

**THE ECONOMIC IMPACTS OF HORSE BREEDING,
RAISING, AND RACING IN ALBERTA
(2007)**

Prepared For
HORSE RACING ALBERTA

Prepared By
SERECON MANAGEMENT CONSULTING INC.

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IMPACT OVERVIEW

TOTAL ECONOMIC IMPACT

There are significant economic benefits of horse racing to the province of Alberta. Our analysis indicates that these benefits totaled over \$399 million in 2007. This represents a 10.7% increase over the equivalent figure for 2006.¹ Approximately 43% (\$171 million) are direct economic benefits and represent expenditures made by industry stakeholders in their local communities.

Economic impacts result from a number of factors. There are initial expenditures that are made by horse owners in breeding, raising and racing horses. In addition there are expenditures that are made at horse races themselves, and the subsequent rounds of spending from the business and people as a result of this expenditure.

The initial or direct expenditure in the horse racing industry has increased by 12.1% between 2006 and 2007, from \$154 million to \$171 million. In addition to the direct expenditures, a total of \$228 million in indirect and induced expenditures were made in the Alberta economy. When combined, this represents a total economic contribution of \$399 million.

GEOGRAPHIC SCOPE

The distribution of industry benefits remains diverse. Approximately \$203 million of the \$399 million in combined economic activity can be traced to rural communities. This is not to take away from the importance of the tracks and urban communities, but emphasize the significance of breeding, raising and racing horses on rural areas. The rural impacts have increased by \$8 million, or 4.1% from 2006.

AGRICULTURAL FIT

The direct expenditures in agricultural activities were \$85 million in 2007. Direct expenditures in agricultural activities consist of \$37.6 million for breeding and raising horses that will eventually race, and \$47.8 million for agricultural inputs associated with racing activities. This includes training, feed and board, and veterinary costs. These direct expenditures have increased by \$3.4 million (4.1%) since 2006.

¹ We have relied on multipliers from Alberta Finance in conducting this analysis. The most recent series was published in June, 2009 and is based on data collected in 2005. Since the last update for HRA (2006) had used an older series of multipliers, we updated these estimates with the most recent multiplier information. Not only is this a more accurate estimate of 2006 figures, but it is also the only way to get results that can be compared across years.

EMPLOYMENT

The number of full time equivalent (FTE) people attributed to the horse industry annually is approximately 2,753, and has increased by 176 FTEs from 2006. When all the owners and unpaid labour are considered the total number of people involved in horse racing in Alberta is 7,646.

PHYSICAL ASSETS

The physical assets associated with the horse racing industry in 2007 totaled \$750 million. This includes \$458 million for the replacement value of racing infrastructure at Edmonton Northlands, Calgary Stampede, Lethbridge's Rocky Mountain Turf Club, and Grande Prairie's Evergreen Park.

In addition to racetrack infrastructure, there is approximately \$292 million in infrastructure associated with breeding, raising and racing activities, an increase of 4.5% over 2006 figures.

Construction of the new Balzac racetrack by United Horsemen of Alberta (UHA) resulted in \$22 million in direct expenditures in the Alberta economy in 2007. This does not include the purchase costs of the land.

TAXES PAID

The industry is responsible for at least \$42 million in taxes annually. As in 2006 the largest portion of these taxes goes to the federal government (83%), with 11.5% going to the province, and 5.5% municipal.

This figure is considered conservative, as it does not consider corporate and fuel taxes payable.

ECONOMIC IMPACT ANALYSIS, 2006-2007

The following analysis updates the direct expenditures associated with horse breeding, raising, racing, and the physical racing infrastructure from 2006 to 2007. These direct expenditures, in the form of operating and capital expenditures and employment information, form the basis for assessing the overall economic impacts that horse racing has on the province. The overall impacts include the indirect and induced expenditures by business and people that occur in subsequent rounds of spending. The overall economic impacts are found by multiplying the direct expenditure by multipliers published by Alberta Finance.

The following analysis is a summary of the findings and includes discussion on the multipliers used; a detailed review of the direct expenditures for breeding, raising, and racing horses; a review of the direct expenditures by racetracks and HRA; an analysis of the overall impacts by market area; a review of employment and tax impacts; a discussion of the physical infrastructure associated with the horse racing industry in the province; and a special discussion of the impacts of the construction of the new racetrack in Balzac.

