

# Changes In The Horse Racing Industry And Impacts On The Indiana Economy: 2010 - 2014

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## ABSTRACT

*A survey of the horse racing and horse breeding industry in Indiana was conducted in 2014 and the economic impact of this industry on the Indiana economy determined utilizing an input-output model. Comparing the results to an identical study conducted in 2010, there are some interesting comparisons especially considering the economic challenges facing the racing and gaming sector of the economy. These changes and the economic impact of these changes on the Indiana economy are the substance of this paper. Specifically, the racetracks in Indiana are under a single ownership and racing composition was changed. In a challenging economy, the competitive horse breeding segment of the industry has also undergone changes. The consequences of these changes on the Indiana economy are measured and compared with the earlier study.*

**Keywords:** Economic Impact Study; Economic Impact; Horse Racing; Indiana Economy; Horse Racing Industry

## BACKGROUND

*M*odern horse racing traces back to the twelfth century when English knights returning from the crusades brought Arabian horses to Europe. Arabian horses were bred with English mares to produce horses that possessed speed and endurance. Competition among breeders developed quickly and formal racing competitions erupted across the European continent.

British settlers brought horse racing to America. The first race track was established around 1665 in what is now Long Island, New York. This popular competitive sport remained a gentleman's competition until after the Civil War. With the rise of the industrial economy, horse racing became more organized and racing became a popular spectator past time. By 1890, there were 314 race tracks across the American continent.

Harness racing is particularly an American sport finding its origins across the American countryside. It did not take much when two gentlemen, driving their horse drawn carriages along the same path, would engage in friendly competition. Racing trotting horses along country roads became a popular past time. The first race tracks were constructed around 1825 and harness racing became an institution across America.

Harness racing led to the evolution of the Standardbred horse which is widely recognized as an American innovation. The famous English Thoroughbred horse "Messenger" was brought to America in 1788 and bred with an American horse to establish a breed with endurance, temperament, and anatomy that was perfect for harness racing. Harness racing had become quite formalized with a racing covering a standard distance of one mile, hence the name Standard bred.

The Quarter Horse is one of the first horses truly native to America. This breed was developed out of a practical necessity for a horse with endurance and capable of fast speed in a short distance. The breed was developed from the cross breeding of Arabian, Turkish and Spanish breeds to develop a breed that became popular

with settlers and ranchers moving west and driving herds of cattle. This became the classic cowboy horse of the west.

### **HORSE RACING IN INDIANA**

Horse racing is now a popular national activity with important economic ramifications. Approximately half of the States have race tracks. Indiana has exactly two race tracks. However, Indiana has at latest estimate, approximately 40,000 horses along with breeders, boarding services, bedding producers, training facilities, farriers and tack supply services.

The two Indiana race tracks are Hoosier Park Race Track and Indiana Grand Race Course. Hoosier Park is located in Anderson, Indiana and was opened in 1994. This gaming and racing facility is located approximately 20 miles northeast of Indianapolis, Indiana and has a 7/8 mile oval race track that now specializes in Standardbred racing. This racetrack and casino facility is now the second largest employer in Anderson, Indiana and was rated as the most popular attraction in Indianapolis by the Indianapolis Business Journal. The Indiana Grand Race Course is located in Shelbyville, Indiana and was opened in 2002. This 233,000 square foot racing and gaming facility is approximately twenty minute drive southeast of Indianapolis, Indiana. This facility is now used to race Thoroughbred horses and Quarter Horses, exclusively on a one mile track or a seven furlong turf course.

### **The 2010 AND 2014 HORSE RACING AND BREEDING STUDIES**

The first comprehensive study of the horse racing industry in Indiana was completed in 2010. This study provided a baseline in 2009 of economic data and a determination of the economic impact that horse racing and horse breeding, as an industry, had on the State of Indiana. This study was particularly important considering the investment and commitment that Indiana had made to horse racing and to the communities of Anderson and Shelbyville, bring a new word to the American vocabulary – the “racino”. A racino is a combined race track and casino facility. Both Anderson and Shelbyville were industrial communities that were economically devastated as industry moved out of the Midwest. The racinos were accepted on the premise that these facilities would bring jobs and economic activity to stimulate these local economies. The 2010 study found that horse racing has had an impact not only on these local communities but throughout the State.

In 2014, a second study was undertaken (Conners et al, 2014), gathering the same information for this industry segment for 2013. The study was deliberately parallel so that comparisons were possible over time. The IMPLAN data base was utilized to estimate economic impacts for each study. The first study utilized the 2008 database and the new study utilized the 2012 data base.

IMPLAN, or Impact analysis for PLANning was developed in 1977 through a cooperative arrangement between the USDA Forest Service and the University of Minnesota (Minnesota Implan Group, 2010). The USDA Forest Service was addressing a need required by the Rural Development Act of 1972. The University of Minnesota collaborated and developed data sets in 1987 to complete the input-output model. In 1991 IMPLAN became a commercial product utilized by various government agencies and private firms and organizations, interested in estimating economic impact of projects and industry changes. Recently, IMPLAN moved its offices, restructured the firm, and acquired its principal competitor, RIMS, from the Bureau of Economic Analysis. The IMPLAN data base is the most comprehensive and flexible input-output model consisting of more than 440 industry sectors (Hodges, 2007).

### **COMPARING THE TWO STUDIES**

In the 2010 study (Conners et al, 2010), it was found that the horse racing industry included the racetracks and off track wagering brought more than \$319 million in revenues in 2009. This supported more than 1,400 jobs directly with an additional 1,400 jobs attributed to the industry as indirect and induced employment. The consequence of this employment was a contribution of more than \$109 million in labor income with significant contributions to the state GDP and tax revenues. The details of the study conclusions are detailed in Table 1.

