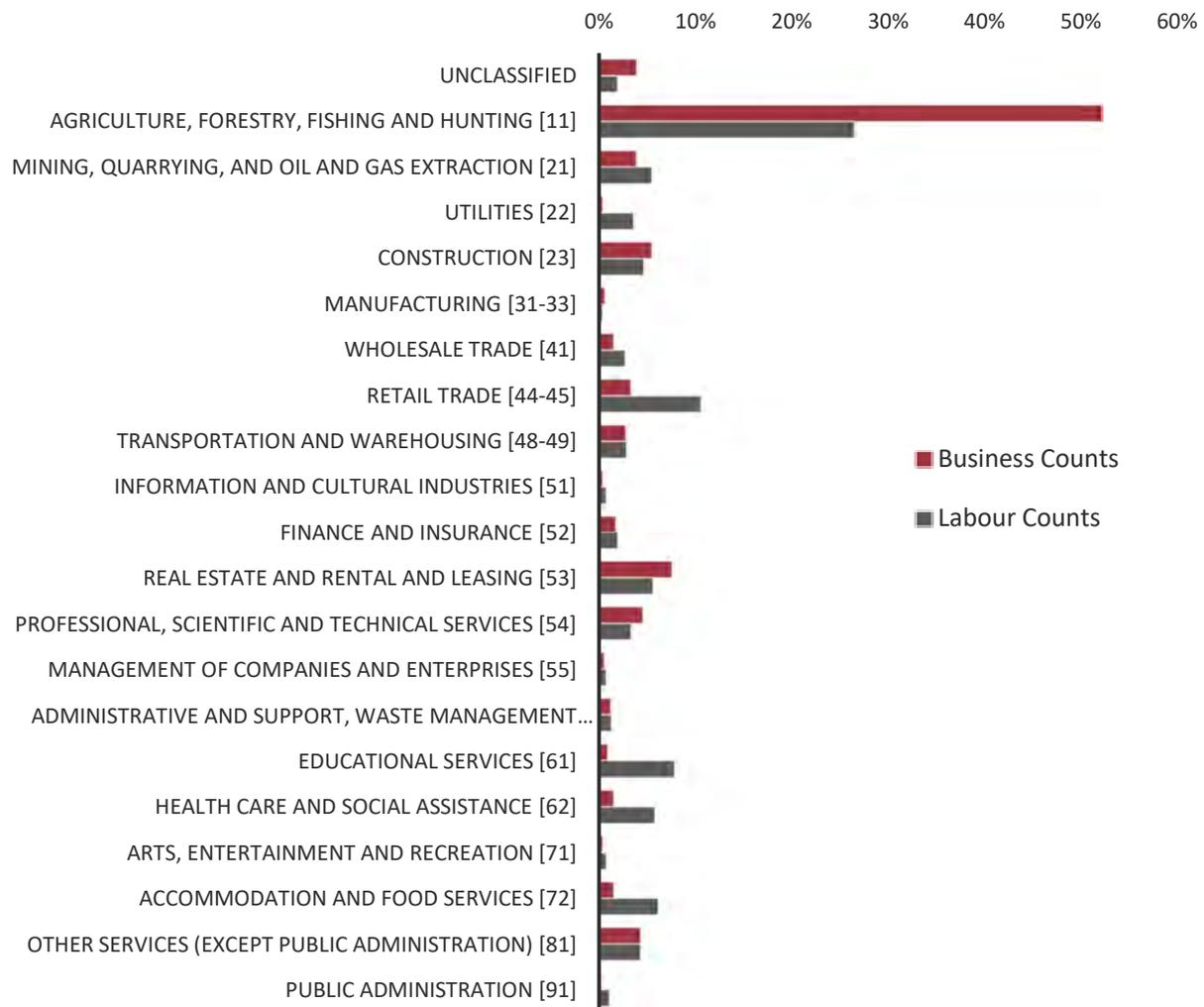
2.2 Business Environment and Labor Force

Figure 1 on the following page provides a view of business concentration and labor force estimates by NAICS code for the Cactus Corridor region.

¹ An establishment is defined as a level of production for which a business maintains accounting records and reports payroll remittance and business profile information to Canada Revenue Agency. For the purpose of this report establishment and business are used interchangeably

² For example, in an economy with only one economic sector, that sector would make up 100% of the economy and the DI would be 0. On the other hand, in an economy where each of the 20 economic sectors contributed an equivalent proportion of GDP, the DI would approach 1.

Figure 1: Cactus Corridor Business and Labor Composition



Statistics Canada. Establishment Counts by NAICS for the Cactus Corridor Census Subdivisions (December 2018)

The above chart and a review of the underlying data, provide the following insights:

- Farming comprises 52% of the region’s businesses but only 27% of the workforce. This indicates that a large number of farm operations require a low amount of labor as compared to other industries.
- Of the 674 agriculture related business establishments (NAICS code 11), 597 or 89% of them are identified as sole proprietorships. Of the remaining 77 businesses, only 7 register having more than 4 employees.
- The Cactus Corridor region has an estimated agricultural labor force that is much higher than the national average of 1.8%³.

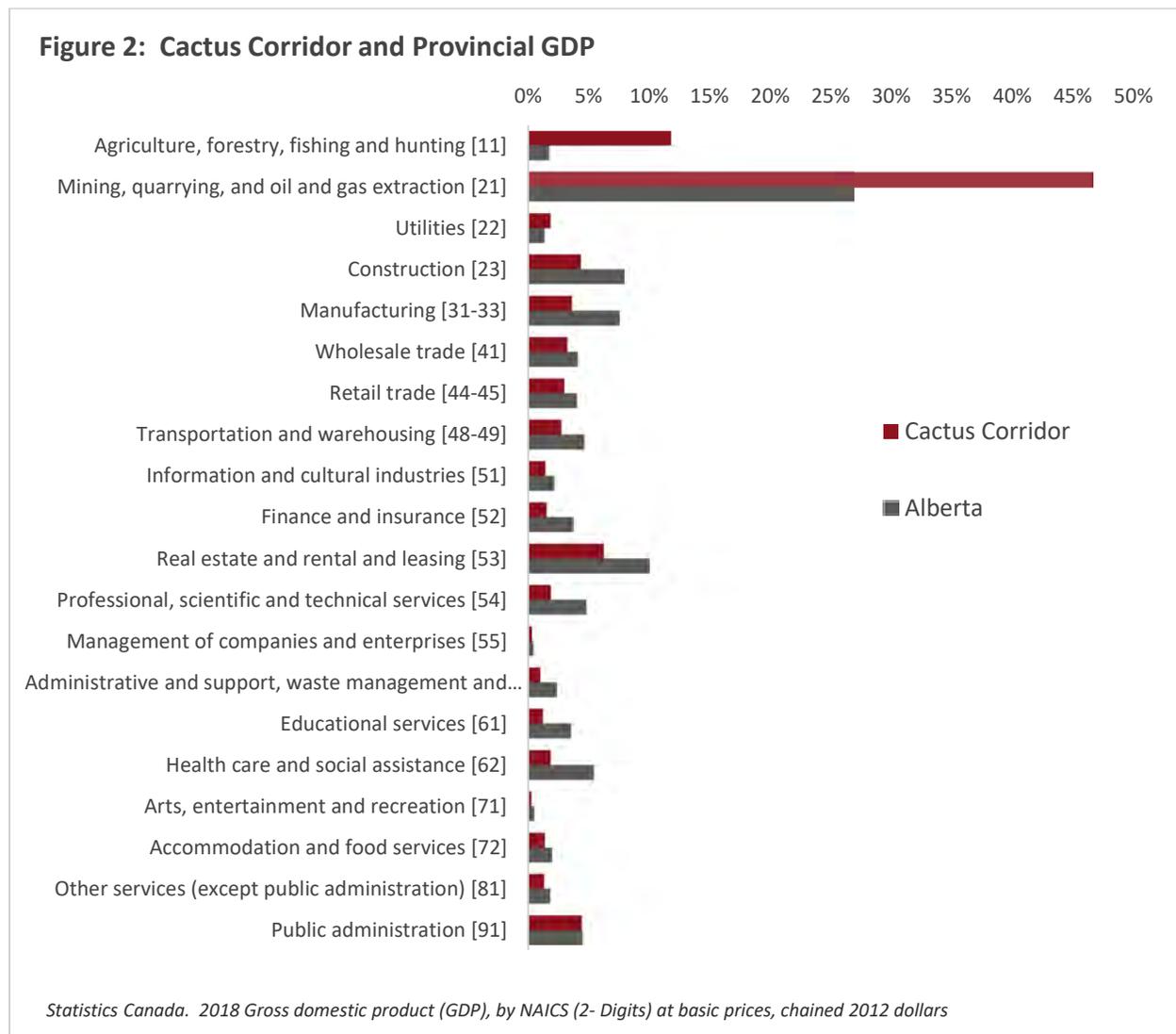
³ Statistics Canada. <https://www150.statcan.gc.ca/n1/pub/11-402-x/2011000/chap/ag/ag-eng.htm>

- Mining, oil and gas extraction, and utilities comprise an estimated 7% of the Cactus Corridor region’s labor force. This is in part attributed to the Sheerness Power Generating station and related coal mining operation. (NAICS codes 21 and 22)
- The manufacturing sector makes up 1% of the region’s business establishments and less than 1% of the workforce. According to the available data, agricultural value-added manufacturing operations such as seed processing and grain milling are nearly non-existent in the region.

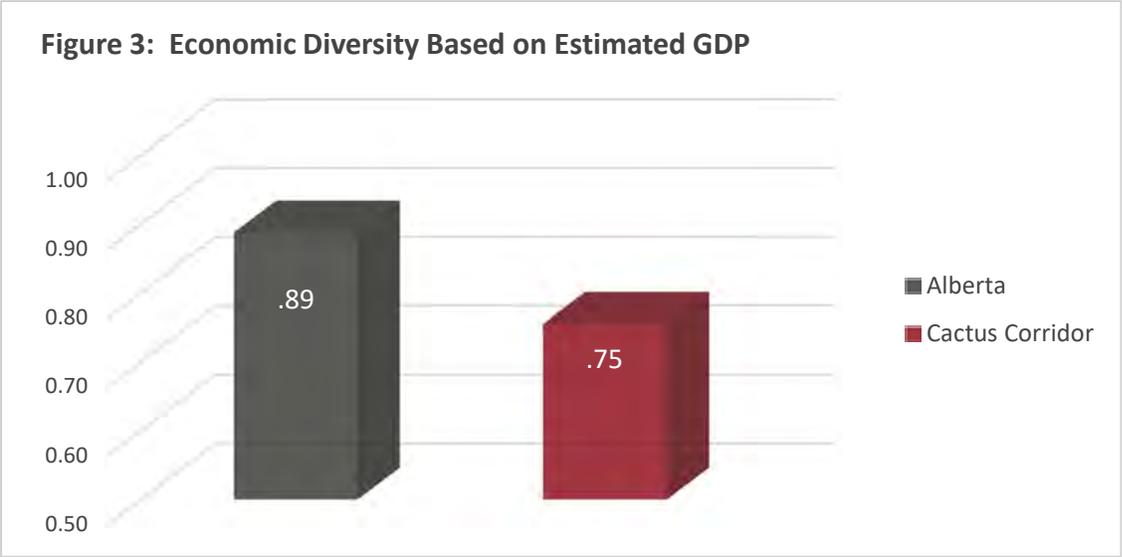
2.3 Gross Domestic Product

GDP data is not available for the Cactus Corridor region, and has therefore been estimated based on regional business activity. See Appendix C for more details on methodology used to calculate GDP.

