

Bureau of Business and Economic Research

The Economic Impact of the Thoroughbred and Greyhound Racing Industries on West Virginia's Economy 2012

John Deskins, Ph.D. Director Christiadi, Ph. D. Research Associate, Demographer Austin Augustine, Graduate Research Assistant

January 2014

© Copyright 2014 WVU Research Corporation

bber.wvu.edu

PO Box 6527 Morgantown, WV 26506 (304) 293-7831 bebureau@mail.wvu.edu Funding for this research was provided by the Charles Town Horsemen's Benevolent and Protective Association (HBPA), Mountaineer Park Horsemen's Benevolent and Protective Association, the West Virginia Thoroughbred Breeders Association, and the West Virginia Greyhound Owners and Breeders Association. The opinions herein are those of the authors and do not necessarily reflect those of the Charles Town HBPA, the Mountaineer Park HBPA, the West Virginia Thoroughbred Breeders Association, West Virginia Greyhound Owners and Breeders Association, the West Virginia Higher Education Policy Commission, or the West Virginia University Board of Governors.

Table of Contents

List	of Figures		ii
List	of Tables		iii
Exe	cutive Summa	ry	1
1	Introduction		4
2	Overview of	the West Virginia Racing Industries	6
	2.1 History	y of the West Virginia Racing Industries	6
	2.2 Track a	and Region Profiles	8
3	Sources of R	Levenue	16
	3.1 Racetra	ack Pari-mutuel Betting Handle	17
	3.2 Racetra	ack Video Lottery and Table Games	20
	3.3 Effect	of State Law Revisions on Industry Revenue	27
	3.4 Compe	etition from neighboring states	29
	3.5 Racetra	ack Revenue and Distributions	34
4	Economic In	npact	44
	4.1 Survey	Methodology	44
	4.2 Thorou	ighbred Racing Impact	50
	4.3 Greyho	ound Racing Impact	54
	4.4 Total E	Economic Impact	57
	4.5 Other s	sources of Potential Economic Impact	59
5	Conclusions		60
App	endix A: Thor	roughbred Racing Industry Terms	63
App	endix B: Econ	nomic Impact Terms	65
App	endix C: Surv	eys	66

List of Figures

Figure 1: Racing Industries Revenue Flow Chart	17
Figure 2: Total Statewide Pari-mutuel Betting Handle (1970-2012)	18
Figure 3: Breeder and Owner Revenue from Pari-mutuel Betting Handle (1999-2012)	20
Figure 4: Breeder and Owner Revenue from VLTs and Table Games (FY1995-FY2012)	27
Figure 5: Share of VLT Gross Terminal Income (1995-2013)	29
Figure 6: Cities where Casinos are Located in the West Virginia Region*	33
Figure 7: Growth of Net Revenue from VLTs and Table Games (1996-2013)	34
Figure 8: Thoroughbred Farm Annual Expenditures	48
Figure 9: Greyhound Farm Expenditures by Category	50

List of Tables

Table 1: Economic Impact of the Racing Industries on West Virginia, 2012	2
Table 2: WV Racing Commission Revenue, 2012	7
Table 3: Allocation of Live Racing Commissions	19
Table 4: Original Allocation of VLT NTI in the Racetrack Video Lottery Act	22
Table 5: Racetrack Video Lottery Revenue Allocation Formula	24
Table 6: Racetrack Table Games Revenue Allocation Formula	25
Table 7: 2012 Thoroughbred Development Fund Distributions	26
Table 8: Location and Ownership of Casinos in West Virginia and Neighboring States	31
Table 9: Charles Town Pari-mutuel Handle Revenue and Disbursements	35
Table 10: Total Charles Town VLT and Table Game Distributions by Category and Year	36
Table 11: Mountaineer Park Pari-mutuel Revenue and Disbursements	37
Table 12: Total Mountaineer VLT and Table Game Revenue by Category and Year	38
Table 13: Mardi Gras Pari-mutuel Revenue and Disbursements	40
Table 14: Total Mardi Gras VLT and Table Game Revenue by Category and Year	41
Table 15: Wheeling Island Pari-mutuel Revenue and Disbursements	42
Table 16: Total Wheeling Island VLT and Table Game Revenue by Category Year	43
Table 17: Total Surveys Mailed and Response Rate by Category	45
Table 18: Thoroughbred Survey Respondents by Track and Category	46
Table 19: Thoroughbred Survey Respondents by State	47
Table 20: Greyhound Survey Respondents by Track and Category	48
Table 21: Greyhound Survey Respondents by State	49
Table 22: Total Direct Economic Impact by Category and County, 2012	51
Table 23: Direct Employment in the Thoroughbred Racing Industry, 2012	52
Table 24: Economic Impact on Jefferson and Hancock Counties, 2012	53
Table 25: Total Direct Economic Impact by Category and County	55
Table 26: Direct Employment in the Greyhound Racing Industry	56
Table 27: Economic Impact on Kanawha and Ohio Counties	57
Table 28: Economic Impact of the Racing Industries in Non-racetrack Counties	58
Table 29: Total Statewide Economic Impact of the Racing Industries	59

Executive Summary

In this study we estimate the total economic impact of the thoroughbred horse and greyhound racing industries on the West Virginia economy. Based on a survey of hundreds of participants in the thoroughbred and greyhound racing industries, we first estimate the direct economic impact of the industries on business volume, employment, employee compensation, and tax revenue in the state. In addition to these direct economic impacts, the activity within these racing industries can have spillover effects on other industries. We use a sophisticated economic modeling approach to estimate this additional economic activity that is created by these spillover effects.

This research focuses on the state's two thoroughbred and two greyhound racetracks:

- Hollywood Casino at Charles Town Races (thoroughbred).
- Mountaineer Casino Racetrack and Resort (thoroughbred).
- Mardi Gras Casino and Resort (greyhound).
- Wheeling Island Hotel-Casino-Racetrack (greyhound).

We provide economic impact estimates of these industries at the local level – in the counties in which the four racetracks are located – and for the state of West Virginia as a whole. Our estimates are for the 2012 calendar year.

The key findings of our study are as follows (See Table 1 for a summary of impacts):

- The thoroughbred and greyhound racing industries in West Virginia contribute more than \$321 million in total business volume to the state's economy. To provide some context, this level of output constitutes about 12 percent of the leisure and hospitality sector statewide.
- The industries support more than 7,300 jobs in West Virginia. This figure is equivalent to about 10 percent of employment in the state's leisure and hospitality sector.
- The industries generate more than \$100 million in total employee compensation.
- The industries generate \$4.6 million in total state tax revenue.
- Thoroughbred racing accounts for around three-fourths of the total economic impact of the two industries.

- Jefferson County, home to Charles Town Races, accounts for nearly half of the total business volume impact of the industries, while Hancock County, home to Mountaineer Park, accounts for nearly 30 percent. The two greyhound racing counties together account for approximately 10 percent of the total business volume impact.
- Approximately 11 percent of the total business volume impact of the industries that is experienced within the state is outside of the four racing counties.

Table 1: Economic Impact of the Racing Industries on West Virginia, 2012

	Direct Impact	Indirect & Induced Impact	Total Economic Impact
Business Volume (millions)	\$146	\$175	\$321
Employment (jobs)	5,368	1,947	7,315
Employee Compensation (millions)	\$47.3	\$53.3	\$100.6
Total State Taxes (millions)	\$2.2	\$2.4	\$4.6

Despite their impact on the state's economy, the racing industries face significant challenges. Revenue for racing industry participants comes primarily from purses, which are paid to winning dogs and horses, as well as breeder development funds. Though some races have seen record purses in recent years, total purse from the pari-mutuel betting handle has been diminishing over the last decade. The following are key findings with regard to owner and breeder revenue:¹

- Accounting for inflation, total pari-mutuel betting handle fell by about one-third from its
 peak in 2004 to 2012. Purses from pari-mutuel betting handle fell by about 45 percent
 over this time.
- Racetrack video lottery terminal (VLT) revenue and table games revenue to owners from purses and development funds peaked in 2005, and has fallen by close to 30 percent through fiscal year 2013.

2

¹ This document generally refers to owners and breeders collectively. However owners and breeders may not receive the same revenue sources. For example, breeders who do not own horses do not collect purse revenue.

- Owners and breeders received approximately 15 percent of VLT revenue when the terminals were first introduced in fiscal year 1995, but that share fell to less than 10 percent in the 2013 fiscal year.
- Promotional play credits deducted from VLT revenue by racetrack operators accounted for 12 percent of gross terminal income in fiscal year 2013. This had the effect of reducing the share of revenue going to the remaining stakeholders, including purses, development funds, and state and local governments.

1 Introduction

The thoroughbred horse and greyhound racing industries have a long history in West Virginia, with the industries' modern era beginning in the mid-1930s with the founding of the famous Charles Town Races in Jefferson County. Since then, the industries have expanded significantly to include a second competitive thoroughbred racing venue as well as two greyhound racing venues.

While a cursory examination will reveal that these industries generate noticeable economic impacts for the state in terms of employment, employee compensation, business volume, and the like, little research has been conducted to document the industries' size in a rigorous fashion. And further, since racing activities today are complex and heavily intertwined with the broader economic activity within the state, it is reasonable to believe that the total economic impact of the industries far exceeds the industries' direct activity.

Given the potential importance of these industries to West Virginia, in this report we document the direct economic impacts of the combined thoroughbred and greyhound racing industry in West Virginia in terms of how the industry affects employment, employee compensation, business volume, and tax revenue. Our results are based on a survey that was administered to hundreds of participants in the state's racing industries. We also use a sophisticated analytical approach to estimate how the industries spill over to support these economic outcomes in the broader economy where each racing venue is located, as well as in the state as a whole.

This research focuses on both of West Virginia's thoroughbred racetracks as well as both of the state's greyhound racetracks, which are as follows:

- Hollywood Casino at Charles Town Races (thoroughbred).
- Mountaineer Casino Racetrack and Resort (thoroughbred).
- Mardi Gras Casino and Resort (greyhound).
- Wheeling Island Hotel-Casino-Racetrack (greyhound).

Our results indicate that the state's racing operations contribute significantly to the economies of the local communities where the racetracks reside, and the state's economy as a whole. Our

analysis shows that the racing industries contribute more than \$321 million to the state's economy. The industries support more than 7,300 jobs, which to place in context, would represent approximately 10 percent of employment in the state's leisure and hospitality sector.

We also examine changes in purse and development fund revenue to the state's owners and breeders of thoroughbreds and greyhounds. A combination of factors has reduced overall revenue to these industry participants. On an inflation-adjusted basis, purses from the parimutuel betting handle (hereafter handle) fell by about 45 percent between 2005 and 2012. Revenue from racetrack video lottery and table games has also fallen about 24 percent in 2012 from its peak in 2005.

The study is organized as follows: Section 2 provides an overview of the racing industries in West Virginia. In Section 3, we examine state legislation that forms the foundation of the racing industries, as well as recent important legislation that affects the industries. We also detail the effects of changes in state law on revenue for the breeder and owner sector of the industries, and other racing industry trends. Section 4 provides our estimate of the economic impact of the racing industries. In it we describe the survey methodology that we used to calculate both the direct impact of the industries on the local economy, and we provide our estimate of the overall effect of the racing industries, given the positive spillover effect they have on other businesses in the region. The final section outlines our conclusions.

2 Overview of the West Virginia Racing Industries

West Virginia currently has four racetracks, including two thoroughbred horse racetracks and two greyhound racetracks. Hollywood Casino at Charles Town Races, located in Charles Town, Jefferson County, and Mountaineer Casino Racetrack and Resort near Chester, Hancock County, present live horse racing and other gambling entertainment. The state's two greyhound racetracks are Wheeling Island Hotel-Casino-Racetrack in Wheeling, Ohio County, and Mardi Gras Casino and Resort in Cross Lanes, Kanawha County.

This section starts with a short history of horse and dog racing in the state. We start with the founding of the West Virginia Racing Commission, the governing body that oversees the racing industries in the state, and outline the original legislation authorizing racetrack video lottery and table games. We then profile the state's four racetracks and the counties in which they are located.

2.1 History of the West Virginia Racing Industries

The history of organized horse and dog racing in West Virginia begins with the founding of the West Virginia Racing Commission in 1931, when the agency was created by statute to oversee the fledgling racing industries in the state. Charles Town Races had its grand opening two years later and the state's racing industries were born.

Greyhound racing was authorized by the West Virginia Legislature in 1975 with the passage of a bill that amended the state code on pari-mutuel racing. Wheeling Island Hotel-Casino-Racetrack, then called Wheeling Downs, transitioned from horse racing to dog racing in 1976, and Tri State Racetrack, now called Mardi Gras Casino and Resort, was incorporated in the same year.

West Virginia currently has four racetracks, two that feature thoroughbred horse racing, and two that feature dog racing. The tracks have undergone significant changes since they were founded. With the advent of slot machines and, more recently, table games, the state's racetracks have become more diversified in their gambling offerings.

2.1.1 West Virginia Racing Commission

The Racing Commission is charged with the promotion of thoroughbred and greyhound breeding in the state and has regulatory jurisdiction over all horse and dog races in the state. Primary funding for the Racing Commission comes from a tax on the pari-mutuel betting handle. The Racing Commission also receives up to 5 percent of the WV Thoroughbred Development Fund, and up to 10 percent of the WV Greyhound Development Fund to pay for administering these funds and for use in promotion of the horse and dog racing industries. Table 2 shows the sources of revenue for the Racing Commission's operations.

Table 2: WV Racing Commission Revenue, 2012

	Revenue (\$, 000s)
State Commission Share of Wagering (pari-mutuel tax)	2,125.2
Thoroughbred Racetrack Operator	998.4
Greyhound Racetrack Operator	1,126.8
Daily License Tax Paid to State by:	196.2
Thoroughbred Racetrack Operator (\$250 per race day)	110.3
Greyhound Racetrack Operator (\$150 per race day)	86.0
Occupational License Fees collected:	389.0
Charles Town	194.5
Mountaineer Park	148.0
Mardi Gras	35.6
Wheeling Island	10.9
Fines Imposed & Collected	89.1
Charles Town	49.1
Mountaineer Park	29.6
Mardi Gras	5.6
Wheeling Island	4.9
Total All Sources	2,799.5

In addition to the pari-mutuel revenue, a portion of the net revenue from video lottery is allocated to special funds operated by the Racing Commission. These funds are primarily used to distribute purses for the West Virginia Thoroughbred Breeders Classics and the West Virginia Derby. The remainder of the money is spent on track capital improvements and breeder development funds.

2.1.2 Racetrack Video Lottery and Table Games

In 1994, the Legislature passed the Racetrack Video Lottery Act (RVLA), which authorized racetracks to operate slot machines under the auspices of the West Virginia Lottery. The four counties where the racetracks were located were given the option of permitting video lottery terminals (VLTs) to be installed at their racetracks. Voters in Hancock, Ohio, and Kanawha counties approved the slot machines at their first opportunity, and the racetracks began operating VLTs in fiscal year 1995. Voters in Jefferson County, where Charles Town Races is located, approved VLTs in 1996, and they went into operation in September of 1997.

