The Economic Impact of Alberta's Equine Community (2021)

FINAL REPORT







The Economic Impacts of Alberta's Equine Community (Research Study 2021)

Executive Summary

Albertans are passionate about their horses, donkeys and mules. These equines are an integral and valued part of our province's culture and history, which has been carried forward from the past to the present.

These past few years have been challenging for all Albertans, let alone horse owners, as we have dealt with the hardships of wildfires, floods, and an ever-changing pandemic. The one constant that has remained unchanged, however, is the commitment to our equines. The Alberta Equestrian Federation (AEF) has sought for many years to better understand the Albertan equine community and its contribution to the province.

In 2021 AEF hired an independent contractor, Serecon Inc., to conduct a study to determine the current status of Alberta's equine community and estimate the economic benefits that it contributes to the provincial economy. The study was designed to capture the impact of all businesses and services in Alberta that connect, directly and indirectly, to the equine community and its related industry.

The diverse nature of the equine sector makes it challenging to capture data. Despite the complications, the AEF believes that understanding the economic footprint of this sector will assist all interested groups in making important decisions that will contribute to a thriving, growing equine community in Alberta.

Methods

AEF worked with key stakeholders in the equine community, using their knowledge and experiences to design a comprehensive survey. AEF administered the survey through multiple social media groups and electronic distribution tools in the fall of 2021, with a total of 1,520 responses from a wide array of industry and community participants. Interviews were also conducted to validate and build out results.

Various data techniques and models were then used to capture and analyze data collected. Survey responses were systematically analyzed to ensure the complex nature of the industry was appropriately summarized.

Major Findings

- The diverse mix of equine activities makes a significant financial contribution to the province. Findings indicate the total economic impact of the equine community in terms of gross domestic product amounted to **\$1.356 billion** in 2021.
- All expenditures related to the equine community totaled over \$1.7 billion. These expenditures resulted in a contribution of \$855 million in labour income.
- The equine community has a notable impact on employment in Alberta. Analysis reveals that over **20,300** full time equivalent (FTE) jobs are contributed after accounting for all equine-related expenditures.
- Study results show Alberta's total population of horses to be just over **142,000 horses**, kept on over **25,000 properties**. Roughly 50 per cent of horses are used for recreation (backyard ownership, trail riding, summer camps, etc.), 38 per cent for sport (western, jumping, dressage, vaulting, etc.), and six per cent for work (outfitting, ranch work, guiding, etc.).
- When it comes to overall expenditures (training, board, feed, health care, etc.) per horse surveyed, owners of horses used for sport pay nearly twice as much (at approximately \$12,700 per year) as those used for recreation (approximately \$7,500), and over three times those used for work (approximately \$3,700).

Going forward

This study shows the equine community's significant impacts across the province, demonstrating the great importance of this diverse and wide-reaching sector. Findings will help determine the best way to enhance and grow the equine community. They will inform decisions in many areas including agriculture, sport, recreation, and government, and help identify future trends and drivers of change.

AEF is committed to sharing and using the study information to develop and enhance our programs and service offerings, attract new partnerships, strengthen existing partnerships, and supporting other groups in the equestrian community whenever possible.



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1.1 Total Economic Impact

The diverse mix of equine activities in Alberta contribute to a significant total economic impact. Our findings for the equine industry indicate that the total economic impact in terms of gross domestic product (GDP) amounted to **\$1.356 billion** in 2021.

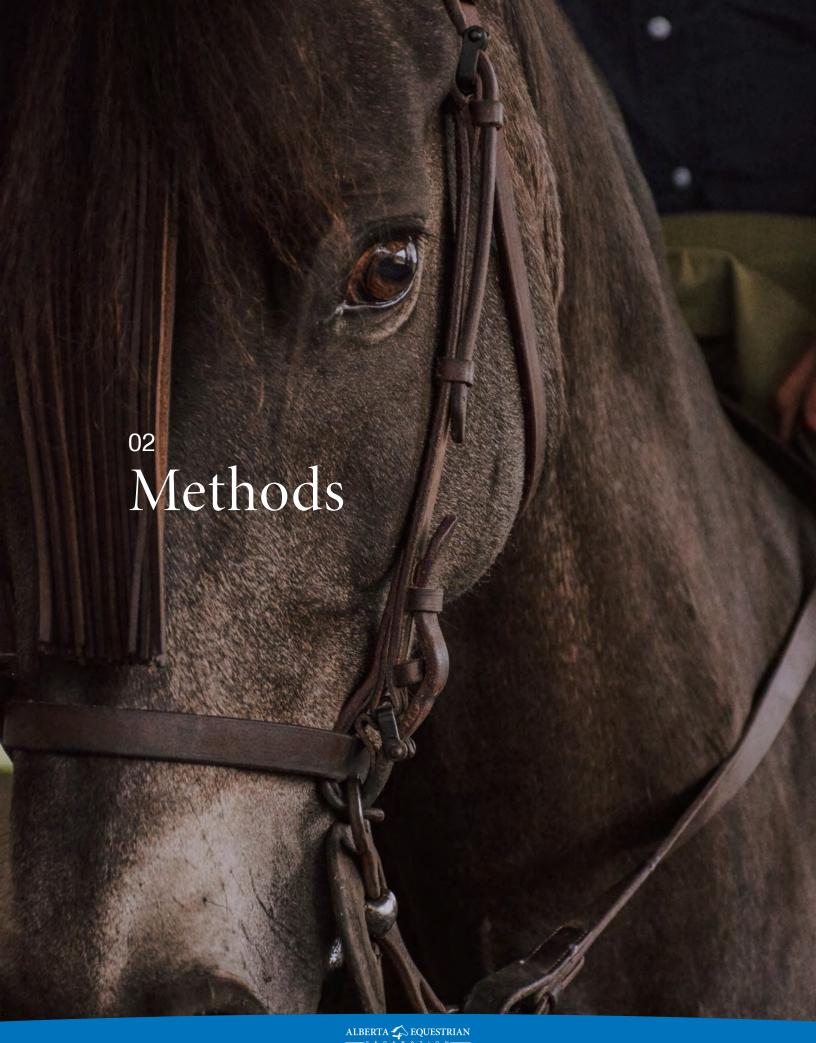
Though horse racing constitutes a significant impact, Horse Racing Alberta has separately quantified its economic impact and so it is not formally included in the equine industry impacts within this report. Horse Racing Alberta's 2019 study found an economic impact estimate in terms of GDP of \$112 million. When considered together, with adjustments to avoid double counting and inflation, the equine industry is estimated to contribute \$1.439 billion in 2021 terms.

After accounting for all expenditures related to the equine industry, we have concluded that the direct expenditures in the equine industry totaled **\$1.714 billion** in 2021. These expenditures result in a contribution of **\$855 million** in labor income within Alberta when indirect and induced impacts are considered.

1.2 Employment

The equine industry has a notable impact on employment in Alberta. Our analysis reveals that in Alberta approximately **6,780 jobs** (measured in full time equivalents (FTE)) are contributed by the various equine industry activities beyond the typical expenditures for keeping horses. After accounting for all horse keeping expenditures, the total number in Alberta of FTE jobs contributed by the equine industry is approximately **20,380**.



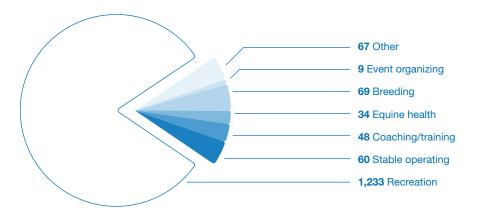


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2.1 Survey Data

The AEF administered an online survey in the fall of 2021 to collect information on horse populations, ownership expenditures, and equine business statistics. A total of 1,520 complete household responses were obtained from industry participants involved in a wide array of activity categories (Figure 1).

Figure 1
Alberta Equestrian Federation Survey (2021)
Respondents by Category



Survey responses were solicited by AEF newsletter, equine association email distribution, and through popular equine industry Facebook social media groups. This distribution strategy foregoes the ability to calculate a response rate.

The 1,520 complete responses were analyzed using Microsoft Excel and supplemented where necessary with expenditure data obtained from targeted industry interviews. The complete set of interview questions are provided in Appendix 1.

2.2 Economic Impact Model

Quantifying Alberta's equestrian industry is a complex task because of the broad swath of formal and informal businesses and hobbyist activities. Members of the industry keep horses for a wide range of activities that include competitive Western and English sporting, casual rural trail riding, breeding, farming, therapy aids, etc.

There are two major methods for quantifying an industry or sector's contribution to the economy of a given geographic location. The calculation of gross domestic product (GDP) is a value measure of goods or services produced by an industry or sector. Input-output models are a more comprehensive technique that include the economic impacts of expenditures on subsequent expenditures because of sector interconnections within the broader economy.

To quantify the economic impacts of Alberta's equine industry most appropriately, an Input-output model was used to assess the indirect and induced impacts of the varied equine activities taking place.