As observed earlier, agriculture is by far the largest industry in terms of business operations. However, in terms of GDP, it is the Mining, Quarrying and Oil and Gas Extraction sector that has the biggest impact on the Cactus Corridor economy. Figure 2 provides a breakdown by NAICS code for each sector’s contribution to the Cactus Corridor region’s estimated total GDP. Data is also provided for the province of Alberta as a point of reference.



As illustrated on the previous page, two sectors contribute almost 60% of Cactus Corridor’s total GDP. This indicates that there is a low level of economic diversification in the region. This is also evident in the Diversity Index calculation in Figure 3.



The economic data gathering and analysis exercise that has been completed for the Cactus Corridor region reveals an economy that is heavily reliant on the agricultural and resource sectors, and has a lower level of economic diversification than the province overall (as measured as a function of GDP by sector).

One of the issues related to reliance on specific sectors of the economy is that it can result in hardship during periods of economic down cycles in those sectors. However, by identifying the key sectors of the local economy, we can gain understanding into regional competitive advantages. These regional strengths are explored further in the following section.

3 Regional Assessment

Special Areas No. 2 represents numerous unique topographical features and weather conditions. The conditions of this area offer insight into current and potential future agricultural uses. Specifically, the area has lower than average precipitation, ranging from less than 350 mm to a maximum of 450 mm per year compared to an average of 510 mm for the province⁴. The region also has higher than average solar radiation, that while generally good for plant growth, when coupled with lower-than-average precipitation creates additional moisture challenges when it comes to crop production.

The soil in the region is made up of brown and dark brown Chernozemic. These types of soil have relatively limited microbial activity and more humus. These soil types tend to allow ease of movement of water to plant roots when water is available. This water movement causes the dissolution of soluble minerals. These soil types are typical of grassland regions. Due to moisture deficits, grassland regions are generally

⁴ Alberta Agriculture, Food and Rural Development. 2005. Agricultural Land Resource Atlas of Alberta, 2nd Edition.

best suited to small grains, oilseeds, pulse, and forage crops, and livestock production. Additionally, it should be noted that grasslands are important reservoirs for soil organic carbon. Improved soil management in agriculture can increase soil carbon storage or carbon sequestration reducing net greenhouse gas emissions for Canada.

Soils in Special Areas No. 2 are also largely Solonchic. This typically indicates low depth of topsoil, increased erosion potential, low organic matter, and makes general production issues likely. In fact, data indicates that organic matter content in the Area is less than 2% with a possible maximum in the province of over 8%. Soil organic matter is an important determinant of the health of the soil as it is the layer where the soil biota resides. This biota is an integral part of plant growth and without it, soil ceases to be productive. Further, the risk of wind erosion in the area ranges from moderate to extreme, likely related to the level of organic matter in the soil of the area as organic matter is useful to resist wind erosion. The number of plant and animal species deemed to be at risk in the Area are also noted to be among the highest in the province, possibly related to soil quality issues.

These characteristics of the soil feed into an area that has lower than average agricultural production capabilities and is likely best suited for animal agriculture. Allowances may need to be made for the purchase of supplemental forage and grains from outside regions to meet the requirements of the livestock. The area may also be a suitable place to consider the construction of greenhouses and hothouses due to the high solar radiation and the stability of the quality of the groundwater in the Area. Covered growing structures will allow producers to take advantage of the high levels of sunshine while also avoiding the dry climate conditions by protecting from evaporation supplemental water that can be accessed from wells. Consideration should be given to assess the volumes of water available in potential construction sites and the levels needed by the production unit to ensure that groundwater resources are not overtaxed.

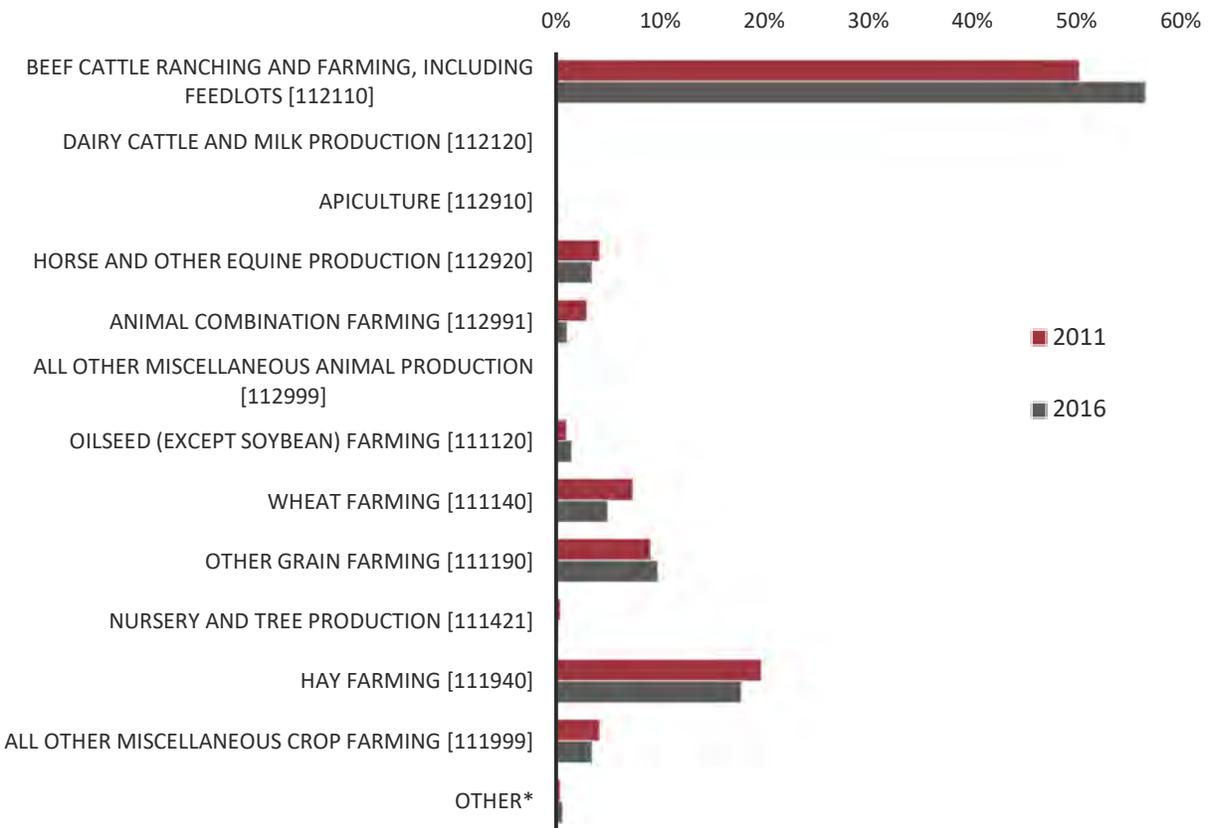
4 Farm Production Assessment

Data from the 2016 Census of Agriculture has been compiled to provide a clear perspective of farm operations and agricultural production in the Cactus Corridor region.

4.1 Farm Types

Figure 4 on the following page provides a view of the type of farm operations in Special Areas No. 2 by 6-digit NAICS code. This data from the 2016 Census of Agriculture, illustrates the breadth of agricultural production taking place in the region.

Figure 4: Special Areas No. 2 - Agricultural Production by Farm Type



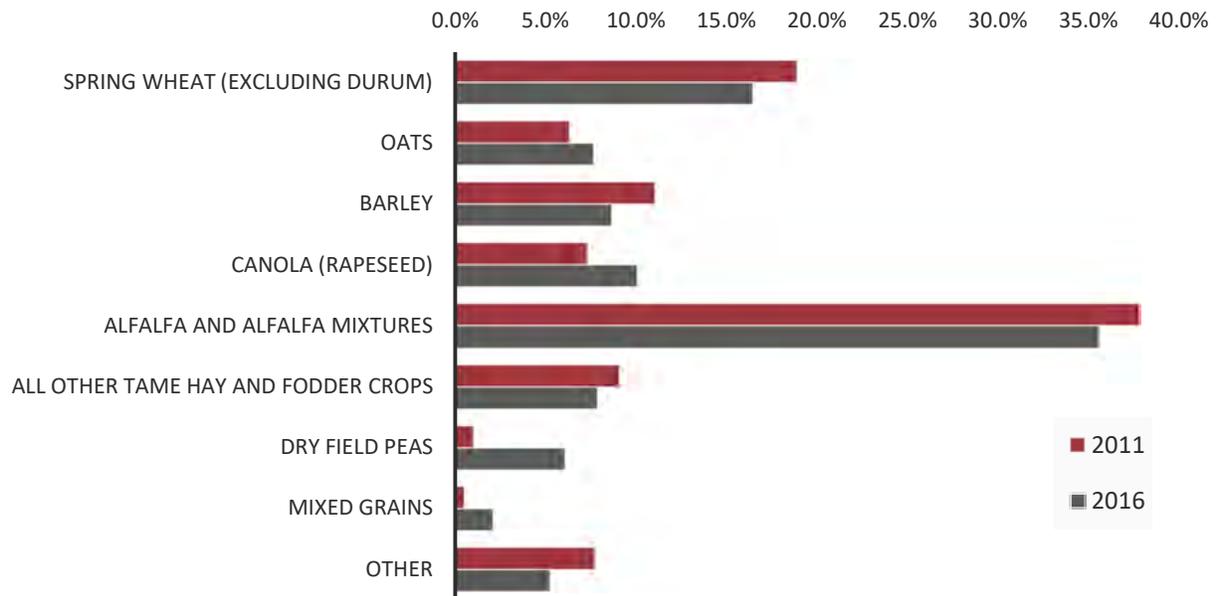
Statistics Canada. Table: 3 2-10-0403-01

Farm type data provides a clear picture of the predominant agriculture production taking place in Special Areas No. 2. In 2016, over half of the farms in the region stated that beef production was their primary form of agriculture production. Likewise, just under 20% identified as primarily hay producers. This means that over 75% of the farms in Special Areas No. 2 are primarily focused on either livestock production or livestock related crop production.