In 2007, the West Virginia Legislature expanded the authority of the West Virginia Lottery to allow tracks to incorporate table games at their casinos.² Voters in all four counties where the racetracks are located have now authorized table games at their respective casinos.

2.2 Track and Region Profiles

West Virginia's four racetracks constitute the heart of the state's racing industries. Since the early 1930s, they have played a significant role in the communities surrounding the tracks, as well as the rest of the state's economy. This section gives a brief history of the racetracks, and some information about the counties in which they are located.

2.2.1 Hollywood Casino at Charles Town Races

The Hollywood Casino at Charles Town Races, located in Jefferson County, was the first horse track founded in West Virginia. According to the racetrack's official history, the track's original owners were Albert and Joseph Boyle, who spent \$160,000 (approximately \$2.9 million in 2013)

² The Racetrack Video Lottery Act and Racetrack Table Games Act are covered in more detail in subsequent sections.

dollars) to build the track at the height of the Great Depression.³ At the time, it was the only horse racing track in the country that ran races in the winter months. The grand opening on Dec. 2, 1933, garnered visitors from across the east coast, with special trains scheduled for bettors to come from Washington, DC, Baltimore, and Philadelphia.⁴

The track was very successful throughout the middle of the 20th century and a number of dignitaries visited the grounds. In 1960, presidential candidate John F. Kennedy held a rally at the track and FBI Director J. Edgar Hoover was a frequent visitor. The track has hosted several famous jockeys, including Hall of Fame jockey Bill Hartack, who began his career at the track, going on to win 4,277 races, including nine races in the Triple Crown series.

In 1972, the Charles Town Races facility was sold to Shenandoah Corporation, which moved year-round racing to the facility from the Shenandoah Downs thoroughbred race horse facility.⁵ The Charles Town Races hit its height in the 1980s, when it was the highest-grossing track in the United States.⁶ But during the 1990s, the track's finances began to deteriorate as it faced competition from nearby states, such as Pennsylvania and Delaware.

After the Legislature authorized slot machines in 1994, Jefferson County voted that year to deny slot machines at the track, and the owners briefly shut down the track in December of that year. Two years later, Jefferson County voters approved slot machines at the racetrack, and the next year, the track was reopened under the new ownership of Penn National Gaming. In December 2009, with the track again threatened by competition from other states, Jefferson County approved table games at the track.

-

³ Hollywood Casino at Charles Town Races, "History," http://www.hollywoodcasinocharlestown.com/About/History (accessed June 3, 2013).

⁴ Special to the New York Times, "Races Begin Today in West Virginia," *The New York Times*. Dec 2, 1933.

⁵ Hollywood Casino at Charles Town Races, *Hollywood Casino at Charles Town Races 2013 Racing Media Guide*,[2013]).

⁶ Jan Vertefeuille, "Historic Track is History; Charles Town's Owners Bet it all on a Video Lottery - and Lost," *The Roanoke Times*, sec. A, Dec 25, 1994.

Since additional forms of gambling have been allowed, purses have risen dramatically and the owners have made large-scale upgrades, totaling \$175 million. In addition to live and simulcast horse racing, the Hollywood Casino at Charles Town Races features 3,500 slot machines, more than 100 table games, and a wide variety of other entertainment.

Started in 2009, the Charles Town Classic has risen to become one of the sport's premier events. In 2013, the race offered a \$1.5 million purse, the largest in the United States outside of the Kentucky Derby and Breeders' Cup, which are part of the Triple Crown championship series. The race, typically held in the spring, brings in some of the best race horses in the country, and has become an early indicator of the year's top winners.

The West Virginia Breeders' Classics are a group of races that highlight the state's top race horses. Founded in 1987 by NFL Hall of Famer Sam Huff, the Classics is a nine-race event, which featured \$2 million in prize money as recently as 2009.

Jefferson County Profile

Charles Town is located in Jefferson County, which is the 11th-largest county in West Virginia with a population of more than 54 thousand people. Jefferson County is part of the Washington–Arlington–Alexandria Metropolitan Statistical Area, and thus has close ties to the economy of the Washington, DC, area. It is also one of the fastest-growing counties in the state, second only to nearby Berkeley County, with population rising at an average of nearly 2 percent per year since 2002. At 38.4 years, Jefferson County's median age is fairly low compared with the state average of 41.1 years. Jefferson County also has a lower proportion of residents over the age of 65 than the state as a whole, with 11.4 percent of the county's residents above that age compared with 15.8 percent for the state. Educational attainment is also higher in this county; the percentage of the population with a bachelor's degree or higher is 27.7 percent, compared with a rate of 17.3 for the state.

⁷ Hollywood Casino at Charles Town Races, *History*, http://www.hollywoodcasinocharlestown.com/About/History ed., Vol. 2013.

⁸ Demographic data in this section and later county profiles comes from the US Census Bureau. US Census Bureau. "American FactFinder." Accessed Dec 17, 2013, http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml.

Total non-farm employment in Jefferson County was 15,044 people in 2012, which was up more than 2 percent from the previous year. The county's employment was dominated by the leisure and hospitality sector, which includes the gaming and racing industries. Employment in this sector was 4,258, which constituted 28 percent of total employment within the county. This concentration was far higher than the state's leisure and hospitality sector, which comprises only 10 percent of the state's jobs.

Average annual wages were \$35,595 for all workers in Jefferson County, which is about 10 percent below the state average. The low wages are likely due to the high concentration of leisure and hospitality jobs, which, at an average annual wage of \$25,386, pay lower wages than those in most other industries. However, overall wages rose at almost double the overall state rate from 2011 to 2012, increasing 5.2 percent compared with the state's 2.9 percent growth over the same period.

2.2.2 Mountaineer Casino Racetrack and Resort

Mountaineer Casino Racetrack and Resort is located near Chester in Hancock County, and is colloquially known as Mountaineer Park. Originally named Waterford Downs, the racetrack was built in 1946 by A.J. Boyle of Charles Town on a former orchard site. Boyle, who was a principal owner of the Charles Town Jockey Club, sited the track near potential markets of the large metropolitan areas of Pittsburgh, Pennsylvania, and Cleveland and Columbus, Ohio.

Mountaineer Park has a storied seven-decade history. Famed jockey Bill Hartack won his first race at the track in 1953 at the age of 19. Other Hall of Famers Pat Day, Mickey Solomone, Angel Cordero Jr., Chris McCarron, and Steve Cauthen have also raced at the track. Though the site has undergone significant changes since it was built, the original grandstand, racetrack, and paddock remain as they were in the 1940s. The racetrack was listed on the National Register of Historic Places in 2001. Mountaineer Park has faced some adversity. In 1983, for example, the track was shut down briefly after the West Virginia Derby, a mainstay at the park for many

⁹ Barbara E. Rasmussen, *Waterford Park, Hancock County, West Virginia*. National Register of Historic Places, 2001). http://pdfhost.focus.nps.gov/docs/NRHP/Text/02001528.pdf.

¹⁰ Bill Finley, "Bill Hartack, 74, Champion Jockey, Dies," *The New York Times*. Nov 28, 2007.

years, was discontinued.¹¹ However the track has been invigorated in recent years after the advent of video lottery and table games.

Mountaineer Park is currently owned by MTR Gaming Group, which purchased the facility in 1992. ¹² Under the new management, the track has undergone significant modernization. The Casino houses more than 2,500 slot machines and has a wide variety of table games, ranging from poker to roulette. The racetrack is surrounded by an upscale resort, consisting of a hotel, golf course, fine dining and entertainment, a theater and events center, and a convention center. MTR announced in September 2013 that it plans a merger with Eldorado Resorts, set to be finalized in early 2014. ¹³

Hancock County Profile

Mountaineer Park is the largest employer in Hancock County, ¹⁴ and because of this it plays an outsized role in the county's economy. The leisure and hospitality sector, which encompasses the racetrack and casino industries, constituted approximately 21 percent of the county's total employment of 11,171 jobs in 2012. ¹⁵ The largest proportion of the county's employment was in the manufacturing sector, however, with 26 percent of the jobs, far higher than the state proportion of less than 7 percent.

Hancock County had a population of approximately 38,000 people in 2012, which placed it around the midpoint of the state's counties. The county's population has been falling over the last decade at an average rate of 0.5 percent per year. Hancock County has a somewhat older population than the rest of the state. The median age in the county is 44.6 years, compared with

¹¹ Rasmussen, *Waterford Park, Hancock County, West Virginia*. National Register of Historic Places, 2001). http://pdfhost.focus.nps.gov/docs/NRHP/Text/02001528.pdf.

¹² UNLV Center for Gaming Research, "MTR Gaming Group Company Profile," http://gaming.unlv.edu/abstract/fin mntg.html (accessed Nov 8, 2013).

¹³ The Associated Press, "MTR Gaming, Eldorado Announce Merger," *Charleston Daily Mail.* Sept 10, 2013.

¹⁴ Workforce West Virginia, "Hancock County Profile," http://www.workforcewv.org/lmi/CNTYPROF/hancock.pdf (accessed Dec 2, 2013).

¹⁵ WorkForce West Virginia. "Hancock - Employment & Wages 2012," http://www.workforcewv.org/lmi/EandWAnnual/ew12cnty029.html (accessed Nov 8, 2013).

41.1 years for the state as a whole. Also, the county's percentage of population over the age of 65 is 18.6 percent compared with 15.8 percent for the state. Hancock County has a lower-than-average educational attainment. The percent of the county's population with a bachelor's degree or greater is 15.3 percent, compared with the state average of 17.3 percent.

The average annual wage in Hancock County was \$33,880 for all workers, which was about 14 percent lower than the state average for that year. Wage growth was substantially higher than the state average, coming in at 6.6 percent, compared with 2.9 percent for the state. The average annual wage in the leisure and hospitality sector was \$29,492, about 30 percent higher than the state average for that sector.

2.2.3 Mardi Gras Casino and Resort

Located in Cross Lanes in Kanawha County, Mardi Gras Casino and Resort operates one of the state's two dog racing tracks. Incorporated in 1976 as Tri-State Greyhound Racing Inc., the track operated under the name Tri-State Racetrack for most of its history. Ownership was transferred to a new company called Racing Corporation of West Virginia in 1989. The name was changed to Tri-State Casino and Resort in 2002, and to the current name in 2010 soon after the introduction of table games at the casino.

In addition to dog racing, the racino houses more than 1,200 slot machines and offers a full slate of table games, including roulette, blackjack, and poker. Its luxury hotel and resort is also a major tourist attraction in Kanawha County.

Kanawha County Profile

Kanawha County has the largest population in the state, with nearly 193,000 people. The population is somewhat older than the state average with a median age of 42.3 years. The percentage of residents over the age of 65 is also higher, at 16.7 percent, compared with 15.8 percent for the state. Educational attainment in Kanawha County is higher than the state average, at 23.4 percent of the population with a bachelor's degree or higher compared with 17.3 percent for the state as a whole.

As the largest county, Kanawha County also has the highest level of employment in the state, with about 105 thousand positions in 2012. The job numbers were virtually unchanged from the

year before, rising less than a tenth of a percent. Due to the presence of the state's capital, the government sector is the largest employer in Kanawha County, with 20.4 percent of employees. The leisure and hospitality sector constituted a bit less than 10 percent of the employment in the county, which was similar to the state average.

Wages in the county were somewhat higher than the state average, coming in about \$42,500, compared with \$39,700 for the state. Average wages in the county's leisure and hospitality sector were \$17,300 in 2012, which was about 9 percent higher than the state average for the sector. Overall wage growth between 2011 and 2012 was a little over 1 percent, which was lower than the state average of 2.9 percent.

2.2.4 Wheeling Island Hotel-Casino-Racetrack

Wheeling Island was founded in 1937 as a horse racing track under the name Wheeling Downs. ¹⁶ The track, which is located in Wheeling, fared well through the post-war period, but was hit with a fire in 1962, and the track shut down for the next five years. After reopening in the late 1960s, the track transitioned in 1976 from horse racing to dog racing, which was then seen as a more profitable enterprise.

The ownership of Wheeling Downs has changed hands several times since its transition to dog racing. It was purchased in 1988 by Delaware North Companies, under the name Sportsystems Corp., which co-owned the property with WHX Entertainment for several years before buying out WHX's share in 2001.¹⁷ The property now houses a 151-room hotel, 1,600 slot machines, and a 1,000-seat showroom.

Ohio County Profile

Ohio County is the 13th-largest county in the state, with a population in 2012 of more than 44 thousand. The county has a median age of 43.3 years, which is about two years higher than the state average. The population of residents 65 years and older is 18.4 percent, compared with 15.8

¹⁷ Vicki Smith, "Sportsystems Corp. Buys into Wheeling Downs," *The Associated Press*, sec. BC Cycle, Nov 20, 2001.

¹⁶ Wheeling Island Hotel-Casino-Racetrack. 2009. The History of Wheeling Island. 2013. http://www.wheelingisland.com/history.aspx.

percent for the state as a whole. Ohio County is a relatively educated population. The percent of the population with a bachelor's degree or higher is 25.9 percent, according to the US Census Bureau, compared with 17.3 percent for the state.

Total employment in Ohio County was about 29 thousand in 2012. Despite the presence of Wheeling Island, leisure and hospitality was only the fourth-largest sector in Ohio County, constituting 13 percent of the total employment. The county's largest employer was the education and health care services sector, which made up more than 23 percent of the total jobs in the county in 2012. Employment growth was fairly slow in Ohio County, up about half a percent from 2011 to 2012.

The average annual wage in Ohio County was \$34,575 in 2012, about 13 percent lower than the state average. In leisure and hospitality, the average wage was \$16,888, less than half the average wage for all non-farm employment. Overall wage growth was 3.6 percent between 2011 and 2012, considerably higher than the state average of 2.9 percent.

3 Sources of Revenue

An assessment of the economic impact of an industry begins with the sources of the industry's revenue. The total revenue available for distribution to participants in the racing industries is based on the dollars bet by customers at the tracks minus the winnings they receive from the games. This net revenue¹⁸ is then divided among three primary stakeholders: the licensed racing association (also called the licensee and hereafter referred to as racetrack operator), the state government, and the owners and breeders of dogs and horses.

Thoroughbred and greyhound owners rely heavily on the winnings from races, which are known as purses. Purse revenue for the racing industries comes from three primary sources: racetrack pari-mutuel betting, racetrack Video Lottery Terminals (VLTs), and racetrack table games. Breeders primarily receive their revenue from breeder development awards from the state's Thoroughbred Development Fund and the Greyhound Development Fund.

In this section we look at the revenue for the racing industries, and its distribution to the breeders and owners of the state's horses and greyhounds. Included in this section is an examination of the impact of state law revisions on purse revenue.

As Figure 1 indicates, wagers are placed by customers at the racetracks and the net revenue is forwarded to the state, where it is disbursed to the various stakeholders according to a variety of funding formulas. The following sections provide more detail on these disbursements.