MULTIPLIERS USED

Alberta Finance economic multipliers are used for both 2006 and 2007. The figures are generated from the Input/Output tables (2005) and were published in June of 2009. In order to more appropriately compare the economic impacts from 2006 and 2007, the same multipliers have been used in each year. In order to this the model used to generate the 2006 impacts has been rerun with same multipliers used in the 2007 model.

The Gross Output/Expenditure multiplier used for Animal Production (Industry 11A) is 2.372, and the Employment multiplier increased is 0.117. This multiplier is used on expenditures made for breeding, raising, and racing horses. It should be noted that the animal production multipliers originally used in 2006 were about 10% higher than the ones used in this current evaluation.

The Gross Output/Expenditure multiplier for Arts, Entertainment, and Recreation (Industry 710) is 2.303, and the Employment multiplier is 0.314. These were used for the industry expenditures calculated for physical racing infrastructure, including pari-mutuel wagering, food and beverage services, and other related activities. The entertainment multipliers originally used in 2006 were about 1.5% lower than the ones used in this current evaluation.

An additional multiplier was used for capital construction, including capital projects at existing racetracks and the construction activities that took place at Balzac for UHA. The Gross Output/Expenditure multiplier used for Non Residential Construction (Commodity 30) is 2.291, and the Employment multiplier is 0.097. These construction

DIRECT EXPENDITURES

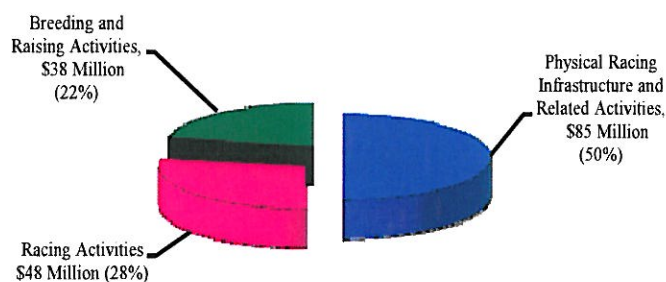
multipliers are approximately 1.8% lower than the multipliers originally used in 2006.

Overall the change in multipliers from 2006 has the effect of lowering the overall impact found using the multiplier approach. If we consider that about 50% of the direct expenditure is in animal racing and breeding, and this multiplier has decreased by 10%, the overall impacts will be about 5% lower than if the model was run using old multipliers.

The province of Alberta receives economic benefits from activities and financial flows from racehorse breeding and raising, training, racing and associated activities. Relevant activities of HRA – those that directly fund programs and activities and are not part of the purses paid – are considered.

In 2006, the industry had direct expenditures \$154 million annually. This figure increased to \$171 million in 2007. This is broken into three components in Figure 1.

Figure 1: Direct Expenditures by Category, 2007
(as a percent of total expenditure)



Breeding and Raising Activities

The costs of breeding and raising racehorses are impacted by the costs associated with mares, foals, yearlings, and stallions, along with the number of the horses being kept in Alberta. Table 1 below shows the annualized costs associated with breeding and raising a racehorse in Alberta in 2007.

Table 1: Annualized Costs of Breeding and Raising Activities, 2007

	Dry Mare	Foal	Weanling and Yearling	Stallion
Thoroughbred	12,147	6,060	8,564	8,432
Standardbred	11,560	6,060	8,598	8,070
Quarter Horse	9,862	5,607	6,962	8,070

In order to be consistent with previous economic impact studies, many of the costs of keeping a stallion are allocated to the cost of a mare. While not having an impact on the total economic impact figures, it does understate the costs of a stallion if they are looked at independently of the rest of the analysis. Had these costs been allocated directly to the stallion, the annual cost associated with a stallion would be exceed \$20,000.

As an example, the breeding costs for a thoroughbred mare are estimated to be approximately \$2,500. Since the mare to stallion ratio is 5.7 this would represent a total cost of \$14,250 per stallion. When this is added to the cost of a thoroughbred stallion in Table 1 of \$8,432 the total costs per stallion are over \$20,000. This figure could reasonably be expected in an independent analysis of stallions.

The total direct expenditures for breeding and raising can be seen in Table 2. These expenditures are found by multiplying the costs in Table 1 by the number of Alberta horses in each category. Overall the costs of the breeding and raising have increased by 6.5% from 2006 to 2007.