4.2 Crop Production

A shortcoming of the farm type data in the previous section is that it doesn't address the different types of production that can take place on each farm. For instance, a farm that primarily produces beef may also be involved in other forms of agriculture production such as hay or oilseed production. Additional insight can be gained by looking at the crop production acreage data from the 2016 Census of Agriculture.

Figure 5: Special Areas No. 2 - Crop Types by Acreage Produced



Statistics Canada. Table: 32-10-0416-01

Considering the previous two sets of agriculture data, it is evident that producers in the region are primarily focused on livestock production and growing crops which feeds that livestock (hay and alfalfa). However, we can also infer that many of them are also utilizing the land available to them for various other forms of crop production. For example, grain production (wheat, oats and barley) made up over 30% of crop acreage in 2016.

4.3 Livestock Production

Based on data from the 2016 Census of Agriculture, a livestock related review of all the 70 Census Subdivisions (CSDs) in Alberta was completed⁵. Special Areas No. 2 has the following attributes:

- Over 1.6M acres of pasture land, ranking 2nd in the province in amount of available pastureland (only behind Cypress County).
- 138,620 head of cattle, which ranks 8th in the province.
- Farms in the region are also significantly larger than the average cattle operation in the province:
 - 395 head versus the provincial average of 256 head per cattle operation.
 - This ranks Special Areas No. 2 as number 8 in the province in terms of average number of head per cattle operation.

⁵ Government of Alberta: <https://open.alberta.ca/dataset/9d694bee-7266-41e1-ac01-245d9dc1be56#summary>

While horses are not as significant as cattle in terms of quantity or economic impact, a review of this segment was completed as well. Special Areas No. 2 sits near the top of the province with a little over 1,700 head of horses and ponies, ranking 21 out of 70 CSDs in terms of the number of animals.

4.4 Farm Profitability

Farm profitability can be measured by the expense to receipts ratio. Simply put, this is the cost to produce a commodity divided by what the farmer can sell it for. A lower ratio represents higher profitability.

Many factors can impact profit margins on the farm, commodity markets, input costs and each individual farm’s level of productivity to name a few. However, the below table indicates that there may be structural differences between different types of farm production. This can ultimately result in varying levels of profitability.

Table 1: Expense to Receipts Ratio by Farm Operation (Canada)

	2010	2015
Livestock		
<i>Dairy cattle and milk production</i>	0.73	0.77
<i>Beef and feedlot</i>	0.93	0.90
<i>Hog and pig</i>	0.92	0.90
<i>Poultry and egg</i>	0.84	0.84
<i>Sheep and goat</i>	1.01	0.96
<i>Other animal</i>	0.88	0.88
Crop		
<i>Oilseed and grain</i>	0.76	0.79
<i>Vegetable and melon</i>	0.84	0.83
<i>Fruit and tree nut</i>	0.90	0.84
<i>Greenhouse</i>	0.86	0.85
<i>Other crops</i>	0.89	0.83

Statistics Canada. <https://www150.statcan.gc.ca/n1/pub/95-640-x/2016001/article/14815-eng.htm>

This data indicates that Canadian beef production is a low margin business in relation to other agriculture endeavors. Opportunities to increase profitability will not only be welcomed by beef cattle producers, but considering the contribution that livestock production makes to Cactus Corridor GDP, it will also have a positive economic impact on the region.

5 Option Assessment

The starting point for the options assessment was the work that arose out of the Community Action Team (CAT) process which identified close to 20 different opportunities within three distinct areas:

- Livestock Hub
- Riding and Event Center
- Food Production

The work completed by the Summit72 project team has involved background research and analysis, as well as interviews with over 20 individuals. This work provided regional insight and opportunity specific direction that assisted in evaluating the best opportunities to include in a potential agricultural center.

Where practical, the options assessment has used available economic indicators and data to provide additional insight into the potential benefits of each opportunity. To facilitate this analysis each opportunity has been classified by NAICS 2-digit and 4-digit codes. The following table shows how each opportunity has been grouped.

Table 2: Agricultural Center Opportunities by NAICS Classification

NAICS Classification	Specific Opportunities
11 - Agriculture, forestry, fishing and hunting	
1114 - Greenhouse, nursery and floriculture production	Greenhouse vegetable production
1121 - Cattle ranching and farming (including feedlots)	Feedlots
1151 - Support activities for crop production	Seed Cleaning
1152 - Support activities for animal production	Animal Therapy, Animal Training, Genetics/Pedigree, Equine Boarding
31-33 - Manufacturing	
3111 - Animal food manufacturing	Companion Food Production (pet food), Cubed Hay
3116 - Meat product manufacturing	Slaughter/Abattoir, Butcher Facilities
3119 - Other food manufacturing	Community Kitchens
3253 - Pesticide, fertilizer and other agricultural chemical manf.	Fertilizer Plant, Humalite Production
44-45 - Retail Trade	
4452 - Specialty food stores	Farmers' Markets
48 - Transportation and warehousing	
4931 - Warehousing and storage	Grain Storage
54 - Professional, scientific and technical services	
5417 - Scientific research and development services	Research Facility
5419 - Other professional, scientific and technical services	Veterinary Services, Lab Services, Animal Nutrition, Range Management
61 - Educational services	
6112 - Community colleges and C.E.G.E.P.s	Education Partnerships (Lakeland College), Adult Education
71- Arts, entertainment and recreation	
7139 - Other amusement and recreation industries	Riding Center

5.1 Opportunity Scoring

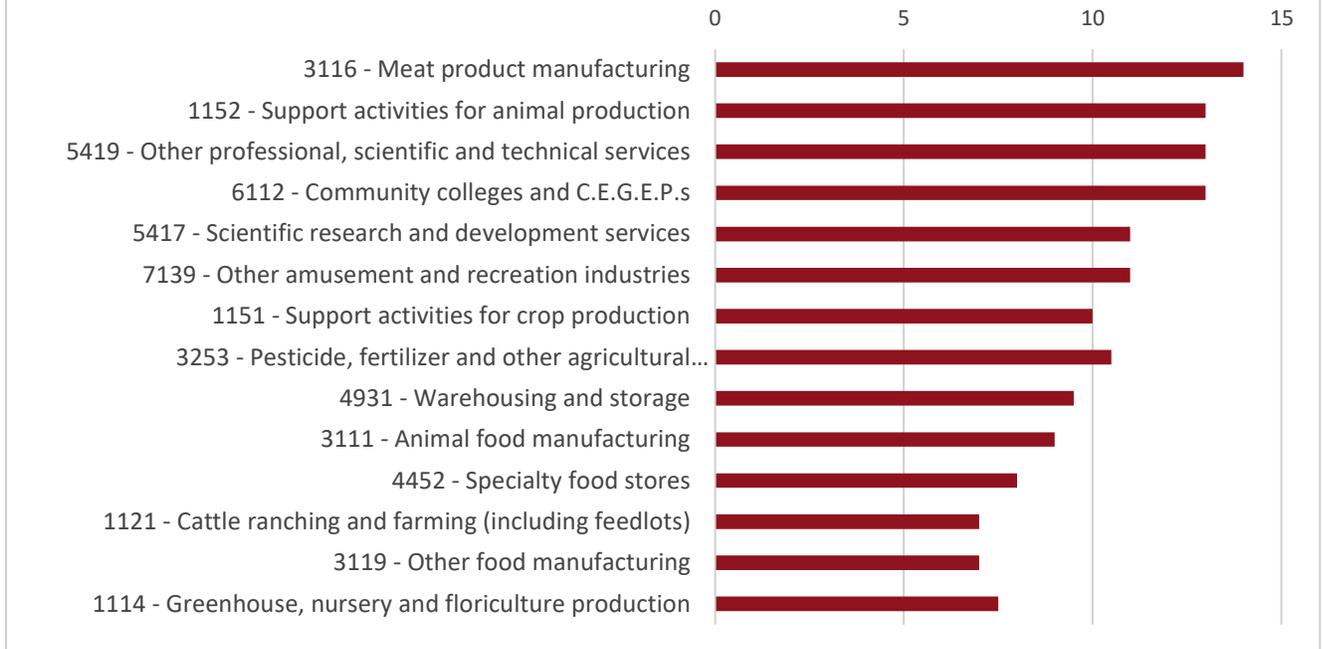
One of the goals of the options assessment is to provide a framework that evaluates each opportunity within the context of available economic data, and regional strengths, weaknesses, opportunities and threats (SWOT). The below table provides a summary of the scoring of opportunities by both qualitative and quantitative factors. The detailed evaluation and rationale for each opportunity can be viewed in Appendix A. The SWOT analysis that was completed was also an important component of this work and can be found in Appendix B.

Table 3: Agricultural Center Opportunities Scoring

Opportunity Ranking	GDP Impact		Sector Profitability		Job Creation		Income Impact		Total Data		Strategic Fit		Regional Fit		Total Qualitative		Overall Ranking	
11 - Agriculture, forestry, fishing and hunting																		
1114 - Greenhouse, nursery and floriculture production	2	0.5	1	1	4.5	1	2	3	7.5									
1121 - Cattle ranching and farming (including feedlots)	1	0	1	1	3	1	3	4	7									
1151 - Support activities for crop production	1	3	1	2	7	1	2	3	10									
1152 - Support activities for animal production	1	3	1	2	7	3	3	6	13									
31-33 - Manufacturing																		
3111 - Animal food manufacturing	2	1	2	2	7	0	2	2	9									
3116 - Meat product manufacturing	2	3	2	2	9	2	3	5	14									
3119 - Other food manufacturing	1	1	1	1	4	1	2	3	7									
3253 - Pesticide, fertilizer and other agricultural chemical	2	1	1.5	2	6.5	1	3	4	10.5									
44-45 - Retail Trade																		
4452 - Specialty food stores	1	1	1	1	4	2	2	4	8									
48 - Transportation and warehousing																		
4931 - Warehousing and storage	1	3	1.5	1	6.5	1	2	3	9.5									
54 - Professional, scientific and technical services																		
5417 - Scientific research and development services	1	1	1	2	5	3	3	6	11									
5419 - Other professional, scientific and technical services	1	3	1	2	7	3	3	6	13									
61 - Educational services																		
6112 - Community colleges and C.E.G.E.P.s	1	3	1	2	7	3	3	6	13									
71- Arts, entertainment and recreation																		
7139 - Other amusement and recreation industries	2	1	1	1	5	3	3	6	11									

This preliminary options assessment provides a better understanding of the opportunities that are well suited for the region and fit within the concept of an agricultural center. For illustrative purposes, the opportunities are ranked highest to lowest in Figure 6 on the following page.