¹⁸ We use net revenue in this document as a general term for amount bet minus the amount paid out to winning bettors. This figure is accounted for differently depending on the type of gambling activity undertaken. In parimutuel wagering, a commission is taken out of the pari-mutuel pool for paying purses and other stakeholders. In the case of VLTs, the amount left over after paying out winners is referred to as gross terminal income. For table games, the same figure is defined as adjusted gross receipts.

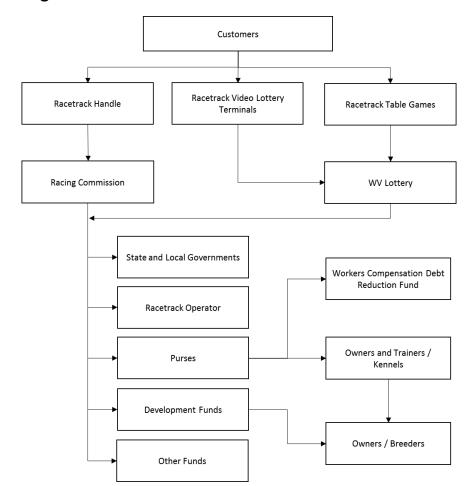


Figure 1: Racing Industries Revenue Flow Chart

3.1 Racetrack Pari-mutuel Betting Handle

Pari-mutuel betting handle at the state's racetracks was originally the only source of revenue for the racing industries. Total handle, which represents the entire amount wagered in any given year, went into a steady decline throughout the 1970s and 1980s, before rebounding since the state implemented other forms of legal gambling in the mid-1990s. Figure 2 shows the total inflation-adjusted handle from both thoroughbred and dog racing tracks in West Virginia from 1970 to 2012. Accounting for inflation, the total handle fell fairly consistently between 1970 and 1997, with a brief uptick in the mid-1980s. Handle surged in the late 1990s and early 2000s, but

has since fallen back to a little over \$600 million.¹⁹ Some of the recent decline in handle is likely due to the 2008-2009 recession and its lingering effects, but competition from racetracks in other states also may be contributing to the falloff in revenue.

Inflation-adjusted dollars (2013\$, millions)

900
800
700
600
500
400
300
200
100
0

Year

Source: WV Racing Commission

Figure 2: Total Statewide Pari-mutuel Betting Handle (1970-2012)

3.1.1 Distribution of Pari-mutuel Betting Handle

Revenue distributed to racing industry participants comes from only a portion of the handle taken out before paying winning wagers to racetrack customers. Handle from races held at the track where the wager is placed is known as live racing handle. For live races, the track deducts a commission from the total handle and then pays out winning bets from the remaining monies. Table 3 reports the percentage of live racing handle distributed to each industry participant. The commission percentage is higher for multiple bets, when a wager is placed on multiple horses at once, but in general, these percentages apply.

¹⁹ Available historical data do not indicate why these fluctuations occurred. One possible explanation for the revenue shift in the 1980s is the inclusion of handle from greyhound racing and new handle from simulcasting, which were authorized by the state Legislature in 1976 and 1982 respectively. The upswing in the 1990s may be related to renewed interest in racing following the installation of VLTs at the racetracks or the growing economy during that time period. Further research would be required to determine the causes of these variations.

The track also receives revenue for simulcasting races held at other tracks, or for broadcasting its races to other locations, which in West Virginia is known as live export. In either case, the track hosting the race receives a portion of the handle, which is called a signal transmission fee, and the track where the wager is placed also receives a portion of the handle. West Virginia's tracks receive the majority of their income from simulcasting. In 2012, more than 80 percent of track revenue came from simulcasting.

Table 3: Allocation of Live Racing Commissions

	Thoroug	Greyhound	
	May-September	October-March	
Purses	6.9%	7.4%	3.8%
Racetrack Operator	6.9%	7.4%	8.2%
State Pari-mutuel tax	1.4%	0.4%	3.7%
County	0.1%	0.1%	0.1%
City			0.3%
Development Funds	2.0%	2.0%	0.3%
Total Commission	17.3%	17.3%	16.3%

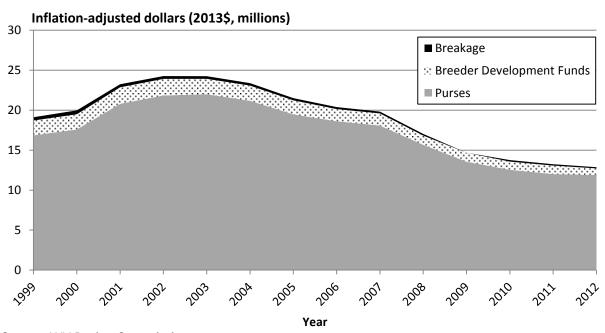
3.1.2 Owner and Breeder Revenue From Pari-mutuel Betting Handle

Purses, which are paid to winning horses and dogs, are the primary source of revenue for thoroughbred and greyhound owners. Purses come from three different sources: a percentage of the net revenue from pari-mutuel wagering, a percentage of the net revenue from VLTs, and a percentage of the net revenue from table games. Total purse from handle has been diminishing over the last decade. On an inflation-adjusted basis, total statewide gross handle fell by about a third from its peak in 2004 to 2012 (see Figure 3). Purses from handle fell by about 45 percent in the same time frame. This disparity between the handle and purse revenues is due to a larger proportion of the handle coming from simulcasting for which the host track receives a smaller proportion of the handle to distribute to purses and the racetrack operator.²⁰

²⁰ Greyhound owners receive no purse revenue from exported simulcasting.

Figure 3 shows the revenue streams from handle for the horse and dog owners and breeders. Purses make up the largest portion of revenue, but have declined along with the reduction in handle over the last 10 years. Additional revenue comes from the West Virginia Greyhound and Thoroughbred Development funds, and in thoroughbred racing, a portion of the breakage, which is the amount of money left over from rounding the payout to bettors, is also allocated to horsemen. The breakage in greyhound racing goes to the racetrack operator.

Figure 3: Breeder and Owner Revenue from Pari-mutuel Betting Handle (1999-2012)



Source: WV Racing Commission Note: 2009 Breakage Data unavailable

3.2 Racetrack Video Lottery and Table Games

Prior to 1994, the state's racetracks relied entirely on pari-mutuel betting revenue to fund their operations. However during the 1980s and early 1990s, the horse and dog racing industries faced falling revenue as inflation-adjusted handle dropped below a third of its height in 1970. As a

_

²¹ Of this purse revenue, \$500 thousand from each of the thoroughbred tracks is deposited into in a pension fund for backstretch employees. Backstretch workers, such as riders, grooms and stable forepersons, are employed by horse and dog owners and trainers, and are not employees of the racetrack operator.

result, racetrack operators, and groups representing the thoroughbred and dog industries, began looking for alternative revenue streams, urging the West Virginia Legislature to allow slot machines at the state's racetracks.

The Legislature responded to the declining fortunes of the racing industries by passing the Racetrack Video Lottery Act (RVLA). The RVLA allowed existing racetracks to offer slot machine gaming in addition to horse and dog races. According to the Act's legislative findings, the law was designed to protect the state's pari-mutuel racing industries:

"The Legislature finds and declares that the existing pari-mutuel racing facilities in West Virginia provide a valuable tourism resource for this state and provide significant economic benefits to the citizens of this state through the provision of jobs and the generation of state revenues; that this valuable tourism resource is threatened because of a general decline in the racing industry and because of increasing competition from racing facilities and lottery products offered by neighboring states; and that the survival of West Virginia's pari-mutuel racing industry is in jeopardy unless modern lottery games are authorized at the racetracks."

The original RVLA defined how revenue from slot machines would be distributed to the various stakeholders: the state, the racetrack operators, and purses. Gross terminal income (GTI) from the video lottery terminals (VLTs), which was defined as the total amount bet minus the total amount won, was divided up according to a formula defined in the law. Up to 4 percent of the GTI was allocated to the WV Lottery as administrative costs. The remaining net terminal income (NTI) was allocated as indicated in Table 4.

Table 4: Original Allocation of VLT NTI in the Racetrack Video Lottery Act

	Share of Net Terminal Revenue
Racetrack operator	47.0%
WV Lottery fund (state government)	30.0%
Purses	14.0%
Thoroughbred and greyhound development funds	1.5%
Pension funds for employees of racetrack operator	0.5%
All other funds, including local governments, tourism and veterans affairs	7.0%

The RVLA has been modified several times since its initial passage. In 2001, the Legislature made a major revision to the RVLA, a so-called "benchmarking" that made changes to the revenue distribution formulas. The revision, effective in fiscal year 2002, designated any revenue above that collected in 2001 as "excess net terminal income." The legislation maintained the same allocation percentages for NTI up to that collected at each track in fiscal year 2001, but changed the allocation for the excess NTI. A larger share of the excess NTI was allocated to the state government, with reduced shares going to the racetracks and purses. The 2001 legislation also established a capital investment fund that allows racetracks to be reimbursed for a portion of their costs associated with upgrading racetrack facilities.

Another major revision in 2005, effective in fiscal year 2006, established the Workers' Compensation Debt Reduction Fund. The revision reduced the percentage of revenue going to purses, by allocating half of the purse share – up to \$11 million per year – to reduce the state's workers' compensation debt. As of fiscal year 2013, \$88 million had been allocated to the debt fund. The 2005 revision also reallocated half a percentage point of the racetrack operator's share of revenue to a pension fund for employees of the racetrack operators.

In fiscal year 2009, the RVLA was revised to allow the racetrack operators to deduct promotional play credits from the GTI. A fiscal year 2011 revision obligated the state to deposit up to \$10 million of state administrative costs into a new Licensed Racetrack Modernization Fund that could be used by the racetracks to upgrade VLT terminals and software. The combined

result of these changes reduced the share of GTI that was allocated to the remaining stakeholders, including the state, purses, development funds and local governments.

The current allocation of VLT revenue is derived from a complicated mix of deductions from GTI, and percentage allocations of the remaining NTI. Starting with GTI, the following deductions were taken out in fiscal year 2013:

- Approximately 12 percent of GTI was deducted for promotional credits. These credits
 are defined as credits to players that allow a limited amount of free play at the casinos.
 Generally these are allocated to regular customers as an incentive program. The amount
 of promotional credits is designated as a percentage of amount played.
- 4 percent was deducted from the total to fund the WV Lottery Commission's actual
 costs. Of this 4 percent, \$10 million is allocated to the Licensed Racetrack
 Modernization Fund. Any revenue above the Commission's costs is allocated to the State
 Lottery Fund, and any revenue above that collected in 2001 is allocated to the state
 Excess Lottery Fund.
- 10 percent was taken out as a surcharge and shared between the state Excess Lottery Fund (58 percent) and the Racetrack Capital Investment Fund (42 percent). The latter was set up in the 2001 fiscal year to enable racetracks to upgrade their facilities.

The remaining Net Terminal Income was divided according to the formula in Table 5:

Table 5: Racetrack Video Lottery Revenue Allocation Formula

	Percent of Net Terminal Income (up to 2001 level)	Percent of Excess Net Terminal Income (above 2001 level)		
Racetrack (including pensions)	47.5%	42.5%		
WV lottery fund (state government)	30.0%	41.0%		
Purses*	14.0%	8.0%		
Thoroughbred and greyhound development funds	1.5%	1.5%		
All other funds (includes Racing Commission, tourism, veterans affairs, and local government funds)	7.0%	7.0%		
* Includes 7 percent up to \$11 million for the Workers' Compensation Debt Reduction Fund				

As Table 5 indicates, the share of NTI allocated to purses is 14 percent. However, 7 percent of NTI, up to \$11 million per year, is deducted from the purse share and allocated to the Workers' Compensation Debt Reduction Fund. This deduction is scheduled to expire once the workers' compensation debt is retired and the unfunded workers' compensation liability has been addressed.

3.2.1 Table Games

With racetracks again threatened with competition from nearby states, the West Virginia Legislature passed the West Virginia Lottery Racetrack Table Games Act in 2007.

"The Legislature finds that horse racing and dog racing and breeding play a critical role in the economy of this state, enhance the revenue collected at the racetracks, contribute vital revenues to the counties and municipalities in which the activities are conducted, provide for significant employment and protect and preserve green space and; that a substantial state interest exists in protecting these industries. Furthermore, it finds that the breeding and racing of thoroughbred horses is an integral part of West Virginia's agriculture, and that agriculture is a critical ingredient in West Virginia's economy. It further finds that the operation of table games pursuant to this article, at racetracks in this state that hold racetrack video lottery licenses and licenses to conduct horse or dog

racing, will protect and preserve the horse racing and dog racing industries and horse and dog breeding industries, will protect and enhance the tourism industry in this state and indirectly benefit other segments of the economy of this state."

Revenue collection and distribution is different for table games than the video lottery. The state government taxes the adjusted gross receipts (AGR) from the table games, which is the amount bet minus the amount won, at a rate of 35 percent. This amount is then distributed to various funds, including purse and development funds. The breakdown based on percentage of AGR is given in Table 6.

Table 6: Racetrack Table Games Revenue Allocation Formula

	Share of adjusted gross receipts
Racetrack operators	65.0%
Lottery Commission administrative costs	Up to 4.0%
Purses	2.5%
Thoroughbred and greyhound development funds	2.0%
Counties and municipalities	3.5%
All other funds (includes WV Debt Reduction Fund, racetrack operator employee pensions, and non-racetrack counties)	23.0%

3.2.2 West Virginia Breeder Development Funds

Another major source of revenue for breeders and owners are the state's development funds for horses and greyhounds. While purses can be won by horses based outside of West Virginia, development funds are designed to provide income for local residents. The WV Thoroughbred Development Fund allocates monies to West Virginia residents who breed horses within the state, and the WV Greyhound Breeding Development Fund provides a similar allocation for greyhound breeders. Both funds are overseen by the West Virginia Racing Commission, which identifies eligible horses and dogs.

Revenue for the development funds come from both pari-mutuel distributions and from gambling operations. The percentages of the handle that are distributed to the development funds vary

depending on the track. However, in general, the development funds receive 2 percent of the pari-mutuel pool from live racing, plus various percentages of signal transmission fees collected for exported simulcasting, and of net simulcast income. In 2012, these pari-mutuel contributions to the development funds totaled about \$815 thousand. The development funds also receive a total of 1.5 percent of net terminal income from VLTs and 2 percent of adjusted gross receipts from table games. These contributions totaled an additional \$8 million in 2012. The development funds also receive 25 percent of any excess returned funds from the West Virginia Racing Commission not used for the West Virginia Thoroughbred Breeders Classics and the West Virginia Derby.

Distributions from the Thoroughbred Development Fund totaled \$9.6 million (see Table 7 for detail). These distributions are limited to accredited horses, which are those foaled or reside in West Virginia, or are sired by a West Virginia horse. Each horse receives a share of the total Thoroughbred Development Fund equal to its share of the accredited horses' total purse winnings for the year. The horse's share is then divided according to the following formula:

- 60 percent to breeders/raisers of the horse.
- 25 percent to the owner.
- 15 percent to the sire's owner.