2.3 Input-Output Model

Input-output models are based on the concept that a portion of expenditures in a specified region's economy result in subsequent expenditures. The portion of direct expenditures transmitted to subsequent expenditures, or indirect and induced impacts, are determined in the inverse by the level of leakage of expenditures outside of the specified economy.



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2.3 Input-Output Model

These portions differ based on the sector and activity and are quantified by the Alberta government as **type I** and **type II multipliers.**

Type I multipliers include indirect impacts that capture the subsequent expenditures resulting from a given direct expenditure within a sector or economic activity category.

Type II multipliers include both indirect and induced impacts which add the expenditures induced by household income to the indirect expenditures.

2.4 Direct Expenditure Categories

Expenditures for equestrian activities were systematically analyzed to ensure the complex nature of the industry was appropriately summarized. Expenditures were categorized into two broad categories: horse keeping expenditures, and additional equine activities. These categories were further divided down into individual expenditure categories that were quantified at a per unit value. These values were totaled by multiplying by the unit values, which included a provincially estimated horse population, stables offering activities, and other estimated activity quantities.

2.4.1 Horse Keeping Expenditures

The expenditures for maintaining horses were broken down into 13 categories and estimated separately for horses primarily used within four separate primary activity categories. Included in this list of direct expenditures are feed, bedding, vet care, farrier care, other horse care, tack, annualized capital cost of buildings and equipment, repairs and maintenance, annualized end-of-life and breeding expenses, clothes, travel, and hired labour.

2.4.2 Equine Activity Expenditures

Equine activities in Alberta vary greatly, which is evident by the wide variety of stables, equestrian events, equestrian associations, and informal activities. To estimate these individual impacts, these are summarized into 13 equestrian activity categories including major and minor events, training, riding lessons, higher education, equine assisted learning and therapy, summer camps, horse rescue, guiding, and processing activities.

2.5 Indirect Impacts

Direct expenditures for keeping a horse and for provisioning equestrian activities have impacts down supply chains that wholly or partly occur within Alberta. The portions taking place within the Alberta economy are considered indirect impacts.

2.6 Induced Impacts

People employed in the equine industry spend at least a portion of their incomes within the provincial economy, which is specified as induced impacts from direct expenditures.

2.7 Total Impact Measures

Total measures of economic impact, therefore, use multipliers that capture both indirect and induced impacts. These measures include estimates of GDP, labour income, jobs, and total output. Each of these will be summarized in Section 4, the Economic Impact Analysis.



Horse population estimates are challenging because of the broad mix of formal and informal equine activities. Census of Agriculture and Premises Identification System (PID) population figures are the best available provincial estimates, however, they both have significant limitations. For instance, horses kept off-farm are not counted within Census of Agriculture statistics. Similarly, some horses are kept without PID registration, and thus not included in government-provisioned summary statistics. PID population data are not actual values, but maximum registered property capacities, which imparts additional limitations.

For these reasons, the best available summary statistics require adjustments that are informed by high resolution estimates. The 2021 AEF survey data includes horses per property estimates and a ration of farm to non-farm properties, that may be used to calibrate Census of Agriculture population data. The survey data also provides an adjustment value for PID data based on the average horses held on a property. Equestrian Canada's 2010 survey provides provincial level adjusted estimates and Strathcona County's 2014 survey provides county level adjustments.

Each of these estimation strategies is detailed below to fully demonstrate the range of information available. The most up-to-date and high-resolution estimate will be used to calculate total industry expenditures and economic impact values.

3.1 Survey Results

AEF's 2021 survey included 5,589 horses with population portions used primarily for recreation, sport, and work summarized in Table 1. These values will be used to apportion the total estimated horse population into primary use categories for estimating total horse keeping expenditures.

Table 1
Survey Horse Population Summary Statistics

	Horses	Portion of Surveyed
Recreation horses	3,035	54.3%
Sport horses	2,222	39.8%
Work horses	332	5.9%
Total	5,589	100%

Table 2
Survey Results of Horses per Property

	Stable	Private	Total
Respondents	60	1,233	1,293
Horses owned	594	4,995	5,589
Horses boarded (part or full-time)	954	4,394	5,348
Average horses owned	9.9	4.1	4.3
Properties with horses	60	937	997
Average Horses per Property	25.8	4.7	5.4

The AEF survey's population total does not on its own provide a meaningful figure to estimate provincial horse populations from, however, the number of horses on an average property provides an adjustment value for other estimation methods. An average of 4.32 horses owned per respondent was found. When boarded horses are included, an average of **5.36 horses per property** was found (5,348/997).

An important calibration value for population estimates is the portion of surveyed properties that are classified as a farm and would, therefore, be included within Census of Agriculture data. Of the survey respondents, **27% resided on farm properties** (177 farm properties / 646 total properties with responses).

3.2 Census of Agriculture

The three most recent Census of Agriculture horse population estimates show a decreasing equine population on farms in Alberta. The trend in total farms reporting equines and the number of horses accelerates from 2016 to 2021.

Table 3

Alberta's Census of Agriculture Horse Population Estimates

	2011	2016	2021	% Change 2011–2021
Horses Farms	139,410 15,001	108,702 12,808	68,025 6,933	-51.2 -53.8
Average horse/farm	9.29	8.49	9.81	+5.6

3.3 Premises Identification (PID) System

The Alberta government operates a PID system primarily designed to establish plans, control for, and prevent the spread of animal diseases. It has also been used as an early warning system for natural disasters that may affect animals. This system requests horse owners to register their properties and note the maximum capacity of horses upon each individual property. Horse owners are coerced into participating by the requirement of a PID account to¹:

- · Purchase medication at licensed retail outlets,
- · Receive transportation manifests or permits for equines,
- · Sell equines at livestock markets,
- And to apply for Alberta Agriculture, Forestry and Rural Development programs and grants.

Despite this strong encouragement, there is assumed to be a small portion of horses not registered under this program. The total maximum capacity is, therefore, not a perfect upper boundary for population estimates but is still a useful guideline.

As of August 25, 2021, Alberta's PID system had 24,853 unique properties registered to contain equines, with a total maximum capacity of 320,700 horses.

¹ Government of Alberta, Premises Identification Program. Accessed October 4, 2021. https://inspection.canada.ca/animal-health/humane-transport/horses/exports-to-japan/eng/1601347381621/1601347382153

3.4 Other Studies

3.4.1 Strathcona County (2011)

Two notable studies were completed in 2010–2011 that conducted horse population estimates that attempt to account for equines not included within the federal Census of Agriculture. The two adjustment factors found by these studies provide one method of accounting for the horse population not included in Census of Agriculture 2021 populations.

In 2011, the Edmonton-adjacent Strathcona County conducted a 'horse count' as a component of a Multi-purpose Agricultural Facility Feasibility Study². The count found that this equine-dense municipality had 6,282 horses, which more than doubles the Census of Agriculture 2011 population estimates as shown in Table 3 below.

If this adjustment was applied to the 2021 census data, the resulting estimate is an Alberta-wide equine population of 149,505.

Table 4
Strathcona County Horse Population Estimates (2011)

Total	Horses on 2011	Est. Horses on	Estimated Portion of
Horses	Census Farms	Non-census Properties	Population on Census Properties
6,282	2,859	3,423	45.5%

3.4.2 Equestrian Canada (2010)

Equestrian Canada completed a study in 2010³ that paired 2006 census of agriculture equine population estimates with phone surveys, pedigree registrations, and a 2003 Canadian Horse Industry Study to estimate provincial equine populations. Phone surveys were used to both adjust 2006 census of agriculture results and provide estimates of non-census equine populations. As shown in Table 4 below, the study found that just under 50% of Alberta's 2010 horse population is found on properties not counted by the Census of Agriculture.

If this adjustment was applied to the 2021 census data, the resulting estimate is an Alberta-wide equine population of 133,382.

Table 5 **Equestrian Canada's Estimated Horse Population in Alberta (2010)**

Total Horses	Horses on 2006 Census Farms	Est. Horses on Non-census Properties	Estimated Portion of Population on Non-census Properties
313,500	159,988	153,512	51%

² Strathcona County, 2011. Multi-Purpose Agricultural Facility Feasibility Study. https://www.strathcona.ca/files/files/at-pds-eosp-multi-purposeagfacility-feasibilitystudy.pdf

³ Equestrian Canada, 2011. Horses in Canada in 2010. https://www.equestrian.ca/cfs/files/resources/wf9c32LH4uErLanMs/IN_2011_cnd_horse_study_chapter_2-e.pdf?token=eyJhdXRoVG9rZW4iOilifQ%3D%3D

3.5 Processing and Packing Estimates

Two sources were used to estimate the quantity of horses within feedlots, exported live, and processed. Industry sources estimated the number of horses on feed as 8,000, which are kept on 260 properties. Estimates of live annual horse exports were sourced from Canadian Food Inspection Agency export documents⁴. Between 2013 and 2021, a total of approximately 41,000 horses were transported to Japan, which is an average of 4,823 horses per year.