Figure 6: Opportunity Ranking



The preliminary options assessment work which has been completed provides an empirical basis for identifying the projects that should be evaluated further within the Agricultural Center business case. However, it should be noted that there are other opportunities evaluated that showed promise but were excluded from the shortlist due to lack of alignment with the agricultural center concept.

One example is Humalite production which may present an excellent opportunity for the region to leverage a natural resource that is unique in the world.

While commercial greenhouses did not rank particularly high against other opportunities, it is one that should be monitored going forward. The Sheerness Power Generating Station offers potential for greenhouse growers to leverage waste heat from the facility. A review of the suitability of the Sheerness facility for this purpose was not undertaken. However, a review of a similar plant in the past, indicated that a waste heat capture system was technically feasible. The financial analysis indicated that under a scenario which sees natural gas prices increase in line with IEA (International Energy Agency) forecasts and the implementation of planned carbon tax increases, a waste heat capture system may offer significant financial benefits to greenhouse operators in the future.

5.2 Conclusion

The research and analysis completed in the earlier stages of this project have identified clear regional strengths that are tied to ranching and livestock production. The preliminary options assessment in has considered how an Agriculture Center could build on these regional attributes in a way that not only benefits producers but could contribute to a more resilient local economy.

The following are the top 6 ranking opportunities that are recommended be evaluated further within the context of the Agricultural Center business case:

- Food Production
 - Slaughter/Abattoir, Butcher Facilities (3116)

- Livestock Hub
 - Animal Therapy, Animal Training, Genetics/Pedigree, Equine Boarding (1152)
 - Veterinary Services, Lab Services, Animal Nutrition, Range Management (5419)
 - Education Partnerships (Lakeland College), Adult Education (6112)
 - Research Facility (5417)

- Riding and Event Center (7139)

If the above list is approved by the CCEDC, the following stages of the project will work to evaluate the feasibility of the selected opportunities and determine if there is a business case to be made for pursuing the Agricultural Center further.

Appendix B - SWOT Analysis

The following section outlines the strengths, assets, and unique selling points of the Cactus Corridor region. The attributes identified have been an important component of our evaluation of the numerous opportunities to be considered as part of an Agricultural Center.

Strengths

- Region with strong agricultural focus, particularly on ranching.
- Large agricultural area in Special Areas No. 2 (Part of Palliser Triangle)
 - Over 2M acres of total farmland, of which 1.6M acres is pasture land.
- Prevalent western culture, with local interest in rodeo events such as the annual Hanna Pro Rodeo and high school rodeo.
- Numerous stock contractors in the area that raise animals for the rodeo circuit.
- The Stampede Ranch with 22,000 acres and over 600 horses is located within Special Areas No.2.
- Strong 4-H programs.
- Large tracts of native grasslands in the region.
- Small town and resilient, rural attitude (community oriented, strong work ethic)
- Many people and businesses that could champion agriculture-related projects.
- Good highway access (Junction of Highway 9 E-W; 36 N-S is a high load corridor).
 - Highway 9 is the main traffic route for traffic between Calgary and Saskatoon, SK.
 - Highway 36 is a heavy haul corridor that supports Alberta's upstream energy sector,
- Cactus Corridor Truck Stop - major stopping point for commercial and recreational traffic
- Strong support network that includes the Hanna Learning Center and the Business Hub.
- Good community relationships with Prairie Land School Division.
- Prairie Land School Division tends to be a key project partner in the communities in which it serves. For instance:
 - Altario School has created its own student led farm, partially in response to the interests of its local students. The student led farm is a partnership with Lakeland College.
- Good/comparative health care assets.
- Both the Town of Hanna and Special Area No. 2 are virtually debt free.
- Fibre optics provided by AXIA Connect Ltd.
- Transmission Lines (power) - provides an opportunity to tie new sources of energy, like solar into the grid.
- High levels of solar radiation:
 - the area receives, on average, about 2,500 hours of sunshine each year, making it one of the sunniest regions in Canada.
- Humalite deposits located at the Sheerness mine:
 - The region's humalite is unique, because it is the only place in the world that the deposit developed in freshwater.
 - Can be used as a soil amendment that may increase yields and help with water retention.
- Chinook Applied Research Association (CARA) based out of Oyen - is driven by farmers and ranchers in the Special Areas and MD of Acadia of east central Alberta to bring innovative and profitable practices to the local agricultural industry.
- Existence of the Hanna Agricultural Society. Agriculture societies encourage improvement in agriculture and in the quality of life of persons living in an agricultural community.

- Housing is relatively affordable.
- Good hunting and fishing.
 - Hanna is in the middle of the largest migratory bird route and staging area in Alberta.
- Recreational:
 - Fox Lake Park and Helmer Dam Campground
 - Prairie Oasis Park (Sheerness Cooling Pond - warmer water)
 - Blood Indian Park and Reservoir
 - Berry Creek Reservoir (Carolside Campground)

Weaknesses

- Remote / sparsely populated.
- Substantively single-industry.
- The education and skills of the local labor force are significantly tied to predominant industries.
- Lack of rail transportation options.
- Closest local meat processor for local processing is Drumheller.

Opportunities

- Rebranding campaign currently underway.
- Return to Rural Campaign has seen some success.
- The Government of Alberta has demonstrated a willingness to assist the region with transitioning from a coal dependent community.
- Special Areas No. 2 produces beef that is sustainably and ethically produced:
 - Animals graze on native grasslands - these are carbon sinks so there could be a case to be made here for sustainability.
 - There is an opportunity for producers to tell their story and market their beef accordingly.
 - Animals produced in the region are high quality and have attributes that are in demand by consumers but these attributes are not always monetized when livestock is sold to large processing facilities.
 - Increasing importance is being placed on food security. People are becoming more interested in knowing where their food is coming from.
- Opportunities in value-added agriculture - Canada will play a key role in feeding the growing world population.
- Large amounts of available land, much of it owned by Special Areas
- Special Areas owns a significant amount of land that is mined by Westmoreland Mining LLC. As the coal mine is reclaimed there is the opportunity to develop the land for specific uses such as an industrial park and even a lake and related recreational area.
- Increasing the diversity of agriculture production in the region:
 - Diversifying producer opportunities - different, higher-value crops, other forms of livestock.
 - There may be opportunities to increase crop production related to plant-based proteins (Protein Industry Supercluster).
- Native grasslands are an endangered ecosystem that are also a carbon sink:
 - Research is ongoing to better understand the amount of carbon that the prairie grasslands capture.
 - There may be research opportunities around native grasslands in the Special Areas

- Potential for selling carbon offset credits.
- Opportunity to leverage beef grown on native grasslands by marketing it as sustainable.
- Work is being done by Westmoreland Mining LLC to assess the opportunities available to market and sell humalite. Tests are currently being conducted by Chinook Applied Research Association (CARA) to quantify the potential benefits.
- Potential for opportunities to build agricultural activities/programs into education programs similar to the student led farm at Altario, and/or a rodeo academy.
- May be an opportunity to capitalize on the tourism traffic from nearby Drumheller - piggyback activities on this major tourist attraction.

Threats

- The closure of the Sheerness Mine and its industry due to phase out of coal generated electricity means the loss of good paying jobs in the region.
- Mine closure may contribute to rural depopulation.
- The education and skills of the local labor force are significantly tied to predominant industries.
- Skilled and even non skilled labor can be an issue in rural areas. Attracting and retaining professionals can be challenging.
- Primary agriculture is strongly influenced by external economic, political, and environmental factors e.g. trade agreements/disputes, commodity prices, regulations, weather/climate and growing conditions.
- Lack of moisture - the region receives lower than average rainfall:
 - From a livestock perspective this means that the land cannot handle the same level of grazing as other areas. This is evident in the number of cattle per acre stats, which are lower than the provincial average.
- Potential for declining meat consumption as plant-based protein products compete for market share.
- Re-sale value of housing depreciating with closure of the Sheerness Mine and Generating Station.

Appendix C - Methodology

Data

Wherever possible data has been acquired in a format that is consistent with the North American Industry Classification System (NAICS). The NAICS classification system allows for data to be represented in varying degrees of detail – from 2 to 6 digits - the more digits in the code signifying greater classification detail (i.e. narrower industry view). However, in some cases, due to data limitations or where additional insight could be gained, higher levels such as the 2-digit economic sector code were used.

The approach taken has been to provide the data in the most relevant form for the data set. Cactus Corridor is represented within Statistics Canada data as three distinct Census Subdivision (CSD). The Town of Hanna, the Villiage of Youngstown, and Speacial Areas No.2. Wherever possible, this level of data has been used. Where it has not been possible to obtain data at the CSD level (as is the case with GDP), we have used the most applicable proxy data and utilized statistical methods to regionalize the data for the Cactus Corridor CSDs. In these instances, further explanation has been provided regarding the approach.

Diversification Measures

Diversification metrics have been provided using a Diversity Index (DI) which is based on the Herfindahl-Hirschman Index (HHI). This approach is consistent with the Government of Canada approach to measuring economic diversity⁶

DI has been employed because of its appropriateness for the task at hand and simplicity of use. The intent has been to utilize a measurement tool that provides an accurate snapshot of the current state of affairs, and one that can be replicated in the future to measure economic progress against current benchmarks.

In Section 2.3, GDP for Cactus Corridor has been provided by 2-digit NAICS code (i.e. 20 distinct economic sectors). The level of diversification in the economy has then been measured by evaluating each economic sector's contribution to total GDP. The Diversity Index has a scale from 0 to 1 and the closer to 1 the index is, the higher the level of diversification.

For example, in an economy with only one economic sector, that sector would make up 100% of the economy and the DI would be 0. On the other hand, in an economy where each of the 20 economic sectors contributed an equivalent proportion of GDP, the DI would approach 1. DI has been used throughout this report to calculate the level of diversification of various components of the Cactus Corridor economy.

⁶ Canadian Northern Economic Development Agency. <https://www.cannor.gc.ca/eng/1388762115125/1388762170542>

Appendix B

Site Summary

Planning Summary

The Project Team has identified the following planning, engineering, and cost considerations that should be evaluated when a site is selected for the Agricultural Center. This list is not all encompassing, and depending on the site additional considerations may be required. The Project Team recommends that comprehensive due diligence and site analysis be undertaken that includes the consideration of the potential requirements listed below. Cost assessments and a feasibility study should also be prepared prior to purchasing a site for the Agricultural Center to identify all possible factors that may influence the site design and facility viability.