Table 7: 2012 Thoroughbred Development Fund Distributions

	Breeder/Raiser	Owner	Sire's Owner	Total
Charles Town (thousands)	\$4,706.7	\$1,961.1	\$1,176.7	\$7,844.5
Mountaineer Park (thousands)	\$1,081.8	\$450.8	\$267.6	\$1,800.1

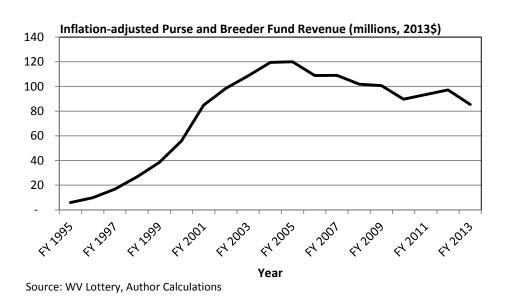
Distributions from the Greyhound Breeder Development Fund totaled \$4.3 million in 2012. These distributions are limited to greyhounds owned by West Virginia residents, and whose dam was also owned by a West Virginia resident. Greyhounds receive development monies in proportion to the number of points they have earned by winning or placing in races.

3.3 Effect of State Law Revisions on Industry Revenue

Because of the falloff in pari-mutuel purses, the racing industries have become more reliant on revenue from VLTs and table games. Purse revenue from VLTs and table games rose rapidly once they were implemented at the state's four racetracks (see Figure 4). But purse revenue has fallen in recent years, and was off about 24 percent in 2012 from its peak in 2005.

Because of the different reporting periods, it is difficult to compare the purse totals from parimutuel betting and gambling. But examining the total purse and breeder fund dollars from handle for 2012 and the purse dollars of VLT and table games for fiscal year 2012 (which includes the first half of 2012), gives a rough estimate of the share of revenue from casinos. Total purse share of handle was about \$12.8 million in 2012, and total purse share from VLTs and table games in fiscal year 2012 was \$91.7 million. Thus casino revenue represented approximately 88 percent of the revenue to breeders and owners last year.

Figure 4: Breeder and Owner Revenue from VLTs and Table Games (FY1995-FY2012)



As outlined above, the West Virginia Legislature has modified the Racetrack Video Lottery Act several times since its passage in 1994. Overall, these changes have caused a reduction in the percentage of gambling revenue going to purses. Revenue accruing to racetrack operators has

gone up over time, while that going to various state agencies has stayed fairly constant (see Figure 5).

Because the funding formulas have changed over time, this study calculates the share of revenue allocated to purses relative to the GTI (amount played minus amount won). This measure keeps a consistent base of measurement throughout the time period. Under this standard, the percentage of VLT revenue that is allocated to purses has fallen from approximately 14.1 percent in fiscal year 1995 to about 8.5 percent in fiscal year 2013. Combined purse and breeder development funds have fallen from 15.0 percent of GTI in fiscal year 1995 to 9.7 percent in fiscal 2013.

Over the same time period, VLT revenue allocated to racetrack operators has risen from 45.9 percent in fiscal year 1995 to 50.8 percent in fiscal year 2013. This revenue includes the racetrack operators' share of GTI, as well as that allocated for capital improvements and for promotional credits. The share allocated to state and local government programs rose between fiscal year 1995 and fiscal year 2006, up from 39.1 percent to 46.7 percent respectively. Since then, the state's share has fallen back to 39.5 percent in fiscal year 2013. The introduction of the promotional credit deduction has played a big part in the cut in the state's share of revenue. Promotional credits now represent about 12 percent of GTI.

²² Data for the Licensed Racetrack Modernization Fund were unavailable.

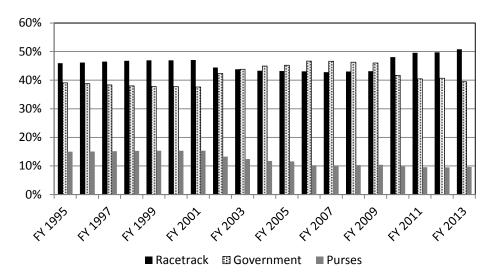


Figure 5: Share of VLT Gross Terminal Income (1995-2013)

Source: WV Lottery, Author Calculations

3.4 Competition from neighboring states

While state law changes have had a major impact on revenue for the racing industry, growing competition from nearby states also has taken its toll. Currently three states contiguous to West Virginia have authorized casino gaming (see Table 8).

Pennsylvania was the first contiguous state to legalize gambling when the state Legislature passed the Race Horse Development and Gaming Act in 2004. The law allowed slot machines at existing racetracks and construction of new non-racetrack casinos. The state's first slot machines began operation in late 2006 at the Mohegan Sun at Pocono Downs near Wilkes-Barre. In 2010, three years after West Virginia approved table games, Pennsylvania approved table games at the state's casinos and they began operation that same year. Currently Pennsylvania has 12 licensed casinos located across the state.

Maryland was the next nearby state to approve casino games, when voters there approved a constitutional referendum in 2008 to allow slot machines at five casino facilities. Maryland voters approved a second constitutional amendment in 2012 to authorize table games and an additional casino location. The state currently has five licensed casinos and one under construction. A sixth license for a casino in Prince George's County was awarded in December to MGM National Harbor. Maryland's casinos likely offer the stiffest competition for the

Hollywood Casino in Charles Town (see Figure 6 for casino locations). Rocky Gap Resort in Flintstone near Cumberland is an hour and a half drive from Charles Town and closer to Pennsylvania population centers, such as Pittsburgh. Maryland Live! Casino in Hanover, MD, is a short drive from Washington, DC, and Baltimore. And the Horseshoe Casino Baltimore is scheduled to be built in the downtown area in 2014.

Lastly, Ohio legalized casino games in a 2009 constitutional referendum at four full-service casino locations. In addition, the Ohio Lottery has licensed seven locations for VLTs. These casinos provide significant competition for West Virginia's racetracks, especially in the Northern Panhandle. Kentucky and Virginia currently do not allow casino gaming.

Table 8: Location and Ownership of Casinos in West Virginia and Neighboring States

Track	City	Gambling Available	Ownership
West Virginia			
Hollywood Casino at Charles Town Races	Charles Town	Thoroughbred, Table Games, Slots	Penn National Gaming
Mardi Gras Casino and Resort	Cross Lanes	Greyhound, Table Games, Slots	Hartman and Tyner
Mountaineer Casino Racetrack and Resort	Chester	Thoroughbred, Table Games, Slots	MTR Gaming Group
Wheeling Island Hotel-Casino-Racetrack	Wheeling	Greyhound, Table Games, Slots	Delaware North
Pennsylvania			
Harrah's Philadelphia Racetrack and Casino	Chester	Harness, Table Games, Slots	Caesars Entertainment
Hollywood Casino at Penn National	Grantville	Thoroughbred, Table Games, Slots	Penn National Gaming
Lady Luck Casino Nemacolin	Farmington	Table Games, Slots	Isle of Capri Casinos
Mohegan Sun at Pocono Downs	Wilkes-Barre	Harness, Table Games, Slots	Mohegan Tribal Gaming Authority
Mount Airy Casino Resort	Mount Pocono	Table Games, Slots	Mount Airy Casino Resort
Parx Casino/Parx Racing	Bensalem	Thoroughbred, Table Games, Slots	Greenwood Gaming and Entertainment
Presque Isle Downs and Casino	Erie	Thoroughbred, Table Games, Slots	MTR Gaming Group
Sands Casino Resort Bethlehem	Bethlehem	Table Games, Slots	Las Vegas Sands Corporation
SugarHouse Casino	Philadelphia	Table Games, Slots	Sugarhouse HSP Gaming
The Meadows Racetrack and Casino	Washington	Harness, Table Games, Slots	Cannery Casino Resorts
The Rivers Casino	Pittsburgh	Table Games, Slots	Holdings Acquisition
Valley Forge Casino Resort	King of Prussia	Table Games, Slots	Valley Forge Convention Center Partners

Track	City	Gambling Available	Ownership
Ohio			
Belterra Park Gaming and Entertainment Center	Cincinnati	Thoroughbred, Slots	Pinnacle Entertainment
Hard Rock Rocksino Northfield Park	Northfield	Harness, Slots	Hard Rock Cafe International
Hollywood Casino Columbus	Columbus	Table Games, Slots	Penn National Gaming
Hollywood Casino Toledo	Toledo	Table Games, Slots	Penn National Gaming
Hollywood Gaming at Dayton Raceway	Dayton	Harness, Slots	Penn National Gaming
Hollywood Gaming at Mahoning Valley Race Course	Youngstown	Thoroughbred, Slots	Penn National Gaming
Horseshoe Casino Cincinnati	Cincinnati	Table Games, Slots	Rock Gaming, Caesars Entertainment
Horseshoe Casino Cleveland	Cleveland	Table Games, Slots	Rock Gaming, Caesars Entertainment
Miami Valley Gaming & Racing	Franklin	Harness, Slots	Delaware North
Scioto Downs	Columbus	Harness, Slots	MTR Gaming Group
Thistledown Racino	North Randall	Thoroughbred, Slots	Rock Gaming, Caesars Entertainment
Maryland			
Casino at Ocean Downs	Berlin	Harness, Table Games, Slots	Ocean Enterprises
Hollywood Casino Perryville	Perryville	Table Games, Slots	Gaming and Leisure Properties (subsidiary of Penn National Gaming)
Horseshoe Casino Baltimore	Baltimore	Table Games, Slots	Caesars Entertainment
Maryland Live! Casino	Hanover	Table Games, Slots	Cordish Companies
Rocky Gap Casino Resort	Flintstone	Table Games, Slots	Lakes Entertainment
Name To Be Determined	Prince George's County	Table Games, Slots	MGM National Harbor

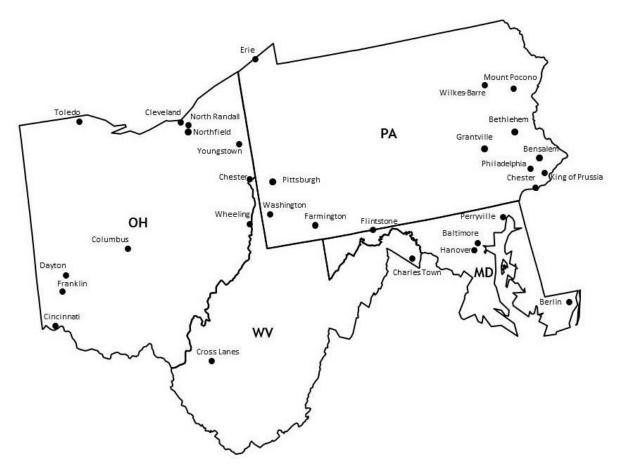
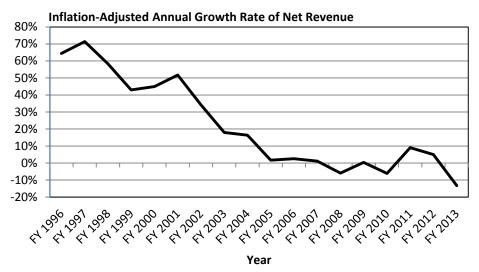


Figure 6: Cities where Casinos are Located in the West Virginia Region*

Source: West Virginia Racing Commission, Pennsylvania Gaming Control Board, Maryland Lottery and Gaming Control Agency, Ohio Casino Control Commission
* Cities may contain multiple casinos.

Increased competition with neighboring states has begun to affect West Virginia's gambling revenue. Gambling revenue grew substantially during gaming's first few years, and was growing as much as 20 percent per year until 2004 (see Figure 7). Revenue was essentially flat through 2010, and grew somewhat in 2011 and 2012, as table games became a larger share of racetrack lottery revenue. However, revenue fell in 2013 by more than 13 percent.

Figure 7: Growth of Net Revenue from VLTs and Table Games (1996-2013)



Source: WV Lottery, Author Calculations

3.5 Racetrack Revenue and Distributions

The previous sections of this chapter have detailed the revenue sources for the industry overall. The remainder of this chapter outlines the revenue and distribution breakdown for the four tracks individually.

3.5.1 Charles Town Races

Total pari-mutuel revenue at Charles Town has been growing in recent years, rising from \$14.1 million in 2010 to more than \$15 million in 2012, an increase of nearly 10 percent (see Table 9). In 2012, the track paid out approximately \$535 thousand to state and local governments, not including licensing fees.

Purse revenue from handle totaled about \$6 million in 2012, which was up 3.5 percent from the previous year. Purses have had their ups and downs at the track in the last decade. Since 1999, the earliest available data, purse revenue from handle peaked in 2002 at \$8 million. Purses fell to a low point in 2009 at \$5.2 million but have risen in each of the last three years.

Table 9: Charles Town Pari-mutuel Handle Revenue and Disbursements

	2010	2011	2012
Race Days	231	232	231
Total Handle (millions)	\$219.5	\$245.9	\$253.2
Net Revenue (thousands)	\$14,082.7	\$14,890.2	\$15,428.4
Commissions	\$8,379.2	\$7,699.2	\$7,642.6
Signal Transmission Fees	\$5,703.5	\$7,191.0	\$7,785.7
Disbursements to Horsemen (thousands)	\$6,418.5	\$6,867.8	\$6,861.0
Purses (includes breakage)	\$5,545.2	\$5,929.4	\$6,129.5
WV Development Fund	\$873.3	\$938.4	\$731.5
Disbursements for Racetrack Operations (thousands)	\$7,211.3	\$7,575.2	\$7,964.3
Racetrack Operator Share (includes breakage)	\$5,545.2	\$5,929.4	\$6,229.5
Transmission Cost of Simulcasting	\$511.2	\$506.8	\$508.0
Host Track Share of Simulcasting	\$1,002.2	\$977.9	\$1,055.5
Racetrack Employee Pensions	\$121.3	\$131.5	\$140.7
Tote	\$31.5	\$29.6	\$30.6
Capital Investment Fund			
Disbursements to Governments (thousands)	\$540.5	\$525.2	\$535.2
State Share	\$520.5	\$506.9	\$517.8
County Share	\$19.9	\$18.3	\$17.5
City Share			

^{*} Revenue may not equal disbursements due to rounding errors and discrepancies in source data.

Net casino revenue at Hollywood Casino at Charles Town totaled \$511 million in fiscal year 2013 (see Table 10). The purse share was \$31 million, approximately 6 percent of the total, and breeder development funds received \$10.8 million. The racetrack operator's portion of revenue, including promotional credits, was \$259 million, and the government's share was \$210 million.

Total gambling revenue rose steadily between fiscal year 1998, when Charles Town adopted slot machines at the track, and fiscal year 2008, when revenue was \$461.2 million. At that time, revenue from the slot machines began to drop off, and has generally been declining since then. However, total revenue began to climb again in fiscal year 2011, when Charles Town approved table games at the track. Total net revenue peaked in fiscal year 2012 at \$582 million, but was down more than 12 percent in 2013.

Purse distributions followed a similar path as total revenue, rising steadily from fiscal year 1998 through 2007, when they peaked at \$35.7 million. Purses fell for the next three years and began to pick up again with the advent of table games. However, purses fell more than 13 percent between fiscal year 2012 and 2013.