3.6 Summary

Data limitations challenge the estimation of Alberta's horse population. Table 6 summarizes the adjusted horse population figures derived from each of the four estimation methods.

Table 6
Alberta Horse Population Estimation Adjustment Summary

Methods	Property Estimate	Population Estimate	Adjustment	Adjusted Population Estimate
2021 Survey data	25,043**	NA	2021 Survey – Horses per property of 5.36	142,230*
2021 Census and Strathcona study	6,933	68,205	Strathcona County – 45.5% on census properties	149,505
2021 Census and Equestrian Canada study	6,933	68,205	Equine Canada – 51.0% on census properties	133,382
September 2021 PID statistics	24,853	320,700 (max)	2021 Survey - Horses per property of 5.36	141,212*
*Includes an additional 8,000 processing a	nd packing equines		Average	141,582

**Due to the sensitive nature of keeping horses on feed, no survey responses were received that could be attributed to such a property. For this reason, it is assumed that the 260 estimated properties, and their corresponding higher average horse population are not within the population estimate. To account for this, the 260 properties were removed from the property estimate, and the 8,000 equines added to the total population estimate.

The strength of the estimation method which uses up-to-date 2021 survey data paired with 2021 Census of Agriculture data provides the most reliable estimation method. With 6,933 farm properties found with horses in 2021, and using the survey farm property proportion of 27%, the estimated total properties with horses kept in Alberta is 25,043. With this adjusted property estimate and the survey's average horses per property value of 5.36, Alberta had an estimated 142,230 equines kept in 2021.

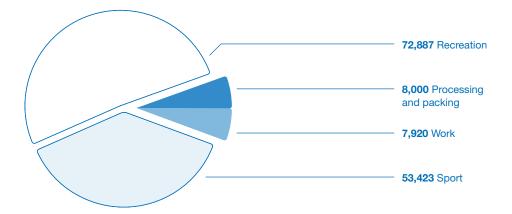
⁴ Canadian Food Inspection Agency, May 19, 2021. Live Horses Exports to Japan: Know the Facts. https://inspection.canada.ca/animal-health/humane-transport/horses/exports-to-japan/eng/1601347381621/1601347382153



3.6 Summary

The total estimated population of 135,626 horses within the sport, recreation, and work categories are divided into the respective primary activity categories according to the Survey proportions in Table 1 and are displayed in Figure 2.

Figure 2
Estimated Alberta Horse Population
by Primary Activity Category





4.1 Methods

The intent of this analysis is to estimate the economic contribution of the equine industry and justify government support based on its economic and community impact. Direct operating and capital expenditures are required for evaluating the overall impacts that the equine industry has on the provincial economy.

The overall impacts include direct expenditures on keeping horses and equine activities, as well as indirect and induced expenditures made by businesses and individuals. The indirect and induced impacts are measured by multiplying the direct expenditure by multipliers retrieved from Statistics Canada. Multipliers developed by Statistics Canada for Alberta (2018) were used rather than those developed by Alberta Finance (2013) because they have been updated more recently.

The analysis that follows is a summary of the results and includes a discussion of the multipliers used, a comprehensive review of the direct expenditures for keeping horses under varying primary uses, a review of the direct expenditures made for associated equine activities, and a summary of total economic impact measures.

4.1.1

Economic Impact is Measured at Different Levels of Inclusiveness

Direct impacts:

Impacts on the various components of the industry (e.g. payments made to suppliers of labour, equipment, services, and other expenditures for keeping horses and other equine activities).

Indirect impacts:

Impacts on the backward-linked industries that supply inputs to the industry creating the new economic activity (e.g. facility construction requires the production of all materials, a portion of which is completed within Alberta).

Induced impacts:

Impacts of spending the increased household income resulting from the new economic activity (e.g. spending by stable employees).

4.1.2 Impacts on Different Aspects of the Economy

The direct, indirect, and induced impacts of Alberta's equine sector can be quantified in several different ways, each of which describes a different aspect of the economic impact. The categories of economic impact that were calculated include the following:

- GDP: Gross domestic product can be defined as output with all intermediate goods and services subtracted. It is a measure of value added, where value added equals economic output less intermediate inputs.
- Labour income: the gross income earned by employees in the province.
- **Employment:** the number of people employed in the province.
- **Total economic output:** is a measure of all sales by producing companies in the province. This includes intermediate goods and services consumed in the production process.

4.1.3 Example: Impact on Employment

Each of these categories will have direct, indirect, and induced effects. For example, the employment impact would include the following types of impact:

- Direct employment impact: the employees working in the equine sector e.g. workers and managers looking after horses.
- **Indirect employment impact**: the employees working in the agribusiness supply industries that supply inputs used in the equine sector workers in feed companies and plants producing other inputs.
- **Induced employment impact**: the additional employment that results from the increased consumer spending flowing from direct and indirect impacts spending by workers in the equine sector and upstream input industries leads to creation of jobs in other industries (e.g. Tim Hortons).

4.1.4 Economic Multipliers

The multipliers used in this analysis were sourced from Statistics Canada Table 36-10-0595-01. These multipliers were produced for the year 2018 and were released in November of 2021.

Total multipliers for the province of Alberta were applied to capture both indirect and induced economic impacts on Alberta's economy. The multipliers used in this analysis reflect impacts on Alberta's economy resulting from economic activity in Alberta.

The following table lists the specific multipliers used for the purpose of estimating the economic impact of Alberta's equine sector.

Table 7

Economic Multipliers Used for Alberta's Equine Sector

Economic Activity	GDP at Basic Prices	Labour Income	Jobs*	Total Output
Keeping Horses				
Repair and maintenance (except automotive)	1.005	0.601	9.448	1.638
Non-residential building construction	0.774	0.534	6.486	1.723
Animal production (except aquaculture)	0.666	0.378	9.704	2.529
 Clothing, leather, and allied products manufacturing 	0.803	0.647	17.508	1.665
Equine Activities				
Educational services	1.112	0.852	16.312	1.665
Arts, entertainment, and recreation	0.977	0.661	17.98	1.745
Universities	1.09	0.617	9.378	1.493
Processing and Packaging	0.661	0.332	6.868	2.414
Truck transportation	0.841	0.51	7.324	1.977

^{*}Full-time equivalent (FTE) jobs required to support the economic activity for every \$1,000,000 in direct expenditures



4.2 Components of

Economic Activity

The equine industry's economic activities are separated into horse keeping and additional equine activities because of the difference in scaling methods for each. Horse keeping expenditures are scaled to a provincial impact based on the equine population, while additional equine activities are scaled based on the number of events, service providers, or other direct unit of quantity. This separation, as detailed in Figure 3, is also employed to specify, where possible, the unique contribution of each activity and to appropriately calculate the resulting indirect and induced economic impacts.

Varying levels of expenditure for different uses for horses are considered by sorting horses into four primary use categories. Actual use of horses often overlaps between sport and recreation, as well as recreation and work. In these cases, the level of expenditures is expected to be the higher category as participating in these activities, even infrequently, can be assumed to require the higher expenditures.

In these two cases, the primary use of a horse that is used for both sport and recreation is categorized as sport, and a horse used for recreation and work is categorized as primarily recreation.

Figure 3 details the breakdown of horse keeping expenditures and equine activities, and how they correspond to the four primary use categories.

Figure 3

Equine Industry Economic Impact Matrix

Part 1 - Horse keeping activities Horse operating expenses by activity category

Χ

Horses in each activity category

+

Part 2 - Additional equine activities

Economic impact of other equestrian activities

Χ

Units for each activitiy

=

Total direct expenditures

Primary Use Category

Sport

Western English Polo/Vaulting Other

Recreation

Backyard ownership Boarded Stable owned Trail riding 4-H

Work

Outfitting Ranch use

Processing

Feedlot Pastured

Activities by Primary Use Category

Training/coaching Major competitions Minor competitions

Riding lessons
Equine assisted
learning and therapy
Summer camps
Horse rescue
Higher education

Guiding

Processing and packing Transport



4.2

Components of Economic Activity

4.2.1

Horse Keeping Expenditures

4.2.2 Additional Equine Activity Expenditures

4.3 Direct Expenditures

The annual expenses for keeping a horse include all those directly attributable to the maintenance and use of an average horse within each primary use category. A detailed breakdown of the elements included in each expense category are detailed in the next section. Direct expenditures included are as follows:

- · Repair and maintenance, buildings and equipment,
- · Annual amortization, buildings and equipment,
- Feed and bedding,
- Vet and farrier care,
- Outside labour,
- Horse care products and services,
- Travel,
- Tack,
- · Clothes,
- Manure disposal,
- Breeding,
- End-of-life.

