

# Economic Impact of the Horse Racing and Breeding Industry to Indiana

## Introduction

Many horse enthusiasts would like to say that they bred the winner of the big race. Many more Indiana residents have attended or, more likely, watched on television the Kentucky Derby, Breeders' Cup, Little Brown Jug or Quarter Horse All American Futurity race. To many, being a spectator of horse racing is great recreation and an enjoyable sport. To others, owning a racehorse winner and, especially, breeding and raising one, is a passion — a compelling and expensive goal. Most horse owners and breeders believe that they are not in an industry per se.



Standardbred racing at Hoosier Park, Anderson, Ind.

However, the entire horse racing industry is big business. Whether the owner or breeder is involved in horses for income-generating motives or for a recreational hobby, they are still spending money and impacting the general economy of Indiana.

The horse racing industry works on market principles like other livestock industries. For example, feed companies buy the grains, manufacture feed and sell

it to the dairy, poultry, swine or beef producers. The producers then sell their product to the processors — in the case of the horse racing industry, the trainers. Of course, none of this happens without the end consumer who buys the products. Racehorse tracks provide the visible public/consumer marketplace for the horse breeders' product: race horses. The end market is the same as any agricultural or manufacturing industry: the public. So, what is the economic impact of horse racing and breeding in Indiana?

## Background

The U.S. Department of Agriculture's Ag Statistics Equine Census of Indiana (Garrett et al, 2004) reported that in 2001 more than 34,000 operations housed 160,000 horses, generated 9,221 jobs, and generated more than \$207 million in economic impact in the state. In 2001, there were more equine operations in Indiana than any other livestock species (NASS, 2001). The \$580 million value of equine in Indiana was equivalent to 58 percent of the total value (\$989.9 million) of all other livestock in Indiana. At that time, 53 percent of the equine and 65 percent of the equine operations were for trail, recreation, or other purposes, and 4 percent of the horses and 3 percent of the equine operations were for racing purposes. The authors stated that "the industry is a thriving part of the Indiana economic landscape, and has potential to continue to grow."

The prior study of the Indiana horse industry, conducted in 2005 by the American Horse Council (AHC, 2005), reported a direct economic impact of \$181 million and a total economic impact of \$294

million for Indiana. The 2005 study reported \$5 million paid in state and local taxes by the racehorse industry. The horse industry in the United States contributes \$39 billion in direct economic impact to the U.S. economy and supports 1.4 million jobs on a full-time basis, according to the same AHC study.

## Today's Situation

So, what is the current economic impact of horse racing and breeding in Indiana? How economically important is the actual horse racing segment and how does that compare with the impact of the racehorse breeding industry, which supplies the racing industry? Participants in the racehorse industry, the whole horse industry, and the general public often ask these questions.

Thanks to the leadership of the newly created Equine Business Management Program at the Purdue Calumet School of Management, there is now data that reflects the economic impact of the horse racing and breeding industry. Researchers leading this recent study include Susan E. Conners, Ph.D., and Jonathan M. Furdek, Ph.D., Purdue University Calumet; Laurent Couëttil, DVM, Ph.D., Purdue University College of Veterinary Medicine; Mark Russell, Ph.D., Purdue College of Agriculture; and Gregory Preston, National Agricultural Statistics Service, USDA.

The data collection portion of the research involved two surveys that were conducted simultaneously. One survey obtained economic data from the two Indiana racetracks (Hoosier Park in Anderson and Indiana Downs in Shelbyville) for the calendar year 2009. The second part of the study involved a survey of more than 7,000 members of the racehorse breeding community (quarter horse, standardbred and thoroughbred), requesting their economic data for 2009. The breeder survey resulted in 1,000 responses. Estimation of economic impact utilizes state-specific Impact Analysis for Planning (IMPLAN) multipliers to estimate the overall economic impact of the

industry on the state GDP and employment. The economic impacts of horse racing and breeding-related activities were estimated using 2008 IMPLAN multipliers for the State of Indiana.

## Findings From the Horse Racing Industry Survey

In 2009 the two racetracks in Indiana, Hoosier Park and Indiana Downs, generated a cumulative income of \$319,136,342, paid out purses of \$49,043,165, paid state and local taxes of \$5,106,261, and had an investment of \$155,781,213 in land, facilities and equipment, of which \$3,042,146 was new real investment. The industry employed 161 full-time employees, 765 part-time employees and 596 seasonal employees in 2009, which computes to a full-time equivalent of 1,240 employees.

## Racetrack Revenues

Ninety-eight percent of racetrack revenue in 2009 came from wagering. Most racetrack wagering revenue came from off-track and pari-mutuel sources, with 2 percent coming from other sources such as admission fees, concessions and program sales. Of the wagering revenue, only 6 percent was generated at the track, while 94 percent came from off-track and pari-mutuel wagering.