Table 10: Total Charles Town VLT and Table Game Distributions by Category and Year

	FY 2011	FY 2012	FY 2013
Purses (millions)	\$33.6	\$35.4	\$31.1
Breeder Development Funds (millions)	\$10.5	\$11.9	\$10.8
Racetrack Operator (millions)	\$264.6	\$290.2	\$259.5
State and Local Government (millions)	\$229.7	\$244.6	\$210.4
Total (millions)	\$538.4	\$582.2	\$511.8

3.5.2 Mountaineer Park

Mountaineer Park held 210 race days in 2012, garnering about \$11 million in revenue, which was about the same as the previous year (see Table 11). The track distributed nearly \$4.8 million in purses from handle, and distributed about \$486 thousand to state and local governments in the form of taxes, not including licensing fees. The racetrack operator's share of handle totaled approximately \$4.8 million.

Purse share of handle has varied substantially in the last several years. After more than doubling between 1999 and 2003, purse share of handle peaked at about \$8 million. It has been in decline

since that time, however, falling to \$4.8 million in 2012, a drop of 40 percent from the peak, and nearly 1 percent from the previous year.

Table 11: Mountaineer Park Pari-mutuel Revenue and Disbursements

Race Days210Total Handle (millions)\$287.3Net Revenue (thousands)\$12,299.7Commissions\$3,501.5Signal Transmission Fees\$8,798.2Disbursements to Horsemen (thousands)\$5,336.2Purses (includes breakage)\$5,336.2WV Development Fund\$0.0Disbursements for Racetrack Operations (thousands)\$6,629.0Racetrack Operator Share (includes breakage)\$5,336.2Transmission Cost of Simulcasting\$758.0Host Track Share of Simulcasting\$406.4	\$258.4 \$11,153.2 \$2,977.9 \$8,175.3 \$4,814.3 \$4,814.3 \$0.0	\$249.1 \$11,083.5 \$2,735.0 \$8,348.5 \$4,783.1 \$4,783.1 \$0.0
Net Revenue (thousands)\$12,299.7Commissions\$3,501.5Signal Transmission Fees\$8,798.2Disbursements to Horsemen (thousands)\$5,336.2Purses (includes breakage)\$5,336.2WV Development Fund\$0.0Disbursements for Racetrack Operations (thousands)\$6,629.0Racetrack Operator Share (includes breakage)\$5,336.2Transmission Cost of Simulcasting\$758.0	\$11,153.2 \$2,977.9 \$8,175.3 \$4,814.3 \$4,814.3 \$0.0	\$11,083.5 \$2,735.0 \$8,348.5 \$4,783.1 \$4,783.1
Commissions \$3,501.5 Signal Transmission Fees \$8,798.2 Disbursements to Horsemen (thousands) \$5,336.2 Purses (includes breakage) \$5,336.2 WV Development Fund \$0.0 Disbursements for Racetrack Operations (thousands) \$6,629.0 Racetrack Operator Share (includes breakage) \$5,336.2 Transmission Cost of Simulcasting \$758.0	\$2,977.9 \$8,175.3 \$4,814.3 \$4,814.3 \$0.0	\$2,735.0 \$8,348.5 \$4,783.1 \$4,783.1
Signal Transmission Fees\$8,798.2Disbursements to Horsemen (thousands)\$5,336.2Purses (includes breakage)\$5,336.2WV Development Fund\$0.0Disbursements for Racetrack Operations (thousands)\$6,629.0Racetrack Operator Share (includes breakage)\$5,336.2Transmission Cost of Simulcasting\$758.0	\$8,175.3 \$4,814.3 \$4,814.3 \$0.0	\$8,348.5 \$4,783.1 \$4,783.1
Disbursements to Horsemen (thousands) \$5,336.2 Purses (includes breakage) \$5,336.2 WV Development Fund \$0.0 Disbursements for Racetrack Operations (thousands) \$6,629.0 Racetrack Operator Share (includes breakage) \$5,336.2 Transmission Cost of Simulcasting \$758.0	\$4,814.3 \$4,814.3 \$0.0	\$4,783.1 \$4,783.1
Purses (includes breakage) \$5,336.2 WV Development Fund \$0.0 Disbursements for Racetrack Operations (thousands) \$6,629.0 Racetrack Operator Share (includes breakage) \$5,336.2 Transmission Cost of Simulcasting \$758.0	\$4,814.3	\$4,783.1
WV Development Fund \$0.0 Disbursements for Racetrack Operations (thousands) \$6,629.0 Racetrack Operator Share (includes breakage) \$5,336.2 Transmission Cost of Simulcasting \$758.0	\$0.0	. ,
Disbursements for Racetrack Operations (thousands) \$6,629.0 Racetrack Operator Share (includes breakage) \$5,336.2 Transmission Cost of Simulcasting \$758.0		\$0.0
(thousands) Racetrack Operator Share (includes breakage) Transmission Cost of Simulcasting \$5,629.0 \$5,336.2 \$758.0	4	
Transmission Cost of Simulcasting \$758.0	\$6,000.2	\$5,875.3
	\$4,814.3	\$4,783.1
Host Track Share of Simulcasting \$406.4	\$713.2	\$724.5
_	\$356.5	\$335.6
Racetrack Employee Pensions \$113.7	\$103.5	\$20.2
Tote \$14.7	\$12.7	\$11.8
Capital Investment Fund \$0.0	\$0.0	\$0.0
Disbursements to Governments (thousands) \$408.1	\$403.9	\$486.7
State Share \$400.2	\$397.3	\$480.6
County Share \$7.9	\$6.7	\$6.1
City Share \$0.0	\$0.0	\$0.0

^{*} Revenue may not equal disbursements due to rounding errors and discrepancies in source data.

The casino side of Mountaineer Park had approximately \$231 million in revenue in fiscal year 2013 (Table 12). Purses received about 8.4 percent of revenue, totaling about \$19.4 million. Breeder development funds received another \$3.2 million. The racetrack operator's portion of

revenue, including promotional credits, was \$135.9 million, and the government's share was \$72 million.

Hancock County permitted slot machines at Mountaineer Park immediately after the RVLA was adopted, and net revenue rose an average of 41 percent each year between 1995 and 2004. Revenue then leveled off and has remained above \$230 million since that time. Net revenue fell 10 percent between fiscal years 2012 and 2013, and it remains to be seen whether this trend will continue.

Until the 2005 RVLA revisions, Mountaineer Park allocated revenue only to purses and did not contribute to the state's breeder development funds. Combined purse and development funds peaked in fiscal year 2004 at \$32.4 million and have been declining since that time. Purse and development fund revenue in 2013 was down more than 10 percent from the previous year.

Table 12: Total Mountaineer VLT and Table Game Revenue by Category and Year

	FY 2011	FY 2012	FY 2013
Purses (millions)	\$19.9	\$21.4	\$19.4
Breeder Development Funds (millions)	\$3.5	\$3.7	\$3.2
Racetrack Operator (millions)	\$136.1	\$149.1	\$135.9
State and Local Government (millions)	\$74.3	\$82.6	\$72.5
Total (millions)	\$233.8	\$256.9	\$231.0

3.5.3 Mardi Gras

Mardi Gras held 311 days of greyhound races in 2012, earning the track about \$3.3 million in net revenue (see Table 13). Total handle at Mardi Gras has been rising rapidly over the past three years after falling off for the previous three. Total handle in 2012 was \$40.5 million, up 80 percent from its low point in 2009, which was \$22.5 million, and almost matched its 2002 peak of \$43.8 million. Approximately \$457 thousand was allocated to state and local governments.

Purse revenue has not followed the rapid rise of total handle. Purses have fallen in 11 of the last 13 years, and are down more than 70 percent since 1999. Purses fell almost 3 percent between

2011 and 2012. The divergence between the total handle and purses is due to an increasing share of handle at Mardi Gras coming from live export simulcasting, which are bets placed on a track's races from other tracks. The local track is paid a signal transmission fee for these races, but purses for greyhound races are not paid from these fees. Non-export handle has dropped by about 10 percent per year on an annualized basis since 2002, and purses have remained a steady share of non-export revenue.

Casino revenue at Mardi Gras does not appear to have been as adversely affected by competition from neighboring states as those at West Virginia's other three racetracks. As Table 14 shows, total revenue was \$70.8 million in 2013, which was down 7 percent from the previous year, but still near the recent average. The purse share of revenue was approximately \$6 million, and breeder development funds were allocated an additional \$1.4 million. The racetrack operator took in \$37.6 million, and the state's share was \$25.8 million.

Casino revenue at Mardi Gras rose rapidly after the adoption of the RVLA, increasing an average of nearly 30 percent per year from fiscal years 1995 through 2004. Revenue leveled off, then began to rise again after table games were authorized. Total revenue peaked in 2012 at \$76.3 million.

Like total revenue, purses rose rapidly through 2004, peaking in that year at \$7.7 million. However, purses have been falling since that time, at an average annual rate of about 3 percent per year. Purses were down almost 7 percent from fiscal year 2012 to fiscal year 2013.

Table 13: Mardi Gras Pari-mutuel Revenue and Disbursements

	2010	2011	2012
Race Days	307	311	311
Total Handle (millions)	\$23.9	\$31.5	\$40.5
Net Revenue (thousands)	\$3,215.5	\$3,190.4	\$3,320.4
Commissions	\$2,897.8	\$2,627.7	\$2,491.3
Signal Transmission Fees	\$317.6	\$562.7	\$829.1
Disbursements to Greyhound owners/breeders (thousands)	\$385.2	\$364.1	\$353.4
Purses	\$354.7	\$335.5	\$325.7
WV Development Fund	\$30.4	\$28.6	\$27.7
Disbursements for Racetrack Operations (thousands)	\$2,468.6	\$2,356.2	\$2,592.5
Racetrack Operator Share (including breakage)	\$1,654.9	\$1,791.4	\$1,964.9
Transmission Cost of Simulcasting	\$309.2	\$107.0	\$206.1
Host Track Share of Simulcasting	\$421.6	\$386.5	\$352.4
Capital Investment Fund	\$38.8	\$29.4	\$26.4
Advertising	\$7.7	\$5.9	\$5.3
Racetrack Employee Pensions	\$36.2	\$36.1	\$37.5
Tote	\$0.0	\$0.0	\$0.0
Disbursements to Governments (thousands)	\$405.1	\$405.9	\$410.7
State Share	\$387.1	\$387.3	\$391.7
County Share	\$6.0	\$6.0	\$6.0
City Share	\$12.0	\$12.7	\$13.1

^{*} Revenue may not equal disbursements due to rounding errors and discrepancies in source data.

Table 14: Total Mardi Gras VLT and Table Game Revenue by Category and Year

	FY 2011	FY 2012	FY 2013
Purses (millions)	\$6.2	\$6.5	\$6.0
Breeder Development Funds (millions)	\$1.5	\$1.6	\$1.4
Racetrack Operator (millions)	\$37.9	\$39.6	\$37.6
State and Local Government (millions)	\$26.3	\$28.7	\$25.8
Total (millions)	\$71.9	\$76.3	\$70.8

3.5.4 Wheeling Island

At \$5.9 million in net revenue, Wheeling Island is the larger of the state's two dog racing tracks (Table 15). Purses from handle in 2012 totaled about \$657 thousand, and the track paid about \$829 thousand in state and local taxes last year.

The track's total pari-mutuel handle peaked in 2007 at more than \$80 million, and was down about 13 percent from that peak in 2012. Handle has been close to \$70 million in each of the last five years, however, despite increased competition from surrounding tracks and the recession. Purses from handle have fallen every year since 1999, the earliest data available. Purses fell almost 9 percent between 2011 and 2012, despite flat total handle revenue.

As at Mardi Gras, live exporting has made up a larger share of total handle in recent years, which helps explain why purses have dropped as a share of total handle. Non-export handle has dropped at an average annual rate of 10 percent per year since 2002, and purses have remained a steady share of non-export revenue.

Table 15: Wheeling Island Pari-mutuel Revenue and Disbursements

	2010	2011	2012
Race Days	245	257	262
Total Handle (millions)	\$68.3	\$70.4	\$70.2
Net Revenue (thousands)	\$6,652.5	\$6,248.5	\$5,972.7
Commissions	\$5,442.5	\$4,780.3	\$4,427.7
Signal Transmission Fees	\$1,210.0	\$1,468.1	\$1,545.0
Disbursements to Greyhound owners/breeders (thousands)	\$873.5	\$780.9	\$712.0
Purses	\$805.2	\$720.1	\$656.5
WV Development Fund	\$68.3	\$60.9	\$55.5
Disbursements for Racetrack Operations (thousands)	\$4,877.3	\$4,637.8	\$4,495.7
Racetrack Operator Share (including breakage)	\$3,583.3	\$3,414.0	\$3,246.2
Transmission Cost of Simulcasting	\$592.1	\$603.7	\$604.4
Host Track Share of Simulcasting	\$456.5	\$393.5	\$437.6
Capital Investment Fund	\$164.9	\$152.5	\$135.4
Advertising	\$33.0	\$30.5	\$27.1
Racetrack Employee Pensions	\$35.4	\$33.7	\$34.8
Tote	\$12.1	\$9.9	\$10.2
Disbursements to Governments (thousands)	\$958.0	\$876.0	\$790.1
State Share	\$889.8	\$813.5	\$735.2
County Share	\$18.6	\$16.9	\$15.0
City Share	\$49.6	\$45.7	\$40.0

^{*} Revenue may not equal disbursements due to rounding errors and discrepancies in source data.

Total net revenue from gambling operations was \$133 million in fiscal year 2013, which was down more than 20 percent from the year before (see Table 16). Purses and breeder development funds totaled \$13.6 million in 2013, while the racetrack operator and the state took in \$76.5 million and \$43.1 million respectively.

The revenue losses in 2013 follow a several-year trend of falling gambling revenue at the Wheeling casino. Total revenue peaked in 2007 at \$199.7 million and has fallen by a third since that year. Total revenue in 2013 was below its 2002 level. Purses have followed a similar downward trajectory, falling more than 13 percent from 2012 to 2013. Purses peaked in fiscal year 2004 at \$19.9 million, and were down more than 40 percent from that peak in 2013.

Table 16: Total Wheeling Island VLT and Table Game Revenue by Category Year

	FY 2011	FY 2012	FY 2013
Purses (millions)	\$13.5	\$13.6	\$11.8
Breeder Development Funds (millions)	\$2.3	\$2.3	\$1.8
Racetrack Operator (millions)	\$93.2	\$93.6	\$76.5
State and Local Government (millions)	\$55.9	\$57.2	\$43.1
Total (millions)	\$164.9	\$166.6	\$133.2

Economic Impact

This section measures the economic impact of the racing industry in West Virginia as well as the four counties where the state's racetracks are located. The total impact of an industry consists of both the direct impact of spending by the industry itself, and the secondary economic impact accrued as those expenditures work their way through the rest of the economy. For example in the racing industry, horse owners may buy hay from farmers, who buy fertilizer from chemical companies, etc. These secondary purchases are termed indirect impacts of the original spending by the horse owners. Each of these industries also pays employees whose income is also spent in the economy. Their purchases set off additional rounds of spending, called induced economic impacts. Thus the original expenditures can be multiplied several times over as the money is passed through the hands of suppliers and employees. The total economic impact is the sum of all of the direct, indirect and induced impacts in the economy.²³

In subsection 4.1 we describe the results of a survey we sent to all of the stakeholders in the racing industry who were registered with the West Virginia Racing Commission. We then examine the impact from thoroughbred racing on the local economies in Jefferson and Hancock counties, and the impact from greyhound racing on Ohio and Kanawha counties. The final section details the total impact on the state's economy, including impacts from both industries on counties outside those where the tracks are located.