Expenditures associated with a horse's primary use do not consider the economic activity from additional equine activities. These services and events primarily involve labour expenses, but also include some activity requiring dedicated buildings and equipment. The following equine activities were considered:

- · Riding lessons,
- Horse and rider training,
- Events and competitions,
- Equine assisted learning and therapy,
- Summer camps,
- Horse rescue,
- Processing, and
- Goods transport.

Expenditures for feeding, sheltering, breeding, training, and many other equine industry activities contribute economic benefits to the provincial economy. In 2021, the industry had direct expenditures totaling **\$1.345 billion**. These expenditures are categorized into four components as illustrated in Figure 4. Most expenditures are associated with sport and recreation horses, with a small portion tied to work and meat uses.

Figure 4

Direct Expenditure by Primary Use Category, 2021

(\$ million, and as a percent of total direct expenditure)





4.3Direct Expenditures

4.3.1 Horse Keeping Expenditures

The expenditure values for maintaining and using a single horse within each primary use category are multiplied by the estimated horse population within each respective category to calculate estimated total annual direct expenditures (Table 8).

Table 8
Estimated Annual Direct Horse Keeping Expenditures by Sub-sector

Direct Expenditure	Recreation	Sport	Work	Processing
Repair and maintenance, buildings and equipment	87,231,162	89,553,509	4,378,334	252,746
Annual amortization, buildings and equipment	56,451,710	49,936,081	2,124,778	471,212
Feed and bedding	136,789,948	133,769,055	8,185,003	6,003,443
Vet and farrier care	96,519,881	113,030,781	4,271,810	209,907
Outside labour	38,672,384	45,680,405	1,811,066	491,695
Horse care products and services	37,877,187	100,704,492	3,263,753	-
Travel	57,809,595	87,893,657	2,987,582	222,840
Tack	35,377,163	59,100,796	2,483,712	-
Clothes	13,647,362	25,685,244	1,029,362	-
Manure disposal	5,057,629	4,994,516	101,218	-
End-of-life	2,782,826	2,039,690	302,386	8,197
Breeding	5,600,637	6,891,033	372,715	-
Total	\$573,817,485	\$719,279,259	\$31,311,720	\$7,572,491

Total direct horse keeping expenditures of \$1.332 billion

Specifying the included expenditures was critical for estimating appropriate average values because of the diversity of horse keeping situations. The included expenses with each expenditure type are detailed below:

- Buildings and equipment annual repairs and maintenance as well as amortized capital
 expenditures for all facilities used for boarding, feeding, exercising, practicing, or otherwise
 maintaining a horse are included. Equipment used for feeding, horse care, transporting,
 breeding, or end-of-life services are included within those respective categories.
- Feed and bedding all expenses for feed, supplements, bedding, and the equipment costs for delivering each to the equines. The labour for delivering is included in the outside labour expenditure type.
- Vet and farrier care regular expenses and irregular vet care expenses, dental care, and all
 farrier services including trimming, shoeing, and others. Reproductive services are not included.
- Outside labour all hired labour for maintaining horses, maintaining horse boarding facilities and practicing grounds or arenas. Labour expenses for hired services such as vet, farrier, repair, and others are included in the respective expenditure types.
- Horse care products and services all equine wellness services and product expenses not included with the feed or vet and farrier care categories. This includes dewormers, various equine therapy services, and various others.



4.3Direct Expenditures

4.3.1

Horse Keeping Expenditures

4.3.1.1 Recreational Use

4.3.1.2 Sport Use

Travel – all vehicle expenses for trucks and trailers transporting horses for recreation, sport, work, or other uses. This includes direct expenses and a measure of vehicle depreciation based on mileage travelled.

Tack – expenses for all equipment used to ride, handle, and care for horses.

Clothes – expenses for all clothes, boots, and headgear purchased for equestrian and animal care purposes.

Manure disposal – all equipment and disposal expenses for manure, where applicable.

End-of-Life – expenses for euthanizing, transport, and cremation of a horse. Three significant horse crematory service providers were interviewed to provide an average total expenditure. The surveyed veterinarian euthanization service estimate averaged \$541, which aligned with the average total expenditure.

Breeding – expenses for mare and stallion reproductive health services. Surveyed expenditure estimates for horses bred under each primary use categories were adjusted to a per foal basis using average annual foals born by each mare and stallion from the Horse Council of British Columbia's 2019 Economic Impact Study. A reliable statistic for the portion of horses in Alberta that are pasture born and are, therefore, not individually serviced is not available, and so a conservative estimate of 20% was used, that was based on the consulting team's industry knowledge.

Horses categorized as recreation are primarily used for the following array of primary activities:

- Trail-riding,
- Arena riding,
- · Riding lessons,
- Therapeutic / learning assistance,
- Retired,
- Companion,
- · Breeding, and
- Pleasure driving.

A significant portion of the horses used for sport are also used for activities categorized as recreational. Horses that undergo any sport activity are categorized under the sport primary use because of the strong likelihood of higher maintenance and use expenditures necessary for even minimal sport participation. Considered sport activities include, but are not limited to:

- Dressage,
- Hunter/jumper,
- Polo/polocrosse,
- Vaulting,
- · Carriage driving,
- Cutting,
- Barrel racing,
- Penning / sorting,
- Roping / team roping,
- Other rodeo,
- Endurance / competitive trail, and
- Pole bending.



4.3.1.3 Work Use

Horses used for work include ranch and outfitting horses. These uses frequently overlap with recreational purposes, but on average incur lower expenditures because of the operating circumstances. Horses kept on farms or used on ranchlands or backcountry guiding typically incur lower values for all expenditure categories due to the location and nature of farming and outfitting uses.

4.3.1.4 Equine Processing Use

A small portion of the province's equine population are raised for meat production. Most of the market for horse meat is for live export to Japan, a market which demands specific qualities and requires stringent biosecurity protocols. This operating circumstance incentivizes the standardized feedlot production of specific breeds, and disincentivizes the use of culled horses. For this reason, expenditures that could not be surveyed from the small number of equine feedlots are estimated based on a five-year survey (2012–16) of Alberta cattle feedlots with an average size of 197 head⁶. These are then adjusted for an estimated 25% lower stocking rate⁷, and inflation⁸.

Table 9
Estimated Annual Direct Expenditures per Horse by Sub-sector

Direct Expenditure	Recreation	Sport	Work	Processing
Repair and maintenance, buildings and equipment	1,196.80	1,676.31	552.82	31.59
Annual amortization, buildings and equipment	774.51	934.73	268.28	58.90
Feed and bedding	1,876.74	2,503.96	1,033.46	739.49
Vet and farrier care	1,324.24	2,115.77	539.37	26.24
Outside labour	530.58	855.07	228.67	61.46
Horse care products and services	519.67	1,885.04	412.09	-
Travel	793.14	1,645.24	377.22	27.86
Tack	485.37	1,106.28	313.60	-
Clothes	187.24	480.79	129.97	-
Manure disposal	69.39	93.49	12.78	-
End-of-life	38.18	38.18	38.18	-
Breeding	76.84	128.99	47.06	1.02
Total	\$7,872.70	\$13,463.85	\$3,953.50	\$946.56

Expenditures for horses used for sport are about 3.5 times greater than expenditures for horses used for work.

The direct expenditures resulting from these activities were an estimated \$381 million in 2021. The expenditures for each activity are detailed in Table 10. Note that horse keeping expenditures for horses used for each activity are separate from the included figures.

4.3.2 Additional Equine Activities

https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1810013502&pickMembers%5B0%5D=2.8&cubeTimeFrame.startMonth=07&cubeTimeFrame.startYear=2016&referencePeriods=20160701%2C20160701 Accessed November 8th, 2021

⁶ Alberta Agriculture, Forestry, and Rural Development 2017. Multi-Year Economic, Productive, & Financial Performance of Alberta Cow/Calf Operations (2012-2016). AgriProfit Benchmarks for Alberta Cattlemen.

⁷ Raspa, F., Tarantola, M., Bergero, D., Bellino, C., Mastrazzo, C. M., Visconti, A., Valvassori, E., Vervuert, I., & Valle, E. (2020). Stocking Density Affects Welfare Indicators in Horses Reared for Meat Production. Animals: an open access journal from MDPI, 10(6), 1103. https://doi.org/10.3390/ani10061103

⁸ Statistics Canada. Consumer Price Index.

4.3.2 Additional Equine Activities

Table 10
Estimated Direct Expenditures Related to Equine Activities

Direct Expenditure	\$/Unit	2021 Units	2021 \$	
Training/coaching	77,797	227	17,660,023	
Major competitions	48,922,143	7	342,455,000	
Minor competitions	44,540	163	7,260,020	
Riding lessons	48,520	194	9,412,785	
Equine assisted learning and therapy	80,286	13	1,043,725	
Summer camps	10,778	32	344,908	
Horse rescue	N/A	N/A	N/A	
Higher education	-	Est.	3,248,900	
Guiding	N/A	-	N/A	
Processing and packing	-	Est.	351,558	
Goods transport	-	Est.	1,902	
Total	-	-	\$381,421,100	

Revenue is not the measured metric since the model utilizes an expenditure-based multiplier. Therefore, counting revenue would result in double counting of economic impact. Further, costs that flow out of province, including purchasing of horses or genetics from abroad, have been eliminated as they have no impact on the Alberta economy.