The racetracks engaged in thoroughbred, standardbred and quarter horse racing in 2009, with thoroughbred racing generating 53 percent of the wagering revenues, standardbred racing accounting for 44 percent and quarter horse racing the remaining 3 percent. An examination of daily wagering revenues by breed provided some interesting factors. Although thoroughbred racing seems to be the big attraction and generates the most revenue, as well as the most revenue per day, the Indiana racetracks engaged in more days of standardbred racing. These findings are summarized in Table A.

**Table A. Racetrack Wagering Revenues by Breed**

	Wagering Revenue	Number of Racing Days	Revenue per Day
Thoroughbreds	\$166,163,798	125	\$1,329,310
Standardbreds	\$127,928,734	160	\$799,555
Quarter horses	\$8,722,966	56	\$155,767

**Table B. Economic Impact of Racing 2009**

	Direct Effect	Indirect and Induced Effect	Total Effect
Employment	1,434	1,409	2,843
Labor Income	\$52,404,584	\$56,848,808	\$109,253,392
Contribution to State GDP	\$319,135,352	\$169,221,320	\$448,356,672

## Economic Impact of Horse Racing on the Indiana Economy

The horse racing industry in Indiana generates by direct payment, as well as from indirect and induced economic activity, \$73 million in tax revenues. Of that, \$29 million is in various forms of federal taxes and \$45 million in state and local taxes. The economic impact of the industry is summarized in Table B.

## Findings From the Racehorse Breeding Survey

There is no doubt that the presence and business of these two racehorse tracks provide Indiana with jobs, economic impact and entertainment. The racehorse tracks provide the visible public/consumer marketplace for the horse breeders' products: race horses. The breeding industry owns land, has employees and purchases inputs, including hay, feed, veterinary and farrier services, tack and equipment, trailers and towing vehicles, apparel, etc. All of these industries derive revenue from the horse breeders.

Interestingly, during the debates of the late 1980s of whether Indiana should amend its state constitution to permit lotteries, Larry DeBoer, agricultural economist at Purdue, stated in 1988 (DeBoer, 1988) "Pari-mutuels would probably have a positive effect on economic development, because the production activities involved in pari-mutuels are performed at racetracks and at horse farms....One would also expect to see an increased vitality in the horse industry."

A survey of more than 7,000 breeders and related operations in the State of Indiana resulted in 1,000 surveys completed and returned. These were the findings:

Eighty Indiana counties were represented in the survey, with the most responses from LaGrange (29), Elkhart (20) and Allen (16).

The principal residence of more than 10 percent of the breeders in the survey was out-of-state. Thirty-four states were represented in the survey, with the most responses indicating Ohio (179), Kentucky (136) and Illinois (113) as the principal residence.

When asked about organizational affiliations, 32 percent were affiliated with thoroughbred organizations, 58 percent with standardbred organizations and 10 percent with quarter horse organizations.

Of the 1,000 survey responses received, 353 indicated primary in-state residence and 647 reported primary residence out-of-state operating in Indiana.

The number of horses owned by the 1,000 respondents was reported to be 3,365. Sixty-five percent of those horses raced in 2009, with 215 of them — or 21 percent — having won in 2009.

Most of the horses were kept on the owner's property (68 percent), while 7 percent were kept at training facilities and 25 percent were held at other types of facilities.

The other types of facilities included racetracks (38.4 percent), other farms (20.5 percent), fairgrounds (11 percent), breeding farms (8 percent) and out-of-state (15.5 percent).

## Breeder Revenues

Significant sources of revenue are the purses and breed awards received by the breeders. Of the 1,000 responding in the sample, 586 breeders received \$15,400,083 in purses, for an average of \$26,280 per winning breeder. Breeders also reported breed awards totaling \$1,569,299, for an average of \$8,622 per breeder. Breeders reported a total income of \$31,682,037 in Indiana, which represented a significant part of their total income since many breeders operate in multiple states. These findings are summarized in Table C.

**Table C. Revenues Reported by Breeders 2009**

Category	Revenues	Percent in Indiana
Sale of Horses	\$11,626,161	15%
Stud Fees	\$2,687,799	17%
Leasing of Horses	\$43,583	66%
Boarding Horses	\$8,342,291	8%
Training Horses	\$6,588,345	37%
Sale of Property	\$109,450	17%
Sale of Equipment	\$480,410	2%
Rental Land	\$76,380	56%
Rental Equipment	\$21,700	2%
Insurance Income	\$118,214	21%
Interest Income	\$93,195	23%
Other Sources	\$1,494,559	15%

## Breeder Expenses

The total expenditures reported by the 1,000 breeders responding to the survey totaled \$58,193,160 for 2009. These expenditures were detailed in 32 categories as described in Table D (see page 5).