4.1 Survey Methodology

In order to collect data necessary to calculate the economic impact of the racing industries, we sent a survey in the summer of 2013 to all industry participants registered with the West Virginia Racing Commission.²⁴ The surveys asked for detailed information regarding participants' involvement in greyhound or thoroughbred racing in the state of West Virginia in 2012. In all we mailed 2,598 surveys to thoroughbred owners, breeders, and trainers (see Table 17). Of those,

44

²³ This study was conducted using the IMPLAN 3.1 modeling software, an industry-standard input-output model of the economy. More information about IMPLAN can be found at http://www.implan.com.

²⁴ See Appendix for full text of the surveys.

188 were returned for a response rate of 7 percent. Another 368 surveys were sent to greyhound owners, breeders, and kennels, of which 46 were returned for a response rate of 12 percent. We also mailed 144 surveys to jockeys, with nine returned for a response rate of 6 percent. Because of the small number of responses from the jockey survey, these results were not used in our analysis.

Table 17: Total Surveys Mailed and Response Rate by Category

	Greyhound Survey	Jockey Survey	Thoroughbred Survey	Total
Surveys Mailed In-State	79	45	434	558
Surveys Mailed Out-Of-State	320	99	2,164	2,583
Total Surveys Mailed	399	144	2,598	3,141
Responses Received	46	9	188	243
Response Rate	12%	6%	7%	8%

4.1.1 Thoroughbred Racing Survey

Of the respondents to the thoroughbred survey, about 70 percent indicated they were owners with horses at Charles Town, and 46 percent said they owned horses that participated at Mountaineer Park (see Table 18). About 37 percent of respondents said they were breeders with horses at Charles Town, and approximately 20 percent said they were breeders with horses at Mountaineer Park. About 22 percent of respondents were trainers at Charles Town, and 18 percent were trainers at Mountaineer Park. There was considerable overlap between these categories.

Table 18: Thoroughbred Survey Respondents by Track and Category

	Char	les Town	Mour	ntaineer Park
	Number	Share of Total	Number	Share of Total
Owner	131	70.8%	86	46.7%
Breeder	69	37.3%	36	19.5%
Trainer	40	21.6%	33	17.8%
No Involvement	32	17.3%	72	38.9%
Total Involved	153	82.7%	113	61.1%

Respondents were also asked how much of their business was related to each track. These responses varied considerably depending on whether respondents were living in West Virginia or out-of-state. In-state respondents said that an average of 79 percent of their business was at Charles Town, while those out-of-state said only 55 percent of their business was at the track. The corresponding percentages at Mountaineer Park were approximately 45 percent for both in-and out-of-state respondents.

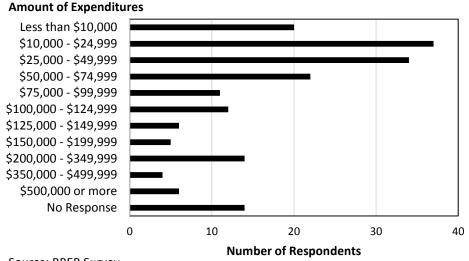
Approximately one-third of respondents lived in West Virginia (see Table 19). Neighboring states also had significant representation with approximately 21 percent hailing from Virginia; and Ohio, Pennsylvania, and Maryland each comprising about 8 percent of respondents. The remaining respondents lived in a variety of states across the country, ranging from Kentucky and Florida to California and New York.

Table 19: Thoroughbred Survey Respondents by State

State	Number	Share of Total Respondents	State	Number	Share of Total Respondents
West Virginia	64	34.6%	Michigan	2	1.1%
Virginia	40	21.6%	South Carolina	2	1.1%
Ohio	15	8.1%	Connecticut	1	0.5%
Pennsylvania	15	8.1%	Iowa	1	0.5%
Maryland	14	7.6%	North Carolina	1	0.5%
Kentucky	7	3.8%	Nebraska	1	0.5%
Florida	6	3.2%	New Jersey	1	0.5%
New York	3	1.6%	Nevada	1	0.5%
California	2	1.1%	Texas	1	0.5%
Delaware	2	1.1%	No State Identified	4	2.2%
Illinois	2	1.1%			

The majority of respondents to the thoroughbred survey had relatively small operations. About 70 percent of respondents had revenue of less than \$100 thousand, and about half had revenue of less than \$50 thousand. About two-thirds of respondents had expenditures less than \$100 thousand, and about one-third of respondents spent less than \$25 thousand (see Figure 8). About 87 percent of farms had less than 10 employees, with about two-thirds of those employed part-time.

Figure 8: Thoroughbred Farm Annual Expenditures



Source: BBER Survey

4.1.2 Greyhound Survey

For the greyhound survey, about 80 percent of respondents indicated they were owners or breeders of dogs that participated at Wheeling Island, and 72 percent said they owned or bred dogs that participated at Mardi Gras (see Table 20). Approximately 13 percent said they ran kennels at Wheeling Island, and 20 percent said they ran kennels at Mardi Gras. As in the thoroughbred survey, there was considerable overlap between these categories.

Table 20: Greyhound Survey Respondents by Track and Category

	Wheeling Island Number Share of Total		Mardi Gras		
			Number	Share of Total	
Owner and/or Breeder	37	80.4%	33	71.7%	
Kennel	6	13.0%	9	19.6%	
No Involvement	6	13.0%	9	19.6%	
Total Involved	40	87.0%	37	80.4%	

Of the 46 respondents, about a third lived in West Virginia (see Table 21). Other major states for survey respondents include Kansas (11 percent), Florida (9 percent), and Iowa (7 percent).

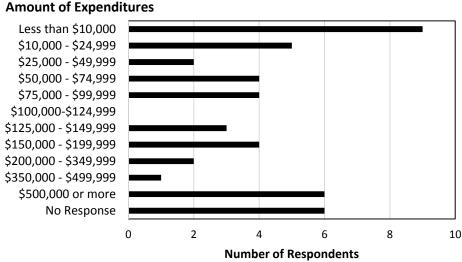
Respondents were also asked how much of their business was related to each track. For Mardi Gras, responses varied considerably depending on whether respondents were living in West Virginia or out-of-state. In-state respondents said that about two-thirds of their business was at Mardi Gras, while those out-of-state said only one-third of their business was at the track. Both in-state and out-of-state respondents said that approximately 40 percent of their business was at Wheeling Island.

Table 21: Greyhound Survey Respondents by State

State	Number	Share of Total Respondents	State	Number	Share of Total Respondents
West Virginia	14	30.4%	Kentucky	1	2.2%
Kansas	5	10.9%	Massachusetts	1	2.2%
Florida	4	8.7%	Missouri	1	2.2%
Iowa	3	6.5%	North Carolina	1	2.2%
Pennsylvania	2	4.4%	New York	1	2.2%
Texas	2	4.4%	Ohio	1	2.2%
Arizona	1	2.2%	Oklahoma	1	2.2%
California	1	2.2%	Oregon	1	2.2%
Colorado	1	2.2%	Vermont	1	2.2%
Illinois	1	2.2%	No State Identified	2	4.4%

In contrast to the thoroughbred survey, respondents to the greyhound survey were more equally distributed in terms of the size of their operations (see Figure 9). About half of respondents had revenue of less than \$100 thousand, but about 20 percent had revenue greater than \$200 thousand. More than half of respondents had expenditures less than \$100 thousand, and 20 percent spent more than \$200 thousand.

Figure 9: Greyhound Farm Expenditures by Category



Source: BBER Survey

4.2 Thoroughbred Racing Impact

The thoroughbred racing industry is the larger of the two industries studied in this report, both in terms of economic activity and employment. The industry is centered at the state's two horse racetracks, the Hollywood Casino at Charles Town Races in Jefferson County, and the Mountaineer Casino Racetrack and Resort in Hancock County. In this section we examine the impact of the horse racing industry on these two counties separately.

4.2.1 Direct Economic Impact

To calculate the economic impact of the thoroughbred racing industry, we first determine the total spending by the industry in the local economy and the associated employment of those industries – known as the direct impact of the industry. To calculate the direct impact we use the results of the Thoroughbred Racing Owner, Breeder, and Trainer Research Survey as discussed above.

Each respondent was asked to indicate where their spending fell within a range of expenditure categories. Respondents were also asked to provide the number of horses that were in active participation at one of the state's racetracks and the share of their total expenditures that occurred

in each racetrack county. Using these responses, we estimate that the average per-horse expenditure within the state of West Virginia was \$9,868.²⁵

The spending patterns of respondents differ depending on whether the respondent indicated that he or she was primarily an owner or breeder of horses, or worked as a trainer. Expenditures also differ significantly depending on whether respondents were located within West Virginia or outside the state. Because of these differences, we divide each direct expenditure into four types: 1) owners and breeders located in the state; 2) owners and breeders located out of the state; 3) trainers located in the state; and 4) trainers located out of the state. We calculate the per-horse expenditure for each category independently of one another and then multiply by the total number of farms of that type registered with the West Virginia Racing Commission. We also assume that trainers derive their income through contracts with owners, and thus we subtract the trainers' income from the owner/breeder total in order to avoid double counting the impact of those expenditures.

Table 22 reports the total expenditures for each category by county. Owners and breeders spent more than \$57 million in the Jefferson County economy in 2012. Trainers spent an additional \$17 million for a total direct impact of nearly \$75 million. In Hancock County, owners and breeders spent more than \$34 million, and trainers spent almost \$11 million for a total direct spending of \$45 million. Spending in both counties totaled almost \$120 million.

Table 22: Total Direct Economic Impact by Category and County, 2012

	Jefferson County		Hancock County	
	Trainers Owners/Breeders Trainers		Trainers	Owners/Breeders
Spending by Out-of-state Residents (millions)	\$8.6	\$41.5	\$5.4	\$32.2
Spending by In-state Residents (millions)	\$8.7	\$16.1	\$5.3	\$2.1
Total (millions)	\$17.3	\$57.6	\$10.8	\$34.3

²⁵ Spending on the horse outside the state of West Virginia was excluded from the study because it does not directly impact the local economy.

Employment

Calculating direct employment in the thoroughbred racing industry is accomplished through a similar methodology as with direct expenditures. Survey respondents were asked how many full-time and part-time people they employed. These numbers are then divided into the four categories described in the previous section to determine the average per-farm employment, which is multiplied by the total number of farms registered with the West Virginia Racing Commission.

Based on our survey we estimate that the thoroughbred racing industry in Jefferson County employed about 2,400 people directly in 2012, with 1,700 of those employed by owners and breeders, and an additional 700 employed by trainers (see Table 23). In Hancock County, a total of 1,400 people were employed by the racing industry. About 1,000 of those were employed by owners, and another approximately 400 were employed by trainers. According to the survey data, about two-thirds of the employees in the thoroughbred racing industry are part-time.

Table 23: Direct Employment in the Thoroughbred Racing Industry, 2012

	Jefferson County Hancock Co		County	
	Trainers	Owners	Trainers	Owners
Employment Attributed to Out-of-state Residents	465	1,149	290	905
Employment Attributed to In-state Residents	241	558	146	90
Total	706	1,707	436	995

4.2.2 Economic Impact Results

The direct economic impact numbers outlined above were used to calculate the indirect and induced impacts of the horse racing industry. Because the impacts were felt in four disparate counties, we conducted separate analyses for each racetrack county and for the remainder of the state. The direct expenditures outlined above were evaluated using a multi-regional model in order to assess the impact on non-racetrack counties separately from the impact on the counties where the racetracks were located. For example, for Jefferson County, we included the secondary impacts on Jefferson County of expenditures in Hancock, Ohio, and Kanawha counties, where

other racetracks are located, as well as any additional expenditures spent in the other 51 counties in West Virginia. Impacts from spending in other regions were added to those in each county to get the total impact for that county. Table 24 details the total economic impacts of the horse racing industry on Jefferson and Hancock counties.

Table 24: Economic Impact on Jefferson and Hancock Counties, 2012

	Direct Impact	Indirect & Induced Impact	Total Economic Impact
Jefferson County			
Business Volume (millions)	\$74.9	\$84.5	\$159.4
Employment (jobs)	2,412	1,037	3,449
Employee Compensation (millions)	\$24.1	\$24.7	\$48.8
State Taxes (millions)	\$1.1	\$1.1	\$2.2
Hancock County			
Business Volume (millions)	\$45.0	\$48.2	\$93.3
Employment (jobs)	1,432	468	1,899
Employee Compensation (millions)	\$16.0	\$15.7	\$31.8
State Taxes (millions)	\$0.7	\$0.7	\$1.4
Total Thoroughbred Racing			
Business Volume (millions)	\$119.9	\$132.7	\$252.6
Employment (jobs)	3,844	1,504	5,348
Employee Compensation (millions)	\$40.1	\$40.5	\$80.6
State Taxes (millions)	\$1.8	\$1.8	\$3.7

These results indicate that the horse racing industry had a total economic impact of \$159 million in Jefferson County and another \$93 million in Hancock County for a total of \$253 million of economic impact in 2012. This spending generated more than \$2 million in state and local taxes in Jefferson County, and another \$1.4 million in Hancock County, for a total state tax impact of \$3.7 million.

Our estimates indicate that the horse racing industry supported 3,449 workers in Jefferson County and another nearly 1,900 workers in Hancock County. The employees supported by the racing industry constitute approximately 14 percent of all jobs held by Jefferson County residents and approximately 15 percent of all jobs held by Hancock County residents. These employees earned almost \$49 million in compensation in Jefferson County and another nearly \$32 million in Hancock County.

4.3 Greyhound Racing Impact

The greyhound racing industry is centered at the Mardi Gras Casino and Resort in Kanawha County and the Wheeling Island Hotel-Casino-Racetrack in Ohio County. This section will examine the economic impact of the dog racing industry on these two counties.

4.3.1 Direct Economic Impact

We used a similar methodology for calculating the economic impact of the greyhound racing industry as presented above for the thoroughbred racing industry. We used the results of the Greyhound Racing Owner, Breeder, and Kennel Booking Research Survey (see the Survey Methodology section on page 48 for more details) to calculate the direct impact of the industry.

As in the thoroughbred survey, each respondent was asked to indicate their spending within a range of different expenditure categories. They were also asked to provide the number of dogs in active participation at the state's racetracks and the percentage of total expenditures that occurred in each racetrack county. Using these data, we calculated the per-dog expenditure within West Virginia as \$1,677.

Respondents were then divided into four groups based on whether they were primarily dog owners or breeders, or a kennel, and whether they were located in- or out-of-state. We then calculated the per-dog expenditures for each of these categories (see Table 25). This figure was then multiplied by the total number of farms or kennels registered with the West Virginia Racing

²⁶ Data on total employment in Jefferson and Hancock counties used for this calculation are provided by the Household Survey of Employment, conducted by Workforce West Virginia, and represent total jobs held by people living in the county, regardless of where they work.