Facility Considerations:

The Agricultural Center will be a multi-purpose facility that will provide grounds for agricultural shows and exhibitions, and have the capability to host small conferences, and other special events. The Facility will have space for a local large-animal vet practice. Offices and research space will also be included in the design of the Center, to be utilized by agricultural industries; potentially tied to the veterinarian, or other independent organizations.

The project team reviewed similar facilities in Alberta to consider the site requirements of the proposed center. Based on this review, the Agriculture Center will require approximately 30 acres of land to accommodate the required buildings, parking, access and loading. However, the site would ideally have the capability to allow for expansion and growth of the Agricultural Center.

Location Considerations:

Harvest Sky Economic Development Corporation (Harvest Sky EDC), confirmed with the Project Team that the Center should be located within 30 kilometers of Hanna. The purpose of this proximity was to enable the Agricultural Center to leverage Town amenities and services, and reduce travel requirements for employees and visitors of the center. In addition, Harvest Sky EDC required that the center be located adjacent to a major highway and visible from the road in order to maximize exposure to the travelling public.

Site and Cost Considerations:

Site considerations that can impact the cost of development include proximity to existing infrastructure including, water, sewer, and utilities. The installation of new services for this facility can significantly impact the feasibility of the center. For this reason, the location of the Agricultural Center should be in proximity to existing services.

The topography of the site may require additional grading which can also increase development costs. Parcels with low lying, wet, or environmentally significant areas may require protection by the province and should also be considered prior to a site being acquired.

The off-site costs to improve highways and roads to accommodate turning movements for the Agricultural Center could make the development unfeasible. Identifying a site with existing road and highway infrastructure that can accommodate safe vehicle turning movements including turning and bypass lanes will reduce the costs of development.

Site Design:

The site design will be impacted on the features of the selected site, however, these general considerations should be taken into account when designing the center.

Harvest Sky EDC has indicated the facility should be visible by vehicle from Highway 9. This location provides excellent opportunities to design the Agricultural Center to take advantage of the prairie landscape and view corridors. Native plantings requiring minimal maintenance and that are drought resistant should be utilized as a landscape standard.

Harvest Sky EDC should identify opportunities for placemaking in the final site plan that creates a campus-like feel. The site should incorporate safe pedestrian walkways and consider formal and informal gathering spaces. For example, the inclusion of a plaza that can be utilized by staff and visitors during facility events will enhance the site. Care should be taken to balance the interaction between pedestrians and vehicles. The facility is anticipated to generate a significant amount of traffic during events, and loading spaces must be placed away from entrances and spaces intended for pedestrians. Day-to-day parking areas could be a paved surface, while informal roadways and parking spaces used only for events could be graded with a gravel surface, or left as grass. This approach would reduce construction costs, ensure that surfaces remain permeable to water, and result in less costs associated with stormwater management for the site.

The site design must ensure accommodation for trucks, trailers, and other equipment that requires a larger turning radius. Infrastructure necessary for livestock must be incorporated into the building design. These improvements can include permanent loading chutes, indoor pens and alleys, and multiple animal wash bays. Outdoor space could also be utilized for temporary or permanent pens to hold animals.

Due to the nature of the facility, nuisance effects are anticipated. Increased traffic, noises, and smells can be generated by the uses in the Agricultural Center. Consideration of how to minimize and mitigate these impacts to adjacent properties, particularly if there are residential uses, must be accounted for in the site design. Appropriate spacing should be made between sensitive uses, and the site design should ensure that adjacent and onsite access is unimpeded by event traffic. For example, ensuring access to the vet clinic is not hindered by traffic to the riding and event center; particularly during large events.

Building Design:

It is recommended that a high standard of the building design and architecture be considered for the Agricultural Center, ideally taking inspiration from the local setting and regional heritage. Building architecture should be consistent across the buildings, which will result in a campus-like feel across the site.

Planning Recommendations:

The final site must take into account any limiting factors or barriers that may hinder or prevent the development of the facility. These can include site limitations such as wetlands and other low-lying areas, or high elevations requiring significant amounts of grading. Harvest Sky EDC must consider costs associated with the construction of the facility and carefully select a site that is financially feasible.

Regulatory requirements must also be taken into account. Depending on the site, rezoning, subdivision and other approvals may be required. Based on the Project Team's understanding of the region, the zoning requirements in either the Town of Hanna or Special Areas do not currently contain a land use district that meets the description of the Agricultural Center. Therefore, the approval of a new Direct Control District with regulations specific to this development should be considered for the proposed facility. Additional approvals from other regulatory bodies including Public Lands, Alberta Environment, and Alberta Transportation may also be required, depending on the site location. It is important to note that additional studies may be required in order to develop the site. These studies may be required by different approval authorities (municipal or provincial).

Appendix C
Grant Funding

Grant Information				
Grant Name	Deadline (Specific or Rolling)	Value (\$)	Eligible Applicants	Description
AgriScience Program	The program ends March 31, 2023, or until funding has been fully committed	Total project costs are shared between AAFC and the Applicant: <ul style="list-style-type: none"> For Not-for-profit organizations: maximum of 70% AAFC and a minimum of 30% applicant For For-profit organizations: maximum of 50% AAFC and a minimum of 50% applicant 	For-profit organizations including: <ul style="list-style-type: none"> businesses and/or corporations 	The program aims to accelerate the pace of innovation by providing funding and support for pre-commercial science activities and cutting-edge research that benefits the agriculture and agri-food sector and Canadians. AgriScience Projects (Projects): This component aims to support specific shorter-term research activities to help industry overcome challenges and address fiscal barriers experienced by small and emerging sectors. https://agriculture.canada.ca/en/agricultural-programs-and-services/agriscience-program-projects
AgriInnovate Program	Projects must be completed by March 31, 2023.	Applicants may apply for AgriInnovate Program funding up to 50% of total eligible costs, to a maximum of \$10 million. The maximum level of government funding (federal, provincial/territorial, and municipal) that an applicant	For-profit organizations that are incorporated in Canada. Includes: <ul style="list-style-type: none"> Businesses and/or corporations Co-operatives 	Provides repayable contributions for projects that aim to accelerate the commercialization, adoption and/or demonstration of innovative products, technologies, processes or services that increase agri-sector competitiveness and sustainability. https://agriculture.canada.ca/en/agricultural-programs-and-services/agriinnovate-program
Agricultural Clean Technology (ACT)	Rolling	The maximum amount payable to a recipient will generally not exceed \$2 million per project.	Eligible activities under the Research and Innovation Stream are of the following nature and type: <ul style="list-style-type: none"> Applied research and development of clean technologies Piloting and evaluating clean technologies Demonstration and knowledge and technology transfer activities Commercializing and scaling up clean technologies Other activities supporting Innovation 	The new Agricultural Clean Technology (ACT) Program aims to create an enabling environment for the development and adoption of clean technology that will help drive the changes required to achieve a low-carbon economy and promote sustainable growth in Canada's agriculture and agri-food sector. https://agriculture.canada.ca/en/agricultural-programs-and-services/agricultural-clean-technology-program-research-and-innovation-stream
Recreation Infrastructure	Quarterly	Up to \$300,000 to a maximum of 50% for new construction and/or substantial upgrades to existing facilities	Local Governments Registered First Nations Bands Registered Not-for-Profits	The Recreation Infrastructure program supports community efforts to create and support recreational infrastructure, such as arenas, gymnasiums, golf courses, fields, boat launches and others, to encourage resident attraction and retention while also increasing opportunities for sport tourism. This program is set up to support new construction projects or upgrades and repairs to existing facilities. https://www.northerndevlopment.bc.ca/funding-programs/community-development/recreation-infrastructure/
Youth Agriculture Education	Rolling	\$200,000	Eligible applicants include: <ul style="list-style-type: none"> An agricultural group registered under the Societies Act A commodity group A university or college* A school district* An incorporated not-for-profit organization A recognized rural municipal government in Alberta (Municipal District, Special Area, Improvement District) 	The program stream supports the development and delivery of effective agriculture education programs that are science-based, topic-driven, curricular-linked and help students use critical thinking to engage in meaningful and informed conversations about issues that affect public trust in agriculture. https://cap.alberta.ca/CAP/program/YOUTH_EDUCATION

Grant Name	Deadline (Specific or Rolling)	Value (\$)	Eligible Applicants	Description
Strategic Research and Development Grant program	Rolling	Various		The Strategic Research and Development Grant Program funds basic and applied research initiatives that complement Agriculture and Forestry's business plan and priorities https://irdar.ca/
Food Farming and Forestry Challenge			<ul style="list-style-type: none"> • Farmers, ranchers, innovators, technology developers • Small and medium-sized enterprises (SMEs) • Research and development (R&D) organizations • Post secondary institutions, • Municipalities, not-for-profit organizations, • Partnerships and collaborations between multiple organizations are encouraged 	This funding opportunity will accelerate innovation in support of long-term competitiveness and stimulate growth in the critically important agriculture, agri-food, fibre, and forestry sectors. It provides near-term capital to innovators in these critical Alberta industries, while also identifying opportunities and solutions for longer term economic recovery, investment attraction, job creation, and emissions reduction. https://eralberta.ca/food-farming-and-forestry-challenge/
Jobs and Growth Fund in Western Canada	2023	Various	<ul style="list-style-type: none"> • Businesses, including co-operatives • Not-for-profit organizations • Community economic development partners 	Western Economic Diversification Canada (WD) is investing \$217 million to help job creators and the organizations that support them to future-proof their businesses, build resiliency and prepare for growth by transitioning to a green economy, fostering an inclusive recovery, enhancing competitiveness and creating jobs in every corner of the country. https://www.wd-deo.gc.ca/eng/20183.asp
Living Laboratories Initiative	Rolling	Various	Farmers, scientists, and other collaborators to co-develop and test innovative practices and technologies to address agri-environmental issues.	nation-wide network of living labs, the initiative focuses on innovative solutions to environmental issues related to agriculture, such as climate change, soil health, water quality and biodiversity. The goal of the Living Laboratories Initiative is to accelerate the development and adoption of sustainable practices and technologies by Canadian farmers. https://agriculture.canada.ca/en/scientific-collaboration-and-research-agriculture/living-laboratories-initiative

Appendix D

Market Assessment

1. Rural Community Practice Market Assessment

The first step to determining the financial viability of a *Rural Community Practice (RCP)*, is to understand the size and structure of the market that the center would serve. Similar to the *Preliminary Options Assessment*, this report makes use of Statistics Canada industry data classified by NAICS (North American Industry Classification Codes). This allows for a consistent analytical approach to the data gathering and analysis process.