## Conclusions

The findings of this study indicate \$733 million in direct economic effect — such as breeders purchasing hay to feed their horses — and more than \$1 billion in total impact for the racing industry, with \$69 million in state and local tax revenue. This represents a fourfold increase in direct economic impact and a 14-fold increase in state and local tax revenue in the past five years. The industry generates direct and related employment of 9,865 jobs. Of the \$31,682,037 of revenues reported in the survey, \$24,775,875 was reported by out-of-state residents operating in Indiana. Regarding the industry, there are several important aspects that need to be explored further:

A significant share of racetrack revenues comes from off-track and pari-mutuel sources.

A significant investment in the breeding segment of the equine industry is from out-of-state interests. This indicates that the equine industry is a significant

export industry, generating in-state revenues from out-of-state sources.

The amount and nature of investment spending as real investments have long-lasting impacts on the economy.

It appears that the horse racing industry in Indiana is a relatively young industry. Although the racetracks have been in operation for several years, the supporting components of the industry are growing and the IMPLAN multipliers may not properly assess this significant growth element.

When a racetrack is successful, it can afford to offer larger purses and attract better horses and athletes. That, in turn, draws larger incomes from pari-mutuel and off-track wagering, which then affords an opportunity to offer even more attractive purses.

This is an industry that is especially important to the communities of Anderson, Shelbyville and the surrounding areas, but the impact is statewide because of the broad in- and out-of-state involvement of breeding and training services and likely other equine industry activity. It appears that the prediction made by Larry DeBoer (DeBoer, 1988) “Pari-mutuel wagering has a much smaller revenue potential than does a lottery, but it probably has a greater economic development potential,” has proved true.

**Table D. Breeder Expenses 2009**

Expenses Item	Amount	Percent in Indiana
Feeds & Supplements	\$5,020,624	42%
Bedding	\$1,079,918	33%
Stable Supplies	\$841,938	39%
Medical Supplies	\$982,795	35%
Fuel Expenses	\$1,537,126	40%
Utilities	\$438,857	32%
Breeding Fees & Expenses	\$3,251,634	22%
Leasing Fees	\$71,258	88%
Boarding Fees	\$2,736,207	22%
Equipment Rentals	\$88,475	9%
Shipping & Travel	\$933,532	32%
Accounting & Tax Services	\$349,646	24%
Legal Fees	\$74,584	26%
Insurance	\$818,374	22%
Marketing & Advertising	\$311,084	28%
Veterinarian Fees	\$4,094,506	33%
Horses Purchased	\$7,242,991	26%
Mortgage Expenses	\$2,791,510	30%
Equipment Payments	\$584,329	28%
Interest Payments	\$250,617	21%
Depreciation	\$2,615,443	11%
Maintenance & Repairs	\$1,008,305	35%
Office Equipment	\$165,240	25%
Property Taxes	\$860,939	41%
Organizational Fees	\$367,525	26%
Sales Taxes	\$197,103	33%
Wages & Salaries	\$4,724,999	33%
Contract Labor	\$2,031,056	48%
Benefits	\$306,239	4%
Farrier Fees	\$1,564,636	46%
Training Fees	\$10,657,658	34%
In-Kind Expenses	\$119,914	59%

## References

American Horse Council, 2005, *The Economic Impact of the Horse Industry on the United States National & State Breakout Report*. <http://www.horsecouncil.org/product/2005-economic-impact-horse-industry-united-states-national-report>.

Conners, Susan, Jonathan Furdek, Laurent Couëttil, Greg Preston, 2010, *Economic Impact of the Indiana Horse Racing and Breeding Industry Summary Report*, Equine Business Management Program, Purdue Calumet.

DeBoer, Larry, 1988, "The Lottery and Pari-Mutuels: Strange Bedfellows," *Indiana Business Review*, Indiana Business Research Center, Bloomington, IN 1988.

Garrett, M.I., Department of Agricultural Economics; C.M. Brady, Department of Youth Development and Agricultural Education; K. T. McNamara, Department of Agricultural Economics; and M.A. Russell, Department of Animal Sciences; ID-320-W, *Economic Impact of the Equine Industry to Indiana*, 2004, Purdue University Cooperative Extension Service.

NASS, 2001. [http://www.nass.usda.gov/Statistics\\_by\\_State/Indiana/Equine\\_Summary/index.asp](http://www.nass.usda.gov/Statistics_by_State/Indiana/Equine_Summary/index.asp).



Thoroughbred racehorses jogging to the starting gate at Hoosier Park, Anderson, Ind.

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