Commission. As in the thoroughbred section, we assumed that kennels derive their income through contracts with owners, and thus kennel income was subtracted from the owner/breeder total in order to avoid double counting the impact of those expenditures.

Table 25: Total Direct Economic Impact by Category and County

	Kanawha		Ohio	
	Kennels	Owners	Kennels	Owners
Spending by Out-of-state Residents (millions)	\$0.5	\$2.4	\$2.0	\$3.5
Spending by In-state Residents (millions)	\$2.5	\$0.1	\$1.7	\$0.3
Total (millions)	\$3.0	\$2.5	\$3.7	\$3.7

Table 25 indicates the total expenditures for each category by county. Owners and breeders spent more than \$6 million, with \$2.4 million in Kanawha County and \$3.7 million in Ohio County. Kennels spent almost \$3 million in Kanawha County and \$3.7 million in Ohio County. Spending in both counties totaled almost \$13 million.

Employment

Calculating the amount of direct employment in the dog racing industry was done through a similar methodology as for the horse racing industry. Survey respondents were asked how many full-time and part-time people they employed. These numbers were then divided into the four categories described in the previous section to determine the average per-farm or per-kennel employment, which was multiplied by the total number of farms and kennels registered with the West Virginia Racing Commission.

According to the survey results and BBER calculations, the greyhound racing industry in Kanawha County employed 536 people directly in 2012, with 451 employed by owners and breeders and an additional 85 employed at kennels (see Table 26). In Ohio County, a total of 988 people were employed by the racing industry, with 839 employed by owners and another 150 employed by kennels. According to the survey data, about half of the employees in the greyhound racing industry are employed part-time.

Table 26: Direct Employment in the Greyhound Racing Industry

	Kanawha County		Ohio C	Ohio County	
	Trainers	Owners	Trainers	Owners	
Employment Attributed to Out-of-state Residents	20	422	106	811	
Employment Attributed to In-state Residents	65	29	44	28	
Total	85	451	150	839	

4.3.2 Economic Impact Results

The direct economic impact numbers outlined above were used to calculate the indirect and induced impacts of the greyhound racing industry. Because the impacts were felt in four disparate counties we conducted separate analyses for each racetrack county and for the remainder of the state. In the case of dog tracks, we included the secondary impacts on Kanawha and Ohio counties from expenditures in Jefferson and Hancock counties, as well as any additional expenditures spent in the other 51 counties in West Virginia. Impacts from spending in other regions were added to those in each county to get the total impact for that county. Table 27 details the total economic impacts of the dog racing industry on Kanawha and Ohio counties.

These results indicate that the greyhound racing industry contributes more than \$31 million to the economies of Kanawha and Ohio counties where the racetracks are located. In Kanawha County, a direct expenditure of more than \$5 million leads to nearly \$8 million in indirect and induced effects for a total of approximately \$13 million in business volume. A direct expenditure of almost \$8 million in Ohio County leads to more than \$10 million in secondary impact, for a total economic impact of nearly \$18 million. The expenditures in the economy produce about \$199 thousand in state and local taxes from Kanawha County, and another \$214 thousand in Ohio County for a total tax impact of about \$413 thousand.

Table 27: Economic Impact on Kanawha and Ohio Counties

	Direct Impact	Indirect & Induced Impact	Total Economic Impact
Kanawha County			
Business Volume (millions)	\$5.4	\$7.8	\$13.2
Employment (jobs)	536	63	599
Employee Compensation (millions)	\$1.6	\$2.7	\$4.3
Total Taxes (thousands)	\$74.3	\$124.8	\$199.0
Ohio County			
Business Volume (millions)	\$7.5	\$10.4	\$17.9
Employment (jobs)	988	146	1,134
Employee Compensation (millions)	\$2.1	\$2.6	\$4.6
Total Taxes (thousands)	\$97.4	\$116.5	\$213.9
Total Greyhound Racing			
Business Volume (millions)	\$12.9	\$18.2	\$31.2
Employment (jobs)	1,524	209	1,733
Employee Compensation (millions)	\$3.7	\$5.3	\$9.0
State Taxes (thousands)	\$171.6	\$241.3	\$412.9

The greyhound industry supports more than 1.7 thousand jobs both directly and indirectly through secondary expenditures, according to our analysis. Almost 600 of those jobs are in Kanawha County, and about 1,100 are in Ohio County. These employees earn approximately \$9 million in compensation, with \$4.3 million in Kanawha County, and \$4.6 million in Ohio County.

4.4 Total Economic Impact

While the thoroughbred and greyhound racing industries have the largest impact on the counties where the racetracks are located, these industries also have a significant effect on the rest of West Virginia. In this section we outline the economic impact of the horse and dog racing

industries on the 51 non-racetrack counties in the state in terms of sales volume and employment. We then sum the impacts to find the total economic impact of the racing industry on the state as a whole. To assess the impact of the racing industries on counties outside of where the racetracks are located, we follow a two-pronged approach. First we examine the direct expenditures by the industry that fall within the state boundaries, but not in the racetrack counties. Then through a multi-regional model, we assess the secondary impacts of the racing industries both in racetrack counties and those without racetracks.

Direct expenditures for non-racetrack counties were determined using the information reported in the thoroughbred and greyhound surveys. Respondents were asked to identify the percentage of their spending that occurred inside West Virginia, but not in the racetrack counties. This percentage was then averaged for each survey and multiplied by the total direct expenditure found in the above sections. This amount was then deducted from the racetrack-county expenditures to avoid bias from double counting. According to this calculation, the direct expenditures from thoroughbred and greyhound racing totaled \$13 million in counties outside the primary racetrack counties in 2012.

As in previous sections, the direct expenditures outlined above were evaluated using a multiregional model in order to assess the impact on non-racetrack counties separately from the impact on the counties where the racetracks were located. Table 28 details the economic impact in the non-racetrack counties. Because we did not have data available on jobs outside the four racetrack counties, we could not identify the direct employment impact for this analysis. The employment impact reported here is due to the secondary spending in the economy.

Table 28: Economic Impact of the Racing Industries in Non-racetrack Counties

	Direct Impact	Indirect & Induced Impact	Total Economic Impact
Business Volume (millions)	\$13.1	\$24.3	\$37.4
Employment (jobs)	-	234	234
Employee Compensation (millions)	\$3.5	\$7.6	\$11.1
Selected Taxes (thousands)	\$166.9	\$344.9	\$511.8

To get the total economic impact of the racing industry, we summed the impact from the racetrack counties with the impact felt outside those counties to get the total impact. Table 29 details the final results. These results suggest that the thoroughbred and greyhound racing industries provide more than \$321 million of business volume in the state's economy, which is approximately 12 percent of the total output in the state's leisure and hospitality sector. The industries support approximately 7,300 jobs, which represent about 10 percent of employment in the leisure and hospitality sector statewide.

Table 29: Total Statewide Economic Impact of the Racing Industries

	Direct Impact	Indirect & Induced Impact	Total Economic Impact
Business Volume (millions)	\$145.9	\$175.3	\$321.1
Employment (jobs)	5,368	1,947	7,315
Employee Compensation (millions)	\$47.3	\$53.3	\$100.6
State Taxes (millions)	\$2.2	\$2.4	\$4.6

4.5 Other sources of Potential Economic Impact

The economic impact of the racing industry estimated here represents an important portion of the West Virginia economy. But our estimate does not incorporate all potential sources of economic impact. Because of a low response rate on our jockey survey, the impact of jockey winnings is not taken into consideration. Also, operating expenditure data from the state's four racetracks was unavailable and therefore we do not consider expenditures relating to the racetracks themselves, which may include employment, construction dollars, and operating costs that could potentially increase the impact of the industry.

5 Conclusions

West Virginia's thoroughbred and greyhound racing industries play an important role in the economies of the four racetrack counties and in the West Virginia economy as a whole. Our estimates indicate that these industries generate approximately \$321 million in business volume in the state's economy and more than \$4.6 million state and local taxes in the state. Further, our estimates indicate that the industries support more than 7,300 jobs in the state, which corresponds to earnings of more than \$100 million.

Yet, despite their sizable impact on the state's economy, the racing industries face significant challenges. Revenue for racing industry participants comes primarily from purses, which are paid to winning dogs and horses, as well as breeder development funds. Though some races have seen record purses in recent years, total purse from handle has been diminishing over the last decade. Accounting for inflation, total handle fell by about a third from its peak in 2004 to 2012. Purses from handle fell by about 45 percent in the same time frame, largely attributable to an increase in handle from simulcasting, which contributes a smaller proportion, if anything, to purses.

The racing industry also has seen purse revenue from video lottery terminals and table games diminish in recent years. Total net revenue hit an all-time-high in fiscal year 2012, but was down 13 percent in fiscal year 2013. Meanwhile, revenue to owners from purses and development funds paid for with lottery monies peaked in 2005, and has fallen by close to 30 percent through fiscal year 2013.

Some of these trends are attributable to the recent economic recession, which likely reduced racetrack customers' disposable income. Further, West Virginia's racetracks are encountering increasing competition as nearby states expand gambling offerings at their racetracks and casinos. Many customers from nearby states who previously traveled across the state border to enjoy West Virginia's racing opportunities now have opportunities closer to home. Tracks in the northern panhandle have felt the competition more acutely, especially at Wheeling Island, where net revenue from VLTs and table games has fallen by one-third since fiscal year 2007.

Lastly, changes in the lottery revenue allocation policies have reduced the share of gambling revenue that is allocated to owners and breeders of thoroughbreds and greyhounds. Owners and

breeders received approximately 15 percent of video lottery revenue when they were first introduced in fiscal year 1995, but that share fell to less than 10 percent by the 2013 fiscal year. The share of VLT and table games revenue going to state and local governments fell below 40 percent in fiscal year 2013, down from almost 47 percent in 2006.

Though our focus has been on the impact of the racing industries in a rigorous fashion, our survey also asked respondents to provide their thoughts on the future of the industry and ways to improve it going forward. We close with some of the responses we received:

- "There is no racing without horses. There are no horses without horsemen. I feel there is no one to speak for the horsemen here at [Charles Town]. We end up being last. Many of us feel like we are being pushed out."
- Several people suggested raising purses, especially for in-state owners and breeders. "Do races for the local people and decrease purses on those million dollar races because those races do not benefit [West Virginia] owners," one person said. "Increase purses and stakes for WV bred and local participants instead of [\$1 million] races for outsiders."
- Others were concerned with the safety at the track. "I would love to see Charles Town
 address track safety in a comprehensive way. The track surface needs to be changed.
 They need to get on board with tough medication controls. There have been too many
 breakdowns and I won't risk my horses running there anymore."
- Several people said that the tracks could better promote the racing aspect of the business. "Promote the greyhounds and pari-mutuel betting," one person said. "Increase social media and communities among owners, breeders, and trainers."
- "More wagering options like a pick 6, super high five, place-pick all, and any wager that has a carryover potential to allow a jackpot pool to develop."
- Several respondents suggested making the racetrack more family-friendly. "Make [racing] friendlier to young people and families," one person said. "Bring children to the backstretch and let them see horses racing and training," said another.
- One respondent said they wanted to maintain the sporting image of racing. "The retention
 of racing in West Virginia gives the state more of a sporting image than a gambling
 image."

• Lastly, one respondent said how much the industry means to their family. "I and my children have grown up here and seeing a reduction in racing would be to destroy an institution."

Appendix A: Thoroughbred Racing Industry Terms

Term	Definition
Accredited Thoroughbred Horse	A horse that is foaled in West Virginia or sired by an accredited West Virginia sire or as a yearling, finished 12 consecutive months of verifiable residence in the state except for 30 days grace for the horse to be shipped to and from horse sales where the horse is officially entered in the sales catalogue of a recognized thoroughbred sales company or for obtaining veterinary services documented by veterinary reports
Accredited West Virginia Sire	A sire that is permanently domiciled in West Virginia, stands a full season in West Virginia and is registered with West Virginia thoroughbred breeders association
Age	The age of a horse, which is reckoned as beginning on the first day of January in the year in which it is foaled
Allowance Race	An overnight race for which eligibility and weight to be carried is determined according to specified conditions, which include age, sex, earnings, and number of wins
Association Grounds	All real property utilized by the association in the conduct of its race meeting, including the racetrack, grandstands, concession stands, offices, barns, stable area, employee housing facilities and parking lots and any other areas under the jurisdiction of the Racing Commission
Betting Interest	One or more horses in a race involving pari-mutuel wagering which is identified by a single program number for wagering purposes
Breakage	The remainder after deducting the payout from the net pool
Bred	The place of a horse's birth
Breeder	The owner of the horse's dam at the time of foaling; breeder of an accredited West Virginia horse means the owner of the foal at the time it was born in West Virginia
Claiming Race	A race in which, according to the conditions, any of the participating horses involved may be claimed
Dam	The female parent (mare) of a horse.
Dark Day	A day during a racing meeting in which neither live nor simulcast parimutuel wagering is conducted
Draw	The process of selecting thoroughbreds and determining by lot their post or starting gate positions for a race in a manner to ensure compliance with the conditions of the rules of racing
Foal	A horse of either sex in its first year of life
Handle	The total amount of all pari-mutuel wagering sales less refunds and cancellations

Jockey	A professional rider issued an occupational permit to ride in races
Maiden	A horse, which has never, in any country, won a race on the flat, other than in a match or private sweepstakes. A maiden which has been disqualified, after having finished first is still to be considered a maiden
Overnight	A race or handicap for which the entries or acceptances are to be made, or if a handicap, acceptances are to be made, seventy-two hours or less (exclusive of Sunday) before the time set for the first race on the day on which the race is to be run
Owner	A person who holds any title, right or interests whole or partial in a horse, including the lessee or lessor of a horse. An interest in the winnings only of a horse shall not constitute ownership
Pari-mutuel	A mutual or collective pool that can be divided among those who have contributed their wagers to one central pool. The odds of these wagers are to be reckoned in accordance with the collective amounts wagered upon each horse running in a horse race relative to the amount wagered on each horse in each pool with the total to be divided among the first three contestants on the basis of the number of wagers
Pari-mutuel Clerk	Any employee of a licensed racing association, who is responsible for the collection of wagers, the distribution of moneys for winning pari-mutuel tickets, verification of the validity of pari-mutuel tickets and accounting for pari-mutuel funds
Post Time	The time set for the arrival at the starting point of the horses in a race.
Purse	The total cash amount for which a race is contested
Sire	The male parent of a horse.
Simulcast	The transmission and/or reception for pari-mutuel wagering purposes of a live horse racing contest conducted at a licensed racetrack other than where the pari-mutuel wager is placed
Stakes Race	A contest in which nomination, entry and/or starting fees contribute to the purse. No overnight race shall be considered a stake's race
Stewards	The person or persons designated to represent the West Virginia Racing Commission whose duty it is to supervise any horse race meeting as may be provided by reasonable rules of the Racing Commission
Sweepstake	A race in which the entrance fee, subscription and/or other contribution of three or more owners are distributed according to the conditions of the race. The race is still a sweepstake when money or any other prize is added, but no overnight race, whatever its conditions, shall be considered to be a sweepstake
Thoroughbred Race	That form of horse racing in which each horse participating in that race is thoroughbred (i.e. meeting the requirements of and registered with The Jockey Club) and is mounted by a jockey

Appendix B: Economic Impact Terms

Term	Definition
Business Volume	Sales plus net increase in finished inventories and the value of intra- corporate shipments. Equals output (see below) plus the cost of goods sold in retail and wholesale trade.
Employment	The number of jobs in a business, industry, or region. Also, the number of jobs attributable to an impact (see below). This is a measure of the number of full-time and part-time positions, not necessarily the number of employed persons. Jobs are annual average by place of work. A job year is equivalent to one job for one year.
Employee Compensation	Wages and salaries plus employers' contribution for social insurance (social security, unemployment insurance, workers compensation, etc.) and other labor income (pension contributions, health benefits, etc.). By place of work unless otherwise stated.
Impacts	The results of the recirculation of funds throughout a regional economy due to the activity of a business, industry, or institution. Estimated by tracing back the flow of money through the initial businesses' employees and suppliers, the businesses selling to the employees and suppliers, and so on. Thus, they are a way to examine the distribution of industries and resources covered in the costs of the initial activity.
Output	For most sectors, measured as sales plus net inventories and the value of intra-corporate shipments. For retail and wholesale trade, measured as gross margins (i.e. sales minus cost of goods sold, also equal to the mark-up on goods sold).
Value Added	A measure of the value created by a business or industry or attributable to an impact (see above). Equal to the value of production minus the cost of purchased goods and services. Also equal to employee compensation plus capital income (profits, interest paid, depreciation charges), and indirect business taxes (e.g. severance, excise). Corresponds to the aggregate concepts of gross domestic product (GDP).