4.3.2.1 Training / Coaching

Training and coaching of horses and riders for a wide variety of equine sporting activities incurs both at stables and through private hire. Coaches will most often operate in conjunction with a stable, which provides the indoor or outdoor arena infrastructure.

A scan of operating equine coaching businesses indicated that 227 stables offered services. Surveyed coaches, trainers, and stables revealed that on average stables employed 1.13 FTE (ull time equivalent) positions which corresponded to an annual per stable labour cost of \$50,009. The average building and equipment annual repairs and maintenance and amortized building and equipment capital costs attributed to the coaching and training activities was, respectively, \$13,536 and \$14,253. The combination of these three direct expenditures results in a stable annual average total expenditure of \$77,797, as shown in Table 10.

4.3.2.2Major
Competitions

A number of equine events occur in Alberta with average spectator counts greater than 1,000. These major competitions occur within large venues that are either rented or owned and often take place over multiple days with many competitors. Expenditures that are considered within these events include hired labour, facility rental or amortized capital cost and repairs and maintenance, and accommodation and food expenditures made by participants and spectators.

Survey results indicated that event participants and spectators spend on accommodation and food expense averages of, respectively, \$315 and \$180 for each event.



A tabulation of major equine competitions indicated seven annual events that include Spruce Meadows' five show jumping tournaments, the Canadian Finals Rodeo, and the Calgary Stampede's rodeo. A single large event organizer responded to the survey and indicated that facility rental and labour costs for each event are both approximately \$100,000. Average spectators and participants for these events is 98,400, which accordingly captures the majority of expenditures for each major event. The combination of these expenditures results in an average event expenditure total of \$48,922,000 as shown in Table 10.

4.3.2.3Minor
Competitions

Many smaller equine competitions take place each year with often greater participant than spectator numbers. These events take place in rented or owned facilities and most often are operated by volunteers.

AEF's 2021 survey results indicated that event participants and spectators spend on accommodation and food expenses averages of, respectively, \$315 and \$180 at each event. An average attendance of 52 participants and 30 spectators was found for the minor competitions.

A scan of annual small and medium sized competitions found that 163 take place including rodeo events, endurance riding, dressage, jumping, polo, carriage driving, and others. Surveyed event organizers revealed average event expenditures of \$1,313 for hired labour, \$269 for building and equipment maintenance, \$1,194 for facility rental, and \$1,175 of other expenses. The combination of these direct expenditures with the spectator and participant expenditures results in annual average minor competition expenditure value of \$44,540, as shown in Table 10.

4.3.2.4 Riding Lessons

Introductory and intermediate riding lessons are separated from training and coaching activities based on the targeted level of performance. Riding lessons are assumed to only target basic riding skills that prepare a rider for recreational riding activities as defined in 4.3.1.1.

A scan of operating stables providing riding lessons indicated that 194 facilities offered services. AEF's 2021 surveyed riding lesson providers and stables revealed that on average stables employed 0.77 FTE (full time equivalent) positions which corresponded to an annual per stable labour cost of \$32,747. The average building and equipment annual repairs and maintenance and amortized building and equipment capital cost attributed to the riding lesson activities was, respectively, \$6,318 and \$9,455. The combination of these three direct expenditures results in an annual average amount of \$48,520 per stable as shown in Table 10.

4.3.2.5 Equine Assisted Learning & Therapy

Operators across Alberta provide services, sometimes interchangeably, referred to as equine assisted learning, therapy, and psychotherapy. It can be tough to distinguish these from each other, though there are a wide variety in specific services provided by each operator.

A scan of operating equine assisted learning and therapy businesses indicated that 13 stables offered services. AEF's 2021 surveyed operators found an average of 1.64 FTE positions were dedicated to therapy service provision which corresponded to an annual average business labour cost of \$79,877. The average annual membership and training fees amounted to \$410 for each business. The combination of these two direct expenditures results in a stable annual average expenditure of \$80,286 for each business, as shown in Table 10.

4.3.2.6 Summer Camps

There are a variety of equine kids' camps and retreat centers that offer a spectrum of equine activities for all ages. Camps offered a range from single-day horsemanship to three-week backcountry adventure camps. There is a corresponding high variety in targeted horsemanship skills, however, the majority are for beginner and intermediate skill levels.

The skill level of the staff providing the camp services is assumed to be the same as for offering riding lessons, and so the surveyed hourly wage rate of \$21.16 was used. The labor required for each facility offering camps was deduced from multiplying the number of camp days offered by the maximum allowed enrollment. The staff labour required was then calculated by dividing the number of rider participant days by four, which corresponds to an assumed rider-instructor ratio of 1:4.

A review of online resources found 34 facilities offering camps, with a combined total participant days of 8,150. This corresponds to 16,300 hours of labour required, with an estimated expenditure of \$344,900. This is a conservative estimate as there are likely more camp programs offered that were not captured by the consulting team's online review.

4.3.2.7 Horse Rescue

Horse rescues play an important role in sheltering and often rehabilitating horses that are surrendered or otherwise need another home. They exclusively operate as non-profit organizations that either maintain horses, or more desirably seek appropriate adopters. Rehabilitation of these horses often incurs some extra expenditures, though these along with the other maintenance expenses such as shelter, feed, standard vet and farrier care, and others are already captured in section 4.3.1. Therefore, while these equine activities are occurring across Alberta, they are not estimated to incur additional direct expenditures.

4.3.2.8 Higher Education

Expenditures for this equine activity include labour expenditures, facility repair and maintenance, and amortized facility capital expenditures. Average values of surveyed stable operators with total facility capital costs greater than \$200,000 were used as these are assumed to represent indoor and larger riding facilities. Average survey values are used because of the privacy concern for reporting actual values for only four identifiable facilities.

A specific estimate was included to account for the specialty facilities used by University of Calgary – Faculty of Veterinary Medicine (UCVM). The total capital value estimate was provided by UCVM staff, and the repairs and maintenance estimated using the percentage of total capital value allocated to this annual expenditure.

The annual salary rate of \$96,460 was provided by the Government of Alberta's ALIS⁹ average salary rate for veterinarians.

Table 11
Higher Education Estimated Direct Expenditures

Expenditure Category	\$/Unit	Units	Total \$
Annual amortization*, buildings and equipment	31,483	4	125,931
Repair and maintenance, buildings and equipment	55,597	4	222,389
Annual amortization*, buildings and equipment	200,000	1	200,000
Repair and maintenance, buildings and equipment	482,000	1	482,000
Labour	96,460	23	2,218,580
*Straight-line amortized over a 25-year useful life		Total	\$3,248,900

⁹ Alberta Learning Information Service (ALIS) NOC 4021. https://alis.alberta.ca/occinfo/occupations-in-alberta/occupation-profiles/veterinarian/. Accessed June 8, 2022.



4.3.2.9 Guiding

An online review found 27 businesses offering equine-based guided trips, primarily based in the foothills and the Rocky Mountains. Services offered include day trips, multi-day backcountry pack trips, wagon rides, stagecoach rides, cabin accommodations, indigenous experiences, and others. Of these, 24 offer multi-day pack trips, 21 offer day trips, five offer hunting guide services, and three offer summer camp programs. This review is very likely a conservative estimate of the total equine guiding services offered in Alberta.

Guides typically provide all transportation for guests and the equines, riding equipment, overnight facilities and equipment, food, and other amenities related to the experience. The survey and interview requests were declined, and so no specific expenditure values can be estimated. While these expenditures were likely significant and should be considered in the equine industry's economic impact, their magnitude is likely small in comparison to the horse keeping expenditures, which are included in section 4.3.1.

4.3.2.10 Processing and Packing

A portion of horses raised for meat are processed and packaged within Alberta, with the balance transported live to Japan. An estimated 8,000 horses are on feed for an estimated average of 18 months¹⁰, which results in an estimated 5,333 horses prepared for processing annually. Live shipments to Japan average 4,823 horses per year (from 2013 to 2021), which implies that an estimated 510 horses are processed in Alberta each year.

This activity incurs direct capital and operating expenditures on buildings and equipment, facility labour, waste disposal, and packaging materials. Due to the small and sensitive nature of this activity, figures for a horse processing and packing facility were not available. Operating costs for a comparably scaled beef facility were assumed and applied to the estimated number of horses processed annually.