The direct expenditures for breeding and raising have been impacted to two main pieces of information, each working the opposite direction in 2007. Firstly the number of horses bred and raised in the province decreased by about 8% in 2007. This negative influence was masked by increases in the cost to raise a horse in Alberta. In 2007 the cost to breed and raise a horse increased by 15% over 2006. This was due to increases in feed costs, labour, fuel, and general price inflation. In increase in costs were more significant than the decrease in horse numbers, resulting in an overall increase in expenditures of 6.5%.

Total direct economic benefits from breeding and raising activities increased 6.5% between 2006 and 2007 to \$38 million

Table 2: Direct Expenditures for Breeding and Raising, 2006-2007

	2006	2007
Breeding and Raising - Thoroughbreds		
Mares	9,349,087	9,778,096
Foals	2,945,253	2,902,751
Yearling & Non Racing 2 Yrs	3,429,781	3,639,717
Stallions	1,104,606	1,187,909
Total	16,828,727	17,508,473
Breeding and Raising - Standardbreds		
Mares	6,612,031	7,017,059
Foals	1,840,131	2,230,089
Yearling & Non Racing 2 Yrs	2,424,497	2,596,711
Stallions	1,392,045	1,513,549
Total	12,268,705	13,357,407
Breeding and Raising - Quarter Horses		
Mares	3,394,122	3,644,962
Foals	1,125,994	1,244,644
Yearling & Non Racing 2 Yrs	1,194,701	1,294,998
Stallions	474,536	521,942
Total	6,189,353	6,706,546
Breeding and Raising Total	35,286,786	37,572,426
% increase over previous year	9.30%	6.48%

Racing Activities

The total direct economic benefit from racing activities approaches \$48 million annually

The direct expenditures for racing both standardbred and thoroughbred horses have increased from \$47 million in 2006 to \$48 million in 2007. The number of horses racing in Alberta decreased by 5.7% from 2006 to 2007 but the costs associated with training, veterinary, and board have increased by 11.0% per horse, leading to net increase in expenditures of 2.3%. These results are summarized in Table 3.

Table 3: Direct Expenditures for Racing Activities, 2006 - 2007

	2006	2007	% Change
Racing Costs – Thoroughbreds	32,463,902	34,846,325	7.3%
Racing Costs - Standardbreds	14,269,656	12,982,550	-9.0%
Total Racing Cost	46,733,558	47,828,875	2.3%

Physical Racing Infrastructure and Related Activities

*Direct economic impacts
related to physical racing
infrastructure is \$88 million
in 2007*

The expenditures surrounding the physical racing infrastructure includes costs associated with: pari-mutuel betting; slots; food and beverage; administration; the Horses Off Track (HOT) network; HRA costs of marketing and administration; and capital expenditures on the existing facilities, as well as the construction of new facilities in case of UHA and the racetrack at Balzac.

The direct expenditures associated with these activities were \$88 million in 2007, an increase of 23% from 2006. A breakdown of these costs is found in Table 4.

Table 4: Direct Expenditures Related to Physical Racing Infrastructure

	2006	2007	% Change
Operational Expenditure	45,620,489	50,776,569	11%
Capital Expenditure (existing tracks)	3,349,258	3,658,010	9%
Capital Expenditure (new tracks)	9,250,000	19,835,556	114%
HOT	4,663,140	4,652,494	0%
Breed Improvement	1,570,524	1,838,135	17%
HRA Marketing	3,876,813	3,337,306	-14%
HRA Regulatory and Administration	3,598,807	4,068,989	13%
Total	71,929,031	88,167,059	23%

Revenue that flows to horsemen in the form of purses and claims are not included since the model uses an expenditure based multiplier and to count revenue would result in double counting data. In addition costs that flow out of province including commissions to other racetracks have been removed as this has no effect on the Alberta economy.

Special attention should be given to the construction expenditures of UHA for the new racetrack at Balzac. \$20 million was spent in Alberta in 2007, compared to \$9 million in 2006. Most of this expenditure was related to land preparation, installation of utilities, and building of barns and infrastructure. In all, it is estimated that the project will cost over \$280 million by the time it is completed.

These expenditures are not reoccurring expenditures like those found in the operating expenditures of racetracks and in breeding, raising and racing horses. It is anticipated that when the construction is completed the expenditures will be replaced with increased operating expenditures from the Balzac racetrack, although they may or may not be of the same magnitude as the construction expenditures. For this reason we may see variability in the total economic impact of the horse racing industry in Alberta from 2009 to 2011.