1.1. Livestock Hub

The Livestock hub component of the proposed *RCP* is composed of the following services:

Livestock Health Services:

- Veterinary Services (livestock focused)
- Breeding Services (Genomic analysis)
- Lab Services
- Equine Rehab and Assisted Therapy

Feed and Land Services:

- Animal Nutrition
- Range Management

Equine Care

- Farrier Services
- Dental
- Boarding Facilities

One of the first steps in the evaluation of the Agricultural Center, was a detailed review of all potential opportunities for the center. The *Preliminary Options Assessment* in Appendix A provides the data and analysis that resulted in a shortlist of opportunities to be evaluated further. The 2016 Census of Agriculture was an important component of that work as it provided specific details about agricultural production in Special Areas No. 2.

As of 2016 there were 138,620 head of cattle in Special Areas No. 2 on 351 farms¹. This translates to 395 head of cattle per farm, well above the provincial average of 256 head of cattle per farm. Additionally, Special Areas No. 2 registered over 1,700 head of horses and ponies, which ranked 21 out of 70 regions in the province. A little over one third of these horses are on the Stampede Ranch located in the southern part of Special Areas No. 2 and it goes without saying that this large ranch presents an attractive partnership opportunity for the *RCP*.²

¹ <https://open.alberta.ca/dataset/9d694bee-7266-41e1-ac01-245d9dc1be56/resource/0f79e7b4-f1b7-480a-8e27-12197a12eaac/download/af-ecb-2016-census-of-agriculture-for-alberta.pdf>

² <https://calgaryherald.com/sports/rodeo-chucks/call-to-the-west-stampede-ranch/?fbclid=IwAR2hJBDQq1a80WjuQKhNBH3mPJA5pavqeDkCuUpsEoTK7jk5YuwSLFXow>

In addition to the Census of Agriculture data, Statistics Canada also provides detailed farm financial data at the provincial level. The following table provides insight into key financial metrics for Alberta cattle ranches and feedlots (NAICS 11211). The five-year average for the data is presented for seven different revenue classes.

Table 1: Financial Metrics for Alberta Cattle Ranches and Feedlots

Average Annual Financial Data (2015 - 2019)	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$1,999,999	\$2,000,000 and over
Total Operating Revenue	36,270	72,199	159,706	348,628	689,226	1,371,072	13,979,396
Total Operating Expense	38,833	65,308	131,785	282,528	573,125	1,162,623	13,359,648
Livestock Purchase Expense	6,401	11,132	26,252	67,079	179,271	461,326	7,970,915
Feed, Bedding Expense ¹	4,748	7,829	14,949	31,577	58,803	117,871	2,661,380
Livestock Health Expense ²	1,044	1,771	3,596	7,603	12,773	22,191	172,143

Source: Statistics Canada. Table 32-10-0136-01 Farm operating revenues and expenses, annual
Notes:

1. Feed, supplements, straw, and bedding
2. Veterinary fees, medicine, and breeding fees

Based on provincial data, it is estimated that the majority of cattle producers in Special Areas No. 2 have annual revenue of approximately \$500,000 per year and spend an annual average of \$45,190 on feed, supplements, straw, and bedding. Producers in the region also spend an estimated \$10,188 on veterinary fees, medicine, and breeding fees every year. This farm operating data provides insight into various expenses that Special Areas No. 2 livestock producers incur and by proxy the level revenue that related businesses in the region could expect to generate.

As previously mentioned, according to the Census of Agriculture, Special Areas No. 2 registered over 1,700 head of horses and ponies. While the equine sector represents a smaller market in terms of total animals, horse owners typically spend more per animal on health-related services. The following data on horse related expenses provides additional insight.

Table 2: Cost of Horse Ownership

Products & Services for the Care of Horses	Average Expenditure per Horse (\$)
Hay	853
Horse Feed	449
Bedding	286
Feed Supplements	172
Grooming & Horse Care Products	141
Veterinary Services & Prescription Drugs	513
Farrier Services	379
Horse Dental Care	158
Horse Therapy Services	339
Total	3,291

Source: Equine Canada

Utilizing the data from Table 1 and 2 allows for the calculation of total market size for the various components of the Livestock Hub. Additional context around the anticipated level of demand for each product or services is provided in Tables 3 and 4 below.

Table 3: Animal Health Expense

	Veterinary, Breeding, Laboratory Services, Rehab		
	Needs Assessment	Estimated Demand	Estimated Market (\$) ^{1, 2, 3}
Cattle	Non-Discretionary	Medium to High	3,790,223
Equine	Non-Discretionary	Medium to High	299,079
Total			4,089,302

Notes:

1. Cattle Source: Statistics Canada, Table: 32-10-0136-01
2. Equine Source: Equine Canada
3. Market basin is Special Areas No. 2 region

Interviews with stakeholders indicated the need for additional veterinary care in the region and based on the levels of cattle ranching activity there is clearly a relatively substantial market for these services. Based on this, it is estimated that the region can support 2–3 full time large animal veterinarians. Both veterinarian and breeding services are believed to be important services that are key to maintaining a healthy, profitable herd. Since breeding services can require specialized training and equipment, it can be more cost-effective for small-scale livestock farmers to outsource these services to industry operators instead of investing in the human and physical capital needed to conduct these services in-house.³

Working under the assumption that feed and supplements make up the majority of costs in the Feed and Bedding expense category, the total market for animal feed is estimated in the table below. While these figures are for total feed, they are used as a proxy for the opportunity that the

³ IBIS World US – Livestock Production Support Services, 2021 IBISWorld US - Livestock Production Support Services (11521) - July 2021.pdf

region also presents for animal nutrition and range management services. This rationale is based on the premise that these nutritionists can assist producers to more cost effectively feed their animals.

Table 4: Nutrition and Range Management Assessment

	Nutrition, Range Management		
	Needs Assessment	Estimated Demand	Estimated Market (\$) ^{1, 2, 3}
Cattle	Non-Discretionary	Low to Medium	17,543,875
Equine	Non-Discretionary	Low to Medium	517,291
Total			18,061,166

Notes:

1. Cattle Source: Statistics Canada, Table: 32-10-0136-01
2. Equine Source: Equine Canada
3. Market basin is Special Areas No. 2 region

While nutritionists and range management professionals have a significant market that they can capture, these services are often considered non-discretionary and producers may not feel the additional expense can be justified. In order to successfully penetrate this market, marketing efforts may be needed to inform producers on the return they can expect on their investment.

The final component of the *Rural Community Practice* is equine care. While these services are typically considered non-discretionary, the estimated value of the market is relatively small.

Table 5: Nutrition and Range Management Assessment

	Farrier, Dental Services		
	Needs Assessment	Estimated Demand	Estimated Market (\$) ^{1, 2}
Cattle	N/A	N/A	N/A
Equine	Non-Discretionary	Medium	188,689
Total			188,689

1.2. Research

The concept of research covers a broad range of topics, but at its heart, it is the practice of investigation and study as it relates to a specific field or discipline. There are two main types of research:

Basic Research

To expand knowledge and gain understanding without concern for how the research will ultimately be used.

Applied Research

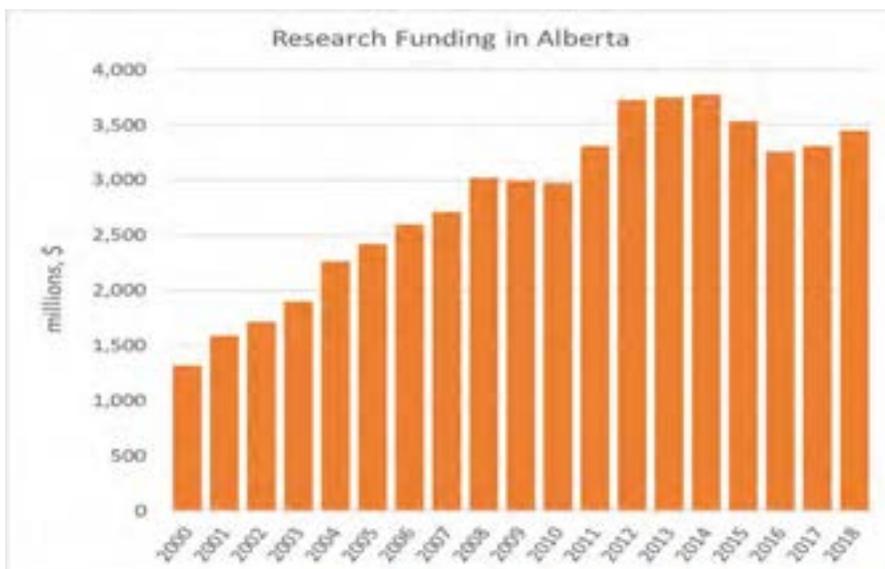
Builds on basic research to determine possible uses for the findings from basic research, or to determine new ways of achieving a goal or solving a problem.

While it is often the case that academic institutions carry out basic research and the private sector focuses more on applied research, in reality the boundaries are often not so distinct. In the private sector, companies will undertake research and development activities in order to develop marketable products and technologies that help producers increase yields and overall profitability.

While large agribusiness companies may have devoted labs and researchers, it often makes more sense for small to medium size companies to outsource some or all of these activities. As a result, Universities and colleges also participate in applied research activities and partnerships exist between the public and private sector to commercialize new technologies and find practical application for the results of basic research. This creates opportunities for relationships and partnerships between the private sector and organizations that can facilitate and/or carry out research activities. Examples include the Technology Access Center for Livestock Production at Olds College and the Chinook Applied Research Association (CARA) in Oyen.

Statistics Canada provides extensive data on the type and source of research funding that takes place in Canada.⁴ Data specific to Alberta shows that from 2000 to 2018 the level of funding increased from \$1.3B in 2000 to \$3.6B in 2018. While total funding has retreated from the peak in 2014, the data shows a significant average annual growth rate of 5.6%. On average over 90% of this research funding has been devoted to Natural Sciences and Engineering disciplines.

Figure 1: Historical Levels of Research Funding



Review of existing data illustrates a sustained focus on research funding but also of interest is the source of research funding. In 2018, over 40% of research funding in Alberta originated with business enterprises in the private sector. This is a significant increase from the 15% in 2000.

⁴ Statistics Canada. Table 27-10-0273-01 Gross domestic expenditures on research and development, by science type and by funder and performer sector (x 1,000,000)

This indicates that private sector research is becoming an increasingly important source of funding for researchers.