Table 12

Processing and Packing Direct Expenditures

Expenditure Category	\$/Head	Total \$
Annual amortization, building and equipment	491.90	250,869
Repair and maintenance, building and equipment	4.02	2,050
Labour	91.07	46,445
Materials	2.32	1,183
Disposal	24.87	12,683
Water	3.42	1,744
Wastewater	2.32	1,183
Total	\$689.33	\$351,558

Packaged, frozen horse meat is transported to Calgary International Airport, from where it is flown to Quebec, the US, French, and Japanese markets. Transport is primarily made in refrigerated vans with an assumed capacity of 42,000 lbs. Average transport costs for the US were adjusted into Canadian terms and applied to the transport of all processed animals.

An estimated transport distance of 190 km is applied given the distance from the primary Alberta processing facility to the Calgary International Airport. The estimated 510 horses processed annually, with an average cut weight of 550 lbs per animal equates to 280,450 lbs or about seven refrigerated vans fully loaded.

¹⁰ A. Tateo, P. De Palo, E. Ceci, P. Centoducati, Physicochemical properties of meat of Italian Heavy Draft horses slaughtered at the age of eleven months, Journal of Animal Science, Volume 86, Issue 5, May 2008, Pages 1205–1214, https://doi.org/10.2527/ias.2007-0629



4.3.2.11 Goods Transport

Table 13

Packaged Horse Meat Transportation Direct Expenditures

Expenditure Category	\$/Km	Total \$
Truck/trailer lease or purchase payments	0.239	318
Driver salary and benefits	0.608	809
Fuel	0.313	416
Repairs and maintenance	0.126	168
Insurance	0.061	81
Tolls/permits/licences	0.050	67
Tires	0.031	41
Total	\$1.430	\$1,902

The nearly ten-fold greater quantity of horse meat transported for live export is not included in this calculation, but rather included in the 'travel' expenditure for keeping horses primarily used for meat.





4.4 Combined Impacts

Initial direct expenditures are only one component of the equine industry's economic impact on the provincial economy. Indirect and induced impacts represent vital components that must also be considered. The inclusion of each of these effects are measured using the following three standard economic impact figures:

- Gross domestic product (GDP) impact is a measure of total economic output less leakage within the local economy as a result of direct expenditures from the equestrian industry;
- Labour income impact is a measure of the additional income for laborers within the local economy as a result of direct expenditures from the equestrian industry;
- Total industry output impact is a measure of the total output generated within the local economy as a result of direct expenditures from the equestrian industry.

Table 14 summarizes the direct expenditures and three measures of economic impacts from each category of expenditure in 2021.

Table 14

Total Economic Impacts of the Alberta Equine Industry by Expenditure Category in Million \$

	Direct Expenditure	GDP Impact	Labour Income	Total Impact on Industry Output
Horse Keeping Expenditure				
Repair and maintenance, building and equipment	181.4	182.3	109.0	297.2
Annual amortization, building and equipment	109.0	84.4	58.2	187.8
Feed and bedding	284.7	189.6	107.6	719.9
/et and farrier care	214.0	142.5	80.9	541.3
Outside labour	86.7	57.7	32.8	219.2
Horse care products and services	141.8	94.5	53.6	358.7
Fravel	148.8	99.2	56.3	376.6
Fack Fack	97.0	77.9	62.7	161.4
Clothes	40.4	32.4	26.1	67.2
Manure disposal	10.2	6.8	3.8	25.7
End-of-life	5.1	3.4	1.9	13.0
Breeding	12.9	8.6	4.9	32.5
Additional Equine Activity Expenditures				
Fraining/coaching	17.7	19.6	15.0	29.4
Major competitions	342.5	334.6	226.4	597.6
Minor competitions	7.3	7.1	4.8	12.7
Riding lessons	9.4	10.5	8.0	15.7
Equine assisted learning and therapy	1.0	0.8	0.6	1.1
Summer camps	0.3	0.3	0.2	0.6
Horse rescue	-	0.0	0.0	0.0
Higher education	3.3	3.5	2.0	4.9
Guiding	-	0.0	0.0	0.0
Processing and packing	0.3	0.2	0.1	0.8
Goods transport	0.002	0.0	0.0	0.0
Grand Total	\$1,713.9	\$1,355.9	\$854.9	\$3,663.3

4.4 Combined Impacts

Multipliers estimated by Statistics Canada for Alberta's economy provide GDP, labour income, and total industry output estimates for Alberta's equestrian industry. The annual impact estimates indicate that as a result of \$1.714 billion in direct expenditures, the GDP impact to Alberta's economy is about \$1.356 billion, which reflects an average GDP multiplier of about 0.79.

It should be noted that the multipliers used are general categories such as animal production and non-residential construction (see Table 7) and likely do not accurately reflect the specific economic impacts of horse keeping and equestrian activities. For instance, the GDP multiplier for animal production is representative of the average animal production activity in Alberta, which is dominated by beef cattle.

To estimate multipliers specific to Alberta's equestrian industry an Input/output model would need to be developed using Statistics Canada's supply-use tables. This process would require significant resources but would provide improved accuracy in the economic impact estimates.

The equine industry contributes approximately \$1.356 billion to Alberta GDP.

4.5 Employment Impacts

Alberta's equine industry drives employment due to expenditures made directly in the industry, as well as from indirect and induced effects. After accounting for indirect and induced influences, we have concluded that the industry is responsible for an estimated total of **20,380 FTE positions**.

Table 15

Employment Impacts in FTEs by Primary Use Sector

	Recreation	Sport	Work	Processing	Total
Horse keeping related FTEs Additional equine activities FTEs	5,747 202	7,458 6,576	323 -	72 2	13,600 6,780
Totals	5,949	14,034	323	74	20,380

4.6 Conclusions

Alberta's equestrian industry contributes significantly to provincial economic activity. With over 20,000 FTEs, labour income of \$855 million, and a contribution to the provincial GDP of \$1.356 billion, the equine industry's wide-spread economic activity has significant impacts across the province.







5.1 AEF's 2021 Survey Findings

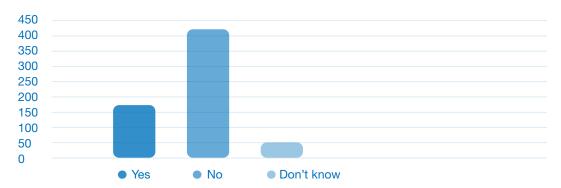
5.1.1 Farms

In addition to information on direct expenditures, survey participants were asked questions about their perception of important industry topics.

The survey asked respondents whether their household qualified as a farm based on minimum annual farm income of \$10,000. Of the 644 respondents who answered this question, 27% qualified as a farm, 64% did not qualify, and 9% didn't know.

Figure 5

Survey Respondents who Qualify as a Farm



5.1.2 Primary Industry Concerns

Survey respondents were asked to rank their level of concern over six pressing Albertan equine industry issues. A large majority of the 1,129 respondents to this question listed 'rising expenses' as their great concern and biosecurity as their lowest concern (Figure 6).

Figure 6
Survey Respondents' Ranked Equine Industry Concerns



Respondents provided 288 additional and wide-ranging concerns, with a few of the following reoccurring themes (the full list of responses is included in Appendix 2):

- Rising expenses for quality hay, veterinary expenses, and show/sport competition participation
- Lack of industry-wide boarding and coaching standards results in a risk of poor or dangerous facilities or coaching services
- COVID's significant impact on equine businesses
- Animal rights activists challenging equine activities

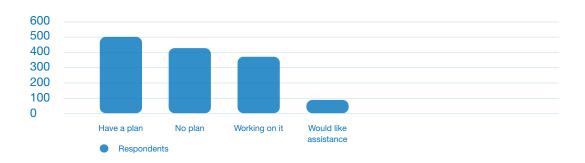


5.1.3 Emergency Management Plan

Survey participants were asked whether they had a formal emergency management plan in place. Of the 1,149 respondents to this question, 43% responded 'Yes', 29% responded 'No', 24% responded "I'm working on it', and 7% responded 'would like assistance' with their plans. Respondents asking for assistance overlapped with some of the other responses.

Figure 7

Survey Respondents with Emergency Management Plans



5.1.4 Biosecurity

Survey participants were asked whether they practiced on-farm biosecurity protocols, and to indicate which ones they did. Of the 1,183 responses to this question, 52% indicated that they do practice, 15% indicated that they do not, 16% were not on a farm, and 17% were not sure if what they did applied as a biosecurity protocol.