COMBINED IMPACTS

Direct expenditures are only one component of the total economic impact of horse racing in Alberta. When all the indirect and induced impacts are calculated, the total impact increases to \$399 million. This is an increase of \$39 million from 2006. Table 5 displays a summary of the direct, indirect and induced impacts for 2007, and their relative change from 2006.

	Direct		Indirect and Induced		Total Economic Impact	
	2007	%Change	2007	%Change	2007	%Change
Physical Racing Infrastructure and Related Activities	85,256,424	19%	110,783,557	18%	196,039,981	18%
Racing Activities	47,828,875	2%	65,621,216	2%	113,450,091	2%
Breeding and Raising Activities	37,572,426	6%	51,549,369	6%	89,121,795	6%
Total	170,657,725	11%	227,954,142	11%	398,611,868	11%

The horse racing industry generates approximately \$399 million in economic benefits annually

As in 2006, the attribution of these impacts to specific market areas is somewhat arbitrary. However, since the activities in of the industry are directly linked to live racing days, it is possible to assign impacts resulting from tracks based on their live racing days.

In our opinion it is not unreasonable to assume that total industry economic impacts would align to some extent with the location of the live racing days. On the other hand, breeding and raising activities do occur across Alberta and are difficult to tie to a specific geographic region. In any event, grouping the impacts around market areas provides an indication of the geographic source of total industry economic impacts.

Impact Type		Physical Racing Infrastructure and Related Activities		Racing Activities		Breeding and Raising Activities		Total	
		2007	% Change	2007	% Change	2007	% Change	2007	% Change
		2007	% Change	2007	% Change	2007	% Change	2007	% Change
Direct	Edmonton	43,310,925	3%	23,868,213	12%	17,379,652	14%	84,558,790	8%
	Calgary**	33,061,722	-29%	10,414,288	-28%	7,765,145	-24%	51,241,154	-28%
	Lethbridge	5,022,615	40%	8,543,841	13%	7,917,432	15%	21,483,888	19%
	Grande Prairie	3,861,163	203%	5,002,533	51%	4,510,198	52%	13,373,893	77%
	Total	85,256,424	19%	47,828,875	2%	37,572,426	6%	170,657,725	11%
Indirect and Induced	Edmonton	56,404,580	3%	32,747,189	12%	23,844,882	14%	112,996,651	8%
	Calgary**	42,815,831	-29%	14,288,403	-28%	10,653,779	-24%	67,758,012	-28%
	Lethbridge	6,539,495	40%	11,722,150	13%	10,862,717	15%	29,124,362	19%
	Grande Prairie	5,023,651	203%	6,863,475	51%	6,187,991	52%	18,075,117	76%
	Total	110,783,557	18%	65,621,216	2%	51,549,369	6%	227,954,142	11%
Total Economic Impacts	Edmonton	99,715,505	3%	56,615,402	12%	41,224,534	14%	197,555,441	8%
	Calgary**	75,877,552	-29%	24,702,691	-28%	18,418,923	-24%	118,999,167	-28%
	Lethbridge	11,562,110	40%	20,265,991	13%	18,780,150	15%	50,608,250	19%
	Grande Prairie	8,884,813	203%	11,866,008	51%	10,698,189	52%	31,449,010	76%
	Total	196,039,981	18%	113,450,091	2%	89,121,795	6%	398,611,868	11%

****Note:** Includes both Calgary Stampede and UHA expenditures and impacts

Approximately \$203 million of the total economic benefit of the horse racing industry accrues in rural Alberta

HRA and other associated expenditures have been allocated to the various tracks based on the percentage of the total handle that they have. While not entirely accurate, it does provide a suitable indication of impact distribution from these activities.

In 2007 48% of the direct benefits can be attributed to rural Alberta. The total economic impact to rural Alberta of approximately \$203 million represents 51% of the total impact to the province. Overall the impacts to rural areas have increased by 4.1% (\$8 million) from 2006, and increased by 18.5% (\$31 million) in urban areas. The distribution of the economic benefits between rural and urban areas can be seen in Table 7.