Background research completed on the Harvest Sky Region provided insight into the regional characteristics and unique ecosystem which could be leveraged in order to attract researchers and research projects to the region.

Cattle production

Researchers and industry representatives interviewed for this project expressed the importance of having access to the livestock herds. The significant prevalence of cattle production in the Harvest Sky Region presents an opportunity to attract research that focuses on improved animal health and welfare, innovative production techniques, forage production, and increasing the profitability of beef production.

Climate Research

The Harvest Sky Region's climate may be of interest to researchers and scientists that are not only studying the effects of climate change, but also those that are working to mitigate the impacts to farmers, livestock, and society in general. While the hot and dry regional climate is often considered a negative externality, it may be of interest to researchers from various disciplines.

Native Grasslands

Native prairie is a unique ecosystem that is becoming increasingly threatened. In Western Canada only 20% of native grasslands remain.⁵ In addition to supporting a diverse range of plants and animals, native prairie also has the ability to sequester carbon from the atmosphere. Discussion with research associations and industry experts identified current research that is ongoing related to the benefits of native grasslands. It is believed that these threatened regions represent an excellent opportunity to attract research funding and the researchers investigating the native grasslands. Areas of interest could be biodiversity, plant ecology, carbon sequestration, and effects of cattle on carbon storage in the grasslands.

Market research shows that there is significant research activity taking place in Alberta, and that the Harvest Sky Region has the unique attributes needed to attract certain types of research. Research activities represent a growing industry in Alberta and there is an increased focus on spending agricultural research dollars in a manner that maximizes the positive impact on the economy.

⁵ https://www.youtube.com/watch?v=_CG4ROvCu0Y

Appendix E

Riding & Event Center

Supplemental Information

1. Riding & Event Center Supplemental

The following document provides information which is intended to support the Riding & Event Center business case.

2. Needs Assessment

The Riding & Event Center will be a multi-use building that is able to host a variety of events, ranging from livestock shows and events to tradeshow and concerts. Located in Special Areas No. 2 in or near the town of Hanna it will serve a very large area. The facility will fill a niche and bring business into the town of Hanna. The following table is the needs assessment that was produce in 2016 by the Community Action Team and was included within a business case produced at that time.

Table 1: Ideal Facility Community Input ¹

Component	Description
Steel frame, metal clad building	Strong sturdy structure that will last a lifetime
Arena floor surface that is a minimum of 100ft wide and 250ft long	A dirt floor surface large enough to host events such as rodeos and other events that have size and pattern specifications
Lobby/Main area floor space that is a minimum of an additional 100ft wide	An area beside the arena floor for spectators where bleachers, tables, and chairs can be set up
Restaurant and Lounge	Licensed space to be able to cook and prepare food and beverages to sell at functions being hosted in the building as well as an additional means of generating income
Washrooms with showers	Public washrooms for spectators and event participants with showers available for anybody who may be overnighing at the facility
Grandstand seating for large volumes of people	Seating capacity to be able to accommodate the Hanna Indoor Pro Rodeo (minimum) and other large-scale events
Second story viewing area	A second story viewing area with large glass windows that will provide secondary spectating/seating space during events also capable of hosting special events
Meeting/conference rooms	For community groups, boards, and businesses to host meetings, conferences, and other special events
Management office	Space for a building manager to work out of

¹ Hope Eaton, Multi-Purpose Ag Facility Business Case, 2016

Show office	Office space for anybody organizing and hosting an event at the facility to temporarily work from
Separate wash rack and cattle prep area with access to arena floor	For preparation of any animals being shown or marketed at the facility or anybody who may need to bathe an animal
Storage for equipment	To store all equipment needed to maintain the facility and any props or equipment needed for various events
Permanent bucking chutes	To buck stock at rodeos, roughstock schools, and roughstock events
Permanent timed event chutes	To run cattle out of for events such as team roping, calf roping, and steer wrestling
Return alley	To run livestock back to the other end of the arena after a competitor has made their run
Outdoor penning for livestock	Housing for livestock being used in various events
Permanent indoor penning for events such as bull sales and horse shows with access to arena floor	A lean-to off of the main building with access to the main arena for indoor stabling for horses and cattle being exhibited
Permanent sound booth	Available for announcers and DJ's to use during events
Full heat	Fully heated building to provide a comfortable atmosphere for anybody using the facility
Sound system throughout	To be used so that anybody in the building can hear any commentary or announcements during events
Ample parking	To allow for as many people as the building will hold to attend events
Trailer parking with power hook-ups available	Parking for those bringing livestock to events and anybody with an RV
Outdoor arena	Available for participants and competitors to warm up before events or to host more than one event at a time
Space for a retail outlet	Opportunity to generate income for the facility and create more jobs for the community
Space for education (i.e. school programs, riding academy)	Opportunity to generate income for the facility while providing a unique education experience that does not exist in the area

3. Comparable Facilities

The following tables are based on market research that was completed for the Agricultural Center Business Case. It provides a list of 10 facilities within the province. Insight related to operating models, ownership structures, revenue streams, etc. has been used to inform the proposed Riding & Event Center in Special Areas No. 2.

Rimbey Agrim Centre - Rimbey, AB

Website	https://rimbeyagrimcentre.com/
Community Population	Rimbey = 2,378. Located in Ponoka County (population 8,856). Total = 11,234.
Building Ownership	Rimbey Agricultural Society owns the facility. Ponoka County provided \$2M toward the facility ² Ponoka County has provided a 200,000 subsidy since 2019 ³
Operated by	In the past, the Ag Society managed the facility as an operational board. Under terms of county subsidy, the Ag Society is now a governance board and the facility's general manager is responsible for day-to-day operations.
Staff	General manager
Amenities	A 125' X 180' riding area, grandstand seating for approximately 500 spectators. The main lobby has concession space and public washrooms. Animal wash bay with overhead loading doors, roughstock chutes and a rope box. In a separate building are 60 indoor stalls and approx. 20 outdoor stalls. ~120 x 200
Capacity	Can currently seat 500. Desire to bring in another 500 seats (temporary). Auditorium can hold ~300 (for events such as weddings)
Capital Costs	\$5.9M ⁴
Challenges	It has been suggested that the facility is overbuilt for the regional market.

Cardston Agridome - Cardston, AB

Website	https://cardstonagridome.com/
Community Population	Cardston = 3,585; Cardston County = 4,481. Total = 8,066
Building Ownership	Cardston Ag Society
Staff	Facility Manager
Amenities	The Cardston Agridome is a public event facility. Located on 20 acres in Southwest Alberta. <ul style="list-style-type: none"> • Heated indoor arena (100' x 200') that seats up to 1500 spectators. • Slide track / warm up arena (200' x 40').

² <https://www.reddeeradvocate.com/uncategorized/ponoka-county-providing-final-installment-towards-agrium-centre/>

³ \$200,000 annually for three years

⁴ Rimbey Ag-Society's new multi-purpose facility opening April 1 (albertafarmexpress.ca)

	<ul style="list-style-type: none"> • Two outdoor arenas, the newest being 200' x 400'. • New kitchen, concession and restroom area with showers. • Campground for travelers. • Stabling that accommodates up to 160 animals.
Capacity	Seats up to 1500 spectators

Calnash Trucking Ag Event Centre (*Premier Facility*) - Ponoka, AB

Website	http://www.paecs.com/
Community Population	Ponoka = 7,229; Ponoka County = 9,806. Total = 17,035.
Origins	The fund raising, planning & building of the Calnash Ag Event Centre occurred via a collaborative effort between the Town of Ponoka, Ponoka County, the Ponoka Stampede & Exhibition Association, and the Ponoka Agricultural Society. Each organization appointed representatives to a steering committee, which became the forerunner to the non-profit society, Ponoka Agriculture Event Centre Society, which owns the current facility.
Building Ownership	Non-profit society: Ponoka Agriculture Event Centre Society (PAECS).
Operated by	<ul style="list-style-type: none"> • The Board of Directors of PAECS is responsible for ongoing planning & fundraising as relates to capital projects. <p>The Calnash Ag Event Centre is operated by a <u>Standing Committee of the Ponoka Ag Society</u>.</p>
Staff	Facility Manager Events Coordinator
Amenities	<ul style="list-style-type: none"> • Indoor arena (140' x 400' with a dirt floor surface), permanent seating for 500, expandable if required • Arena can be used as exhibition space • Separate warm-up area, that can be used for smaller individual events • Self-contained stabling facility with up to 280 stalls available • Stock pens • Specialized equipment to support equestrian and other livestock events, including wash racks • Attractive foyer with concession, show office, ticket & administration office • Separate classroom and small banquet room; available for educational & special events • 287 Parking Stalls • 55 RV parking spots • Home to the Canadian Rodeo Hall of Fame
Capacity	500 permanent, plus temporary
Financials	2020 – revenues \$1.46M, expenses \$1.23M ⁵
Challenges	Appears to have been some governance issues with the different parties involved:

⁵ <https://www.canada.ca/en/revenue-agency>

	<ul style="list-style-type: none"> • <i>“Following a spat that has since been patched up... PAECS took over operations of the building at the start of 2019.</i> https://www.ponokanews.com/news/paecs-turns-tidy-profit-after-taking-on-operating-facility/ • <i>“Control over the building’s operations is a real sticking point”.</i> https://www.ponokanews.com/news/ponokas-ag-society-board-under-scrutiny-during-agm/ • https://www.rimbeyreview.com/news/county-pulls-support-for-ponoka-ag-event-centre/
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Silver Sage Community Corral - Brooks, AB

Website	https://www.silversagecorral.com/
Community Population	Brooks: 14,451; Newell County: 7,524. Total = 21,975
Opened	Opened in 1997
Building Ownership	Owned and operated by the Silver Sage Agricultural Society.
Operated by	Volunteer Board of Directors govern the facility.
Amenities	<p>Main building features a 100 X 185 heated riding arena and is equipped with arena level concession, spectator seating, ample display area and heated wash racks.</p> <p>A second floor viewing area and lounge is also available. Facility is wheelchair accessible, with full bathrooms complete with showers for overnight patrons.</p> <p>Off the main arena is a 100 X 80 warm up arena with rolling overhead doors into the main arena.</p> <p>77 box stalls, 9 of which are on the outside of one of the barns but are covered by a roof.</p> <p>1 - 100 x 50 water pens 2 - 50 x 50 water pens with windbreaks</p> <p>These pens are available for rent by individuals who have committed to an arena for rent. Stalls are all available on a year-round basis for horse boarding. A turn out pen is provided with the stall rental as available. 25 turn out pens.</p>
Capacity	<p>Eight sets of bleachers (4 are in the building at all times) which seat approximately 40-45 each. 320 to 360.</p> <p>Second floor mezzanine has the best seats in the house to watch all the events in the arena, mostly standing room only, but can hold up to 200 people.</p>
Capital Costs	Estimated at \$3M in 1997
Financials	2020 – revenues \$0.38M, expenses \$0.42M ⁶

⁶ <https://www.canada.ca/en/revenue-agency>

Claresholm Agriplex - Claresholm, AB

Website	http://www.claresholmagriplex.ca/
Community Population	Claresholm = 3,780; MD Willow Creek = 5,179. Total = 8,959
Opened	1977. Had moved when the town needed more land for residential expansion. Have started building a 2nd indoor equine facility. Received \$500,000 from Major Communities Enhancement Grant. WCAS committed approximately \$600,000 from their budget as well. Applied for an additional \$400,000 through the Community Facility Enhancement Program.
Building Ownership	Owned and operated by The Willow Creek Agriculture Society (WCAS).
About	One of the first entirely equine indoor small-town facilities to be built in the province.