Figure 8
Survey Respondents' Practice of On-Farm Biosecurity

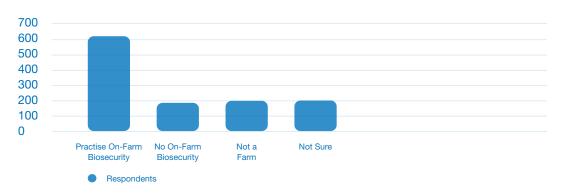
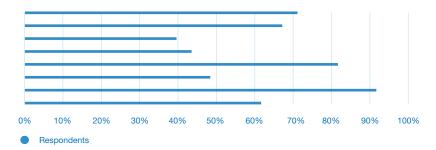


Figure 9

Portion of Owners Practicing Biosecurity Protocols

Pasture Management Manure Management No Cross-Contamination Restricted Access Health Management Equipment Sanitation Immunization Herd Quarantine



5.1.5 Horse Trailer Ownership

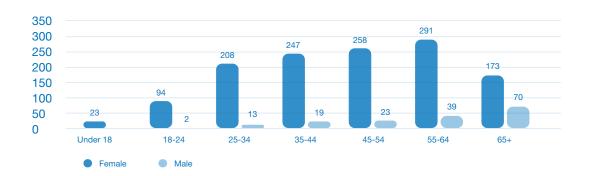
5.2 Demographics

5.2.1 Age and Gender

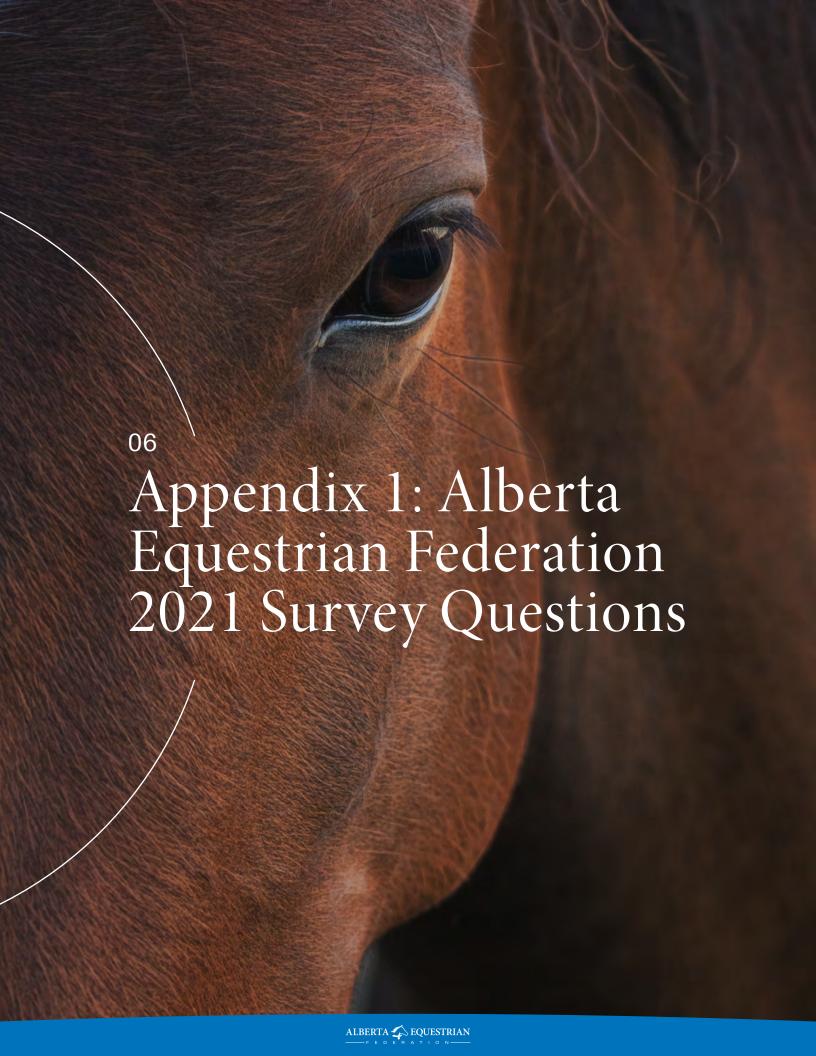
Survey participants were asked whether they owned a horse trailer and if so, what their annual truck and trailer mileage was for equine activities. Of the 1,195 respondents to this question, 66% answered yes and indicated an annual average of 6,200 km driven with truck and trailer.

Survey respondents were wide ranging in age and mostly female (89%). The male respondents were mostly older in age with 66% of respondents over the age of 55.

Figure 10
Survey Respondents' Age Group and Gender







- 1. For accuracy purposes, we ask all participants to only complete one survey per household. Please confirm below:
- a. This is the first time my household is filling out the survey
- b. Someone else in my household has already filled it out
- 2. What region are you located? (See map below for three Alberta regions)
- a. North of Edmonton
- b. Central (Edmonton to north of Calgary)
- c. Calgary and south
- d. Saskatchewan
- e. British Columbia
- f. USA
- g. Other (please specify location)
- 3. If you are not located in Alberta, do you own horses in Alberta or are involved in the Alberta Equine Industry?
- a. Yes
- b. No

4. What is your age?

- a. Under 18
- b. 18-24
- c. 25-34
- d. 35-44
- e. 45-54
- f. 55-64
- g. 65+
- h. I prefer not to answer

5. What is your gender?

- a. Male
- b. Female
- c. Non-binary
- d. Prefer not to answer
- e. Prefer to self-describe, below:
- 6. How many household members (including yourself) are employed or involved in the equine industry?
- 7. Please indicate your primary involvement in the equine industry:
- a. Recreation / personal use
- b. Stable operator
- c. Veterinarian
- d. Event organizer
- e. Breeder
- f. Outfitter
- g. Farmer / rancher
- h. Not-for-profit organization or charity
- i. Other equine business or organization (please specify)



A different set of questions are presented for each type of primary involvement in the equine industry:

For Recreational/Personal Use Respondents

- 8. How many horses do you own?
- 9. How many horses do you lease?
- 10. What is the primary activity of each horse? (if multiple horses are owned or leased, please enter the number of horses for each primary activity below without double counting horses)
- a. Recreation (e.g. trail/casual riding)
- b. Sport (e.g. Western or English)
- c. Work (e.g. outfitting or ranch)
- d. Other (please specify)
- 11. Given that horses are often used for multiple activities, please check all activity categories that are undertaken with your horses:
- a. Recreation (e.g. trail/casual riding)
- b. Sport (e.g. Western or English)
- c. Work (e.g. outfitting or ranch)
- 12. If your horses are boarded, for how much of the year are your horses boarded and at what monthly cost?
- 13. Please enter your approximate annual expenditures for a single boarded horse used for recreation. For your reference, our starting point estimates have been provided in the brackets beside each category.
- a. Vet and farrier care (\$1,150)
- b. Horse care products and services (\$290)
- c. Travel (\$250)
- d. Tack (\$260)
- e. Clothes (\$80)
- f. Other
- 14. Please enter your approximate annual expenditures for a single boarded horse used for sport. For your reference, our starting point estimates have been provided in the brackets beside each category.
- a. Vet and farrier care (\$1,990)
- b. Horse care products and services (\$820)
- c. Travel (\$280)
- d. Tack (\$600)
- e. Clothes (\$200)
- f. Other



- 15. If your horses are not boarded, please enter your approximate annual expenditures for a single horse used for sport. For your reference, our starting point estimates have been provided in the brackets beside each category.
- a. Repair and maintenance, building and equipment (\$2,120)
- b. Feed and bedding (\$2,840)
- c. Vet and farrier care (\$1,990)
- d. Outside labour (\$1,360)
- e. Horse care products and services (\$820)
- f. Travel (\$280)
- g. Tack (\$600)
- h. Clothes (\$200)
- i. Manure disposal (\$150)
- 16. Please enter your approximate annual expenditures for a single horse used for recreation. For your reference, our starting point estimates have been provided in the brackets beside each category.
- a. Repair and maintenance, building and equipment (\$1,600)
- b. Feed and bedding (\$1,840)
- c. Vet and farrier care (\$1,150)
- d. Outside labour (\$630)
- e. Horse care products and services (\$290)
- f. Travel (\$250)
- g. Tack (\$260)
- h. Clothes (\$80)
- i. Manure disposal (\$60)

For Stable Operator Respondents

- 8. How many horses do you own, lease, or provide board for?
- a. Owned
- b. Leased
- c. Boarded
- 9. Without counting the same horse in more than one activity, please enter how many of your horses take part in the following primary activities:
- a. Recreation (e.g. trail/casual riding)
- b. Sport (e.g. Western or English)
- c. Work (e.g. outfitting or ranch use)
- d. Other (please specify)
- 10. Given that horses are often used for multiple activities, please check all activity categories that are undertaken with your horses:
- a. Recreation (e.g. trail/casual riding)
- b. Sport (e.g. Western or English)
- c. Work (e.g. outfitting or ranching)



- 11. What are your approximate monthly expenses to provide board for a horse?
- a. Feed and bedding
- b. Manure disposal
- c. Hired labour
- d. Repairs and maintenance of stables
- 12. What is the approximate capital cost of buildings and equipment used solely for boarding horses? (capital costs of buildings and equipment used for providing other services will be asked for separately)
- 13. Please Indicate the employment term, approximate wage rate, and primary responsibility for yourself and each employee:
- a. For yourself employment term, wage rate, primary responsibility,
 % of time spent on primary responsibility, secondary responsibility
- Employee 1 employment term, wage rate, primary responsibility,
 of time spent on primary responsibility, secondary responsibility
- c. Employee 2...
- 14. What is the total capital cost for buildings and equipment primarily used for lessons and training?
- 15. What are your estimated annual repair and maintenance expenses for buildings and equipment that are primarily used for lessons and training? (such as riding arenas)
- 16. If you offer other services, what do they include?
- 17. What annual labour, building, and equipment expenses do you incur for the primary purpose of offering these other services? (please specify the service the expense is allocated to)
- 18. If you own horses personally proceed through the Recreational/Personal Use Respondents Questions 8-16

For Veterinarian Respondents

- 8. Please select the services you offer:
- a. Dental care
- b. Emergency procedures
- c. Mare reproduction services
- d. Stallion services
- e. Ophthalmology
- f. Sports medicine
- g. Farrier care
- h. Other (please specify)
- 9. What percentage of your working time is spent with equines?