Table 7: Allocation of Economic Benefits Between Rural and Urban Communities

Impact Type	Rural Alberta		Urban Alberta	
	2006	2007	2006	2007
Direct	82,020,344	85,401,301	71,929,031	85,256,424
Indirect and Induced	112,531,911	117,170,585	93,572,336	110,783,557
Total	194,552,255	202,571,886	165,501,367	196,039,981

PHYSICAL ASSETS

Horse racing is responsible for a significant amount of physical assets. Horses need to be bred, raised, trained, and raced in physical structures designed for the equine industry.

The value of these assets has been reassessed for 2007. The value of the assets associated with breeding, raising, and training has increased by 4.5% from 2006 to \$292 million. This increase is due to inflationary pressure in agricultural building values.

The value of the racetrack assets increased from \$457 million in 2006 to \$458 million 2007. This increase is due to strong real estate market in Alberta and inflationary pressures on new construction.

The total value of physical assets for all aspects of the industry has increased from \$736 million in 2006 to \$750 in 2007, a 2% increase.

EMPLOYMENT IMPACTS

3,133 FTE's resulting from the horse racing industry

The horse racing industry generates employment both as a result of the expenditures that are made directly in the industry, and from the indirect and induced effects.

When the indirect and induced impacts are considered using the appropriate Alberta Finance multipliers, the total FTE's associated with

the industry jumps to a total of 2,753, which is an increase of 176 people from 2006.

The operational reality of the horse racing industry is such that this figure does not include a significant amount of non-paid individuals who are critical to the industry.

Our analysis suggests that the total number of people actually involved in the industry is approximately 7,646. A complete breakdown can be observed below.

Table 8: Total Employment (Paid and Unpaid) Associated With the Racing Industry (2007)	
Total FTEs – Multiplier	2,753
Unpaid Labour (Family)	1049
Owners	2262
Others	1582
Total Paid and Unpaid	7,646

Using the results of the employment multiplier, along with updated wage information for Alberta, the total annual employment income for the sector increased by \$7 million to \$51.8 million in 2007.

TAX IMPLICATIONS

Tax implications, like employment calculations, are difficult given the varying rates and conditions that taxation rules cover. The following analysis uses a number of assumptions, but does provide a basic indication of the magnitude of the contribution of the industry back into the public purse.

Taxes are calculated for the following six categories:

- the personal income tax (PIT) paid by FTE's,
- Workers Compensation Payments (WCB),
- Employment Insurance (EI) and Canada Pension Plan (CPP) payments,
- the Goods and Services Tax (GST),
- municipal taxes paid on physical infrastructure, and
- liquor taxes paid on sales at the racetracks.

Table 9 illustrates the magnitude of the taxes paid and the level of government that they were paid to. Overall we estimate that \$42 million is paid annually, a decrease of 0.8% over 2006, largely as a result of a decrease in the GST tax to 6% for all of 2007, where it had averaged 6.5% in 2006.

Table 9: Allocation of Taxes by Type and Responsibility

Level of Government	Tax	Amount	Total	Distribution %
Municipal	Land	1,515,947		
	Buildings	813,639		
			2,329,586	5.5%
Provincial	Income	3,574,771		
	WCB	756,937		
	Liquor	535,012		
			4,866,720	11.5%
Federal	Income	7,294,955		
	CPP	4,771,285		
	EI	2,239,703		
	GST	20,806,014		
			35,111,957	83.0%
Total			42,308,263	100%

The figure of \$42 million is conservative since it does not include many other taxes that are difficult to estimate in this analysis: fuel taxes and corporate income taxes, etc.

CONCLUSIONS

After reviewing the activities of the horse racing industry, it is our opinion that there has been a significant increase in the economic impact on Alberta between 2006 and 2007. Direct expenditures increased by \$17 million or by 12%. The combined direct, indirect and induced impacts increased by \$39 million or 10.7%. The results reflect the most recently available data from the Alberta Finance Input/Output tables published in June 2009, and based on data in 2005.

The industry continues to be of importance to a wide distribution of both urban and rural areas, playing an important part in the viability of rural communities. It is strongly connected to its agricultural base, with 51% (\$203 million) of the total economic impacts occurring in rural Alberta.

In summary, the sector generates approximately \$399 million annually in direct, indirect and induced economic benefits. The industry provides 2,753 FTE's and is associated with 7,646 Albertans in total. In addition, the sector is responsible for \$42 million in taxes to the three levels of government.