The 2010 study also investigated horse breeding in Indiana and estimated the economic impact of this segment of the industry. The findings were that in 2009 breeders engaged in economic activity resulting in over \$258 million in assignable costs with a direct impact of more than 5,800 jobs with an additional 1,200 indirect and induced equivalent number of jobs in the state economy. These jobs account for more than \$82 million in labor income with a total contribution to state GDP exceeding \$588 million. There were also significant tax revenue implications associated with this industry segment. This information is detailed in Table 2.

**Table 1.** Economic Impact of Race Tracks and Off Track Betting on Indiana in 2009

<b>Race Track and OTB in 2009</b>	
Revenues	\$319,136,342
Direct Employment Effect	1,434
Indirect/Induced Employment Effect	1,409
Total Employment Effect	2,843
Labor Income	\$109,253,392
Contribution to GDP	\$488,356,672
State & Local Tax Impact	\$45,133,322
Federal Tax Impact	\$23,012,026

**Table 2.** Economic Impact of Horse Breeding on Indiana in 2009

<b>Horse Breeders in 2009</b>	
Costs	\$258,193,160
Direct Employment Effect	5,821
Indirect/Induced Employment Effect	1,201
Total Employment Effect	7,022
Labor Income	\$82,479,056
Contribution to GDP	\$588,634,624
State & Local Tax Impact	\$24,399,409
Federal Tax Impact	\$22,561,904

In these studies, the economic impacts were estimated using revenue data for the race tracks and cost data for the breeders. Race track revenues are heavily impacted by pari-mutuel betting while breeder cost information, particularly around tax season when the surveys were conducted are more tangible. For these studies, it was the opinion of the researchers that this provided the most reliable data and results. For purposes of implementing the economic multipliers, of course revenue of cost could be utilized.

When the 2014 survey was conducted and economic impacts analyzed, it was found that horse racing revenues had dropped significantly to \$263 million. However, there was no significant impact on total employment which had been 2,843 full time equivalent jobs in 2009 and was now 2,825 full time equivalent jobs. Similarly, labor income remained steady over that time while the impact on GDP was reduced approximately 25% from \$488 million to \$366 million. Although there was an insignificant decline in derived federal tax revenues, there was a significant increase in derived state and local taxes. These results are summarized in Table 3.

**Table 3.** Economic Impact of Race Tracks and Off Track Betting on Indiana in 2013

<b>Race Track and OTB in 2013</b>	
Revenues	\$263,286,745
Direct Employment Effect	1,993
Indirect/Induced Employment Effect	832
Total Employment Effect	2,825
Labor Income	\$103,052,130
Contribution to GDP	\$366,273,898
State & Local Tax Impact	\$66,877,086
Federal Tax Impact	\$22,220,005

**Table 4.** Economic Impact of Horse Breeding on Indiana in 2013

<b>Horse Breeders in 2013</b>	
Costs	\$365,132,215
Direct Employment Effect	2,764
Indirect/Induced Employment Effect	1,154
Total Employment Effect	3,918
Labor Income	\$142,915,103
Contribution to GDP	\$507,957,208
State & Local Tax Impact	\$92,746,707
Federal Tax Impact	\$30,815,223

### CONCLUSIONS

The economy from 2009 through 2013 posed a difficult environment for the horse racing industry and significant changes were occurring that are reflected but not identified in the data. The race tracks had undergone consolidation and are now under a single ownership with oversight by the Indiana State Horse Racing Commission. As part of the consolidation, racing became specialized. In 2009, each race track conducted all forms of racing. With the consolidation, one race track specializes in Thoroughbred racing and the other in Standardbred racing. It is believed by the race tracks that this has brought about a higher level of efficiency in track operations. The race tracks are largely impacted by global rather than local economic conditions as substantial revenues are drawn from pari-mutuel wagering throughout the world. With a weaker global economy, revenues were significantly affected.

Race horse breeding also has gone through significant changes in Indiana. The economic climate for horse racing in neighboring states is believed to be less encouraging than in Indiana. There is evidence from the surveys that there has been a significant influx of breeders, specifically with larger more sophisticated operations. These breeders are not only from neighboring states but generally from states nationwide and from international breeding operations

Two important conclusions can be drawn from the data. While the race tracks have been impacted by global economic conditions, as revenues fell, the racing industry responded with more efficient operations. The race tracks must still continue to run races, offer purses, and conduct operations at the race tracks. Consequently, the major impact appears to be to corporate profits while the welfare impact on the State of Indiana was minimized.

The second conclusion is that the horse breeding industry in Indiana is also undergoing significant restructuring and consolidation as more breeders enter the state employing more skilled employees.

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**REFERENCES**

- Conners, S.E., L. Couetil, J.M. Furdek, and M.A. Russell (2011). “Indiana Equine Industry Economic Impact and Health Study”. Purdue Calumet Equine Program. Hammond, Indiana.
- Conners, S.E., J.M. Furdek, L. Couetil, G. Preston (2010). “ Economic Impact of the Horse Racing and Breeding Industry”. Purdue Calumet Equine Program. Hammond, Indiana.
- Conners, S.E. and J.M. Furdek (2014). “2014 Pari-Mutuel Horse Racing Industry Economic Impact Study”. Purdue Calumet Equine Program. Hammond, Indiana.
- Hodges, A.W. (2007). “Understanding and Using Economic Multipliers”. USDA Economists Group.
- Minnesota IMPLAN Group (MIG). [www.IMPLAN.com](http://www.IMPLAN.com) (2010).

**NOTES**