Edson Chrysler Event Center – Proposed Venture - Edson, AB

Website	https://www.yellowheadagsociety.com/
Community Population	Edson: 8,414; Yellowhead County: 10,995. Total = 19,409
Building Ownership	Yellowhead Ag Society owns the land where the current indoor riding arena resides.
Amenities	Their current venue: Indoor riding arena is a wood structure 80' x 120' (25+ Years old). No Potable Water – No Indoor Plumbing. Used by many Edson and Yellowhead County residents. Approximately 63% of visitors are Yellowhead County/Edson residents, and 37% are from surrounding jurisdictions (Whitecourt, Hinton, Drayton Valley, Edmonton, etc.). Compared to other nearby arenas in Whitecourt or Thorsby, the Edson indoor riding arena has 90% utilization, which has become a large problem as our demand is higher than our availability to our users. The facility usage and membership has increased every year and currently sits at a 700% increase over the past five years.
Capacity	Without bringing in seating for events, there is seating for approx. 30 people. Unable to hold large events. With 250+ members, the arena is used regularly & we have outgrown it. Arena is overbooked and not able to accommodate some groups.
Proposed venue:	<ul style="list-style-type: none"> • 71,000 Square Feet • 368' x 170' Building with a 25' Lean-to • Largest Ag Building North of Ponoka • Arena floor of 250' x 130' • Largest public arena space in Alberta • Warm up arena 80' x 130'

	<ul style="list-style-type: none"> • Bigger than our current arena • Meeting room (Approx. 20 x 40) • Seating for 500+ Spectators • Bathrooms with Showers • Concession with tables & seating area • Mezzanine (VIP Section) • Rough Stock area on South Side away from spectators • Roping Chutes on West end • Wash Bay • Storage area for equipment & Tractor
Capital Costs	Budget \$3.82 Million
Challenges	Yellowhead County is reluctant to provide support.

Silver Slate Arena - Stavely, AB

Website	https://www.silverslatearena.com/
Community Population	Stavely = 541; MD of Willow Creek= 5,179. Total = 5,720
Opened	2009. Has grown from 10 scheduled shows in 2009 to over 50 scheduled shows for 2019, ranging from High School/ All Girl Rodeo, Team Roping, Cutting, Reining, Working Cow Horse, Team Penning, horse vaulting
Building Ownership	Family owned and operated facility
Amenities	<ul style="list-style-type: none"> • Includes a steakhouse which is quite popular and hotel rooms. • 300'x120' indoor arena for boarders to use and a smaller 140'x120' outdoor arena. • There's a heated tack room and hot water wash bay. • Boarding features include: • Outdoor Pens <ul style="list-style-type: none"> ○ 300'x120' indoor arena use ○ 140'x120' outdoor arena use • Tack room • Hot water wash bay • Outdoor pasture
About	<p>Stavely has a long history: Stavely is the home of the Stavely Indoor Rodeo. Founded in 1929, it is the world's first indoor rodeo. Annual three-day professional rodeo is held at the Stavely Arena the second weekend in May. Stavely Arena is operated by Stavely & District Agricultural Society.</p> <p>Located between Lethbridge and Calgary, a one-hour drive from either location on Hwy 2 – close to 2 big metro markets.</p>

Stettler & District Agricultural Society grounds - Stettler, AB

Website	https://www.stettleragsociety.com/facilities.html#/
Community Population	Stettler: 5,952; Stettler County: 5,322. Total = 11,274

Building Ownership	Stettler District Ag Society
Staff	2 f/t staff
Amenities	<ul style="list-style-type: none"> • Indoor Arena • Outdoor Arena • Agriplex • Pavilion • Meeting Room • Concession on Request • Liquor Bar on Request • Stall Rentals (only during events) • Wash Rack on Request • Large Parking Lot • Dry Camping available (only during events) • Table and Chair Rental

Spur West Event Centre - Alhambra, AB

Website	http://www.spurwest.com/
Community Population	Alhambra: hamlet near Rocky Mountain House (6,635); Clearwater County: 11,947.
Building Ownership	Family run. Dori Westin and Brad Insel are owner/operators. Westin obtained CEF level 1 Coaching Certificate in 1988 and has been a Clinician for many groups. Certified Farrier who worked shoeing horses full-time for 15 years & has taught Trimming courses for Adult Education, including Fairview College. She obtained a certificate in Horse Husbandry, Equine A-1 and Biological Sciences majoring in Animal Health Technology. Experience working with Equine Practitioner.
Amenities	<p>100' x 250' x 20' HEATED INDOOR Public Arena and a Regulation size 150x240 Steel paneled OUTDOOR Arena. Both spaces have comfortable viewing areas with 100-person aluminum bleacher seating, shelter for outdoors and a light food concession at many events.</p> <p>Arena Amenities</p> <ul style="list-style-type: none"> • 100 Person Aluminum Bleachers • Announcer Stand • Sound System • Wash Bay • Viewing/Meeting Area with Kitchenette • Indoor Round Pen • Tack Lockers • Staging area at both ends <p>Boarding:</p>

	<p>Private Pens 24 x 24 Steel Pipe with Shelters on FCFS Basis</p> <p>Semi-Private Pens Steel Pipe & Wire; (4-6 Compatible horses, up to 10 in larger fields).</p>
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Donalda Equestrian Centre - Donalda, AB

Website	https://www.donaldaagsociety.com/equestrian-centre
Community Population	Donalda = 219; Stettler County = 5,322
Building Ownership	Donalda & District Ag Society
Amenities	<p>75'x180' heated indoor riding arena (32,000 Sq.Ft) and a 200'x220' outdoor arena (44,000 Sq.Ft). In addition to the riding facilities the indoor arena features a lobby area with kitchen facilities.</p> <p>Adjacent to the arena is the Donalda Campground with 9 fully-serviced stalls along with multiple non-serviced stalls.</p>

Teepee Creek Lyons Production Services Events Centre - Teepee Creek/County of Grande Prairie, AB

Website	https://www.tpstampede.ca/lyons-events-centre.html
Community Population	Hamlet. County of Grande Prairie: 22,303
Opened	2016
Building Ownership	Teepee Creek Stampede Board. Currently, the Teepee Creek AG Events Centre is 100% volunteer operated and managed. Not an ag society.
Staff	No paid employees.
Amenities	<p>Building of 40,000 square feet of usable space.</p> <p>The riding arena is 110' x 270' with an additional lean-to of 40' x 270' for tying horses.</p> <p>Enframe Barn - 2000 people. Has a stage, running water, dance floor, mezzanine, bar areas, power, and room for camping.</p>
Capacity	Hosts about 140 events/year
Capital Costs	Budget for the first phase of construction is around \$1.2 million.
Operational Costs	<p>County of Grande Prairie granted operational funding in May 2021: \$40,000 to the Teepee Creek Stampede Association for the Lyons Events Centre.</p> <p>For the most part, volunteer board uses County funding towards utilities.</p>
About	Teepee Creek, hamlet in County of Grande Prairie.

	<p>Traditionally, the Teepee Creek Stampede was an amateur rodeo; now part of the Pro rodeo. For many years, The Teepee Creek Stampede was the largest amateur rodeo in the north and one of the largest amateur events in Canada.</p> <p>Teepee Creek Stampede has been growing over the last 10 years. Since moving to a pro show, have completed massive amounts of work to grounds and expanded wagon show from 2 nights of chuckwagon racing to now including 4 full nights of racing with a final dash for cash. In 2005, less than 1000 people passed through the gates during the Stampede. In 2015, hosted more than 15K spectators</p> <p>The Teepee Creek Stampede is a CPRA Pro Rodeo. Also feature races from the Western Chuckwagon Association GMC Pro Tour and the All Pro Canadian Chuckwagon & Chariot Association Taste the Dust Pro Tour and are often known as 4 DAYS IN THE WILD!</p>
Challenges	Distance can make it hard to attract certain rodeo participants. Usually good feedback/returns when folks do attend.

Appendix F

Assumptions

1. Business Case Assumptions

The following is a list of assumptions and sources of information used in the completion of the financial analysis for the *Rural Community Practice* and the *Riding & Event Center*.

General

- Financial projections provided in this analysis are based on statistical estimates using the best publicly available data. Therefore, forecasts generated for purposes of this analysis necessarily carry a margin of error.

Capital

- Interest rates are based on the 30 year indicative interest rates provided by the Government of Alberta for loans to Local Authorities¹
- Construction estimates carry a margin of error of +/- 30% as is consistent with pre-feasibility level estimates.
- Facility costs are based on probable building construction cost per RSMeans, 2021 Q3, Red Deer AB, includes consultant fees, Riding and Event Center estimates are based on warehouse-grade facility.

Land

- Land cost assumes parcel size matches facility needs:
 - 27 acres for *Riding & Event Center* and related facilities.
 - 1.5 acres for *Rural Community Practice*.
- Site development costs include servicing costs (water, gas, sewer, electricity)
- Estimated land cost is based on market data for unserviced land in general vicinity of the town of Hanna and ranges from an estimated \$5,000 per acre to \$12,000 per acre
 - The analysis assumes that a larger parcel of land can be purchased at a lower per acre rate.

Labor

- Managerial expense has been consolidated for the integrated Agricultural Center scenario with the general manager's time being split between RCP and Riding & Event Center (50/50 split)
- The support staff position time split is split between the RCP and Riding & Event Center 30/70, reflecting the need that the arena facility has for assistance with day-to-day operations such as event setup and tear down.

¹ <https://acfa.gov.ab.ca/loan-form-script/rates.html>