- 10. What are your estimated average per horse expenditures for the following categories?
- a. Breeding (reproductive services per foal)
- b. End-of-life
- c. Annual routine vet care (including dental)
- d. Annual routine farrier care
- 11. If you own horses personally proceed through the Recreational/Personal Use Respondents Questions 8-16

For Event Organizer Respondents

- 8. What type of event(s) do you organize?
- 9. How many events do you organize per year?
- 10. What is the average number of participants in each evttent?
- 11. What is the estimated number of spectators for each event?
- a. 0-25
- b. 25-50
- c. 50-200
- d. 200-500
- e. 500+
- f. Not applicable
- 12. What are the average expenditures per event for the following categories?
- a. Facility rental or lease
- b. Equipment repairs and maintenance
- c. Hired workers
- d. Food and beverage
- e. Other expenses
- 13. If you or your organization own the facilities where the event is organized, what is the total capital cost of buildings and equipment?
- 14. If you own horses personally proceed through the Recreational/Personal Use Respondents Questions 8-16

For Breeder Respondents

- 8. Please list the amount for the following expenses sometimes required for breeding horses:
- a. Mare reproductive vet care
- b. Stallion reproductive vet services
- c. Memberships or certifications
- d. Other (please specify):



- 9. Which market do you primarily breed horses for?
- a. Sport (e.g. Western or English)
- b. Recreation (e.g. trail/casual riding)
- c. Work (e.g. ranch or outfitting)
- d. Other
- 10. If you own horses personally proceed through the Recreational/Personal Use Respondents Questions 8-16

For Outfitter Respondents

- 8. How many horses do you primarily use for work?
- 9. What are the estimated daily expenses for a pack trip? (Gear required and transportation)
- 10. How many days do your horses spend on horse pack trips per year?
- 11. How many people are employed by your outfitting business and on average how any days a year are they providing guiding services for paid pack trips?
- 12. Please enter the annual expenditure that is spent for you work horse in the boxes below. For your reference, our starting point estimates have been provided in the brackets beside each category.
- a. Repair, maintenance, buildings and equipment (\$790)
- b. Feed and bedding (\$1,300)
- c. Vet and farrier care (\$580)
- d. Outside labour (\$330)
- e. Horse care products and services (\$140)
- f. Travel (\$220)
- g. Tack (\$170)
- h. Clothes (\$50)
- i. Manure disposal (\$10)
- 13. If you own horses personally proceed through the Recreational/Personal Use Respondents Questions 8-16





For Farmer/Rancher Respondents

- 8. Are your horses primarily used for farm/ranch work or for recreational use?
- 9. If for work, please enter the annual expenditure that is spent for your work horse in the boxes below. For your reference, our starting point estimates have been provided in the brackets beside each category. Respondents have the option to skip this question if they prefer.
- a. Repair, maintenance, buildings and equipment (\$790)
- b. Feed and bedding (\$1,300)
- c. Vet and farrier care (\$580)
- d. Outside labour (\$330)
- e. Horse care products and services (\$140)
- f. Travel (\$220)
- g. Tack (\$170)
- h. Clothes (\$50)
- i. Manure disposal (\$10)
- 10. Please enter your approximate annual expenditures for a single horse used for recreation. For your reference, our starting point estimates have been provided in the brackets beside each category. Respondents have the option to skip this question if they prefer.
- a. Repair and maintenance, building and equipment (\$1,600)
- b. Feed and bedding (\$1,840)
- c. Vet and farrier care (\$1,150)
- d. Outside labour (\$630)
- e. Horse care products and services (\$290)
- f. Travel (\$250)
- g. Tack (\$260)
- h. Clothes (\$80)
- i. Manure disposal (\$60)
- 11. If you own horses personally proceed through the Recreational/Personal Use Respondents Questions 8-16

For Not-for-Profit Organization or Charity Respondents

- 8. What type of not-for-profit or charity organization do you operate?
- 9. How many employees do you have?
- 10. Please Indicate the employment term, approximate wage rate, and primary responsibility for yourself and each employee:
- a. For yourself employment term, wage rate, primary responsibility
- b. Employee 1 employment term, wage rate, primary responsibility
- c. Employee 2...
- 11. If you own horses personally proceed through the Recreational/Personal Use Respondents Questions 8-16



For Other Equine Business or Organization Respondents

- 8. What kind of business or organization within the equine sector do you operate?
- 9. How many employees do you have at your business or organization?
- 10. Please Indicate the employment term, approximate wage rate, and primary responsibility for yourself and each employee:
- a. For yourself employment term, wage rate, primary responsibility
- b. Employee 1 employment term, wage rate, primary responsibility
- c. Employee 2...
- 11. If you own horses personally proceed through the Recreational/Personal Use Respondents Questions 8-16

General Final Questions for all respondents:

- 17. Do you qualify for provincial farm status by achieving gross annual farm product revenue of \$10,000+?
- a. Yes
- b. No
- c. Don't know
- 18. If yes, what activity is the farm revenue primarily based on?
- a. Equine
- b. Cattle/other livestock
- c. Crop
- d. Other (please specify)
- 19. Please rank the issues below in terms of your concern for the equine industry's future in Alberta:
- a. Rising expenses
- b. Access to public trails
- c. Agri-stability ineligibility
- d. Decreasing amount of local competitions/events
- e. Biosecurity risks
- f. Equine services availability
- 20. Do you have other concerns not listed in the question above? Please list any.
- 21. If you spectate at equine competitions, shows, or other events, please enter your average expenses per event for:
- 22. Do you have an Emergency Management Plan that incorporates your equines?
- a. Yes
- d. Would like assistance
- b. No
- e. Other comment:
- c. Working on it





- 23. Do you own a horse trailer?
- 24. If yes, did you include depreciation and variable costs for your truck and trailer into your previously entered annual travel expenses?
- 25. If no, what is your estimated annual truck and trailer mileage for all equine activities?
- 26. Do you practice on-farm/property biosecurity protocols?
- a. Yes
- b. No
- c. Not applicable
- d. Not sure
- 27. If yes, which biosecurity protocols do you practice?
- a. Quarantine of herd
- b. Immunization
- c. Sanitation of all equipment
- d. Health management
- e. Restricted access
- f. No cross-contamination
- g. Manure management
- h. Pasture management
- i. Other (please specify)
- 28. Please enter your email address below for your chance to win 1 of 2 \$200 gift cards. If you are drawn as one of the winners, you will be contacted in the week following the closing of the survey. Your email address will only be used to contact you in the case that you are drawn as a prize winner.
- 29. Do you wish to receive an emailed copy of the report summary upon its completion?

End of Survey





7.1 Survey Limitations

The survey administered in the fall of 2021, was voluntary and distributed through various equestrian association's members and public equine industry social media groups. As a result, it reached many industry participants, however, it is not necessarily a comprehensive industry sample.

7.1.1 Survey Bias

The voluntary survey imparts the potential for sampling bias, whereby industry participants with greater investment, and potential expenditures, were more likely to respond and potentially skew the expenditure estimates.

Some industry participants operating specific types of businesses may be disinclined to provide expenditure values because of their significant role in a category of business with few competitors. Their expenditure values would stand out and be, therefore, likely attributable to their business. This source of response bias may negatively impact the quality of the expenditure data for event organizers, breeders, and guides.

7.1.2 Data Inconsistencies

Occasionally a survey respondent input expenditure data was far out of the normal range of other responses. When the value could be concretely shown to be a misinterpretation of the question, (such as inputting an annual expenditure or total business expense instead of reporting the monthly or per animal expense), the appropriate adjustment was made. If this could not be definitively adjusted and the value could not readily be justified by the respondent's evident participation in a niche equine activity, the data point was considered an outlier and removed from further calculations.

7.1.3 Incomplete Responses

One category of equine activity, guiding, received no survey responses nor responded to targeted interview requests. Twenty-seven businesses offering horse guiding services were catalogued in Alberta, and so significant economic impact should likely be associated.



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