Appendix C: Surveys

West Virginia Thoroughbred Racing Owner, Breeder, and Trainer Research Survey

The Charles Town Horsemen's Benevolent and Protective Association and Mountaineer Park Horsemen's Benevolent and Protective Association commissioned the West Virginia University Bureau of Business and Economic Research (BBER) to research the economic impact of the thoroughbred race horse industry on the West Virginia economy. This study will be instrumental in understanding how important thoroughbred racing is to the state in terms of economic growth and job creation and, likewise, it will help promote an understanding of how the state's economy would be affected if the industry were to rise or decline. To better understand the economic contributions of the industry, BBER has developed this survey for the owners, breeders, and trainers. This research survey has been approved for distribution by the WVU Institutional Review Board for the Protection of Human Subjects.

This survey is voluntary and participants, who must be 18 years of age or older, are not required to answer all questions and may any question(s). All responses will be kept confidential and completed surveys will be destroyed after data entry. Individual responses will not be presented in the final report. All surveys can be completed and returned to the BBER at the address at the end of the survey; alternatively, you can complete it online by visiting http://be.wvu.edu/bber/thoroughbred.htm.

If you have any questions or concerns feel free to contact the project manager, Eric Bowen (BBER Economist), at 304.293.7534, or by email at eric.bowen@mail.wvu.edu.

Please return the survey to the above no later than August 30, 2013. For more information on the BBER please visit http://www.be.wvu.edu/bber/.

Section 1: General Information

Please fill out the following section to capture the basic information for all owners, breeders, and trainers. Contact information in this section will be used if BBER needs to ask follow-up questions.

Contact Information:			
	(Name)	(Farm N	ame)
	(Mailing Address)		
	(City)	(State)	(Zip)
	(Residence County)	(Farm Co	ounty)
	Phone Number		 Email Addres

	capacity were you active es in 2012? An active part	•	_	•	
	Owner Br	eeder	_Trainer _	None of the Ab	oove
	capacity were you activel [,] 12? An active participant l	•	-	•	
	Owner Br	eeder	_Trainer _	None of the Ab	oove
3. What pe	ercent of your overall busi	iness in 2012 was	devoted to ac	tivities at the Charle	s Town Races?
		%			
4. What pe	ercent of your overall busi	iness in 2012 was	devoted to ac	tivities at Mountaine	eer Park?
		%			
•	e an Owner , please indica cetrack in 2012:	ate the number o	f horses that y	ou own that particip	ated at a West
		Number o	f Horses Tha	t You Own	
	West Virginia Bred				
	Not West Virginia Br	ed			
	Total				

6. If you are a **Trainer**, please indicate the number of horses that you trained that participated at a West Virginia racetrack in 2012:

	# of Horses	Number of Horses That You Trained
Horses That You Own	WV Bred	
	Not WV Bred	
Horses That You Trained	WV Bred	
for WV Clients	Not WV Bred	
Horses That you Trained	WV Bred	
For Out-of-State Clients	Not WV Bred	
Total	WV Bred	
	Not WV Bred	

7. If you are a **Breeder**, please indicate the number of mares and stallions that you bred that participated at a West Virginia racetrack in 2012:

	# of Horses	Number of Horses that You Bred
Horses That You Own	# of mares	
	# of stallions	
Horses That You Bred For	# of mares	
WV Clients	# of stallions	
Horses That You Bred For	# of mares	
Out-of-State Clients	# of stallions	
Total	# of mares	
	# of stallions	

8. If you are a breeder, please provide the number of foals you have had over the past six years:

	2007	2008	2009	2010	2011	2012
Foals Bred						

8. a. What critical factors are currently affecting your long term breeding program?					

Section 2: Financial and Employment Information

Please complete the following section as completely as possible so that the BBER can accurately calculate and quantify the economic impact of the thoroughbred racing industry on West Virginia for 2012. All data will be strictly confidential and after being entered in our database it will be destroyed. All financial information will be aggregated so that it will be impossible to identify any individual.

9.	9. Please indicate whether your thoroughbred racing business operated at a profit or loss in 2012.				
	Profit Loss				

10. Indicate your total thoroughbred race horse revenues for 2012 as an owner, breeder, and/or trainer: (Note: be sure to include all bonus payment received in 2012)

Thoroughbred Race Horse Revenues 2012	Check One
Less than \$10,000	
\$10,000 - \$24,999	
\$25,000 - \$49,999	
\$50,000 - \$74,999	
\$75,000 - \$99,999	
\$100,000 - \$124,999	
\$125,000 - \$149,999	
\$150,000 - \$199,999	
\$200,000 - \$349,999	
\$350,000 - \$499,999	
\$500,000 or greater	

11. In 2012, indicate your total operating expenditures as a thoroughbred race horse owner, breeder, and/or trainer: (Note: Do not include capital expenditures)

Thoroughbred Race	Check
Horse Expenditures 2012	One
Less than \$10,000	
\$10,000 - \$24,999	
\$25,000 - \$49,999	
\$50,000 - \$74,999	
\$75,000 - \$99,999	
\$100,000 - \$124,999	
\$125,000 - \$149,999	
\$150,000 - \$199,999	
\$200,000 - \$349,999	
\$350,000 - \$499,999	
\$500,000 or greater	

11. a. What percentage of thoroughbred race horse expenditures were for the following categories in 2012? (Note: expenditure breakdowns allow for the accurate calculation of the economic impact as well as elimination of double counting.)

Thoroughbred Race Horse Expenditures	% of Total Expenditures 2012
Wages and Salaries	%
Employee Benefits	%
Feed, Bedding	%
Veterinarian	%
State Licenses/Permits	%
Entry Fees	%
Stall/Barn Rentals	%
Property Taxes	%
All Other Taxes	%
All Other Expenditures	%
Total	100%

12. Please estin	nate how your expenses have change	d over the past five years on the following items:
	Expenses have risen by	% on a bail of hay over the last five years.
	Expenses have risen by	% on bail of straw over the last five years.
	Expenses have risen by	% on bag of horse feed over the last five years.
13. What perce	ntage of your thoroughbred race hor	se expenditures in 2012 occurred within:
	% in Jefferson County	
	% in Hancock County	
	% Rest of West Virginia	(excluding Jefferson and Hancock Counties)

14. What was the value of new investments in equipment, land, and structures made in 2012 for your thoroughbred horse operation?

Thoroughbred Race Horse Capital Expenditure	Expenditures in 2012
Equipment	\$
Land	\$
Structures	\$
Total	\$

15. Please indicate the average number of paid employees in your thoroughbred race horse operations in 2012 on a full and part time basis: (Please include yourself if you are self-employed).

Employee Category				Total
	Full Time	Part Time	Independent	Average
	Average	Average	Contractors	2012
Farm employees				
Backstretch employees				
Office employees				
Total				

16. If you are an owner, please provide the daily training fee that you paid your trainer at Charles Town Races and/or Mountaineer Park in 2012.					
\$per horse per day in 2012 at Charles Town Races					
\$per horse per day in 2012 at I	\$per horse per day in 2012 at Mountaineer Park				
17. In order to understand how many of those involved in the state, please provide the following information on you					
	Average Number of Employees 2012				
Permanent Jefferson Co. residents					
Permanent Hancock Co. residents					
Permanent WV (non-Jefferson/non- Hancock Co.) residents					
18. If you are a West Virginia resident, how long have you lived in West Virginia?					
I have lived here my entire life.	I moved here in				
19. If you are not a West Virginia resident, do you lease stalls at a West Virginia training center?					
Yes No West	: Virginia Resident				
20. If you are not a West Virginia resident, do you swim horses at a West Virginia training center? Yes No West Virginia Resident					

Section 3: Thoroughbred Horse Racing Future

1. How would your thoroughbred race horse operation be affected if there was a reduction in the acing program at the Charles Town Races or Mountaineer Park (i.e., reduction in purses, racing days, reeder's awards, etc.)?
2. What would be the impact on your thoroughbred race horse operation if there was an increase in ne racing program at the Charles Town Races or Mountaineer Park (i.e., an increase in purses, racing ays, breeder's awards, etc)?
3. How do you think the thoroughbred race horse industry could be showcased better in West Virginia? Check all that apply)
Develop horse park (including horse shows, barrel racing, etc.)
Increase advertising/promotions
Expansion of seating and concessions at racing facility
Other Suggestions

Please return surveys to:

Bureau of Business and Economic Research ATTN: Eric Bowen PO Box 6025 Morgantown, WV 26506

Or FAX to 304.293.7061

Charles Town Races Jockey Research Survey

The Charles Town Horsemen's Benevolent and Protective Association and Mountaineer Park Horsemen's Benevolent and Protective Association commissioned the West Virginia University Bureau of Business and Economic Research (BBER) to research the economic impact of the thoroughbred race horse industry on the West Virginia economy. This study will be instrumental in understanding how important thoroughbred racing is to the state in terms of economic growth and job creation and likewise, it will help promote an understanding of how the state's economy would be affected if the industry were to decline. To better understand the economic contributions of the industry, BBER has developed this research survey for the owners, breeders, and trainers. This research survey has been approved for distribution by the WVU Institutional Review Board for the Protection of Human Subjects.

This research survey is voluntary and participants, who must be 18 years of age or older, are not required to answer all questions and may stop the survey at any time or skip any question. All responses will be kept confidential and completed surveys will be destroyed after data entry. Individual responses will not be presented in the final report. All surveys can be completed and returned to the BBER at the address at the end of the survey; alternatively, you can complete it online by visiting http://be.wvu.edu/bber/thoroughbred.htm.

If you have any questions or concerns feel free to contact the project manager, Eric Bowen (BBER Economist), at 304.293.7534 or by email at eric.bowen@mail.wvu.edu.

Please return the survey to the above no later than August 30, 2013. For more information on the BBER please visit http://www.be.wvu.edu/bber/.

Section 1: General Information

Please fill out the following section to capture the basic information for jockeys. Contact information in this section will be used if BBER needs to ask follow-up questions.

Contact Information:			
	(Name)		
	(Mailing Address)		
	(
	(City)	(State)	(Zip)
	(Phone Number)		

1. How many racing days were you hired as a	jockey at the Charles Town Races in 2012?
days	
2. How many races per day did you run typica	ally at the Charles Town Races in 2012?
average races pe	er race day
3. How many racing days were you hired as a	jockey at Mountaineer Park in 2012?
days	
4. How many races per day did you run typica	ally at Mountaineer Park in 2012?
average races pe	er race day
5. In what county and state was your perman	ent residence in 2012?
County	State
6. What was the size of your household (spou in 2012?	use, children and extended family) with whom you resided
number of household m	embers

Section 2: Financial and Employment Information

Please complete the following section as completely as possible so that the BBER can accurately calculate and quantify the economic impact of the thoroughbred racing industry on West Virginia for 2012. All data will be strictly confidential and after being entered in our database it will be destroyed. All financial information will be aggregated so that it will be impossible to identify any individual.

7. Did you employ a	an agent in 2012?		
	Yes	No	
7. a. If yes, what wa	as the average percent	age or amount of revenue per r	ace received by your agent?
\$_	or _	%	
8. Did you employ a	a valet in 2012?		
	Yes	No	
8. a. If yes, what wa	as the average percent	age of revenue per race receive	d by your valet?
	%		

Section 3: Thoroughbred Horse Racing Future

9. How would your livelihood be affected if there was a reduction in the racing program at the Charles Town Races or Mountaineer Park (i.e, a reduction in purses or racing days)?
10. What would the impact on your livelihood if there was an increase in the racing program at the Charles Town Races or Mountaineer Park (i.e,. an increase in purses or racing days)?

Please return surveys to:

Bureau of Business and Economic Research

ATTN: Eric Bowen
PO Box 6025
Morgantown, WV 26506

Or FAX to 304.293.7061

West Virginia Greyhound Racing Owner, Breeder, and Kennel Booking Research Survey

The West Virginia Greyhound Owners and Breeders Association commissioned the West Virginia University Bureau of Business and Economic Research (BBER) to research the economic impact of the greyhound racing industry on the West Virginia economy. This study will be instrumental in understanding how important greyhound racing is to the state in terms of economic growth and job creation and, likewise, it will help promote an understanding of how the state's economy would be affected if the industry were to rise or decline. To better understand the economic contributions of the industry, BBER has developed this survey for the owners, breeders, and kennel bookings. This research survey has been approved for distribution by the WVU Institutional Review Board for the Protection of Human Subjects.

This survey is voluntary and participants, who must be 18 years of age or older, are not required to answer all questions and may answer any question(s). All responses will be kept confidential and completed surveys will be destroyed after data entry. Individual responses will not be presented in the final report. All surveys can be completed and returned to the BBER at the address at the end of the survey; alternatively, you can complete it online by visiting http://be.wvu.edu/bber/thoroughbred.htm.

If you have any questions or concerns feel free to contact the project manager, Eric Bowen (BBER Economist), at 304.293.7534 or by email at eric.bowen@mail.wvu.edu.

Please return the survey to the above no later than August 30, 2013. For more information on the BBER please visit http://www.be.wvu.edu/bber/.

Section 1: General Information

Please fill out the following section to capture the basic information for all owners, breeders, and kennel bookings. Contact information in this section will be used if BBER needs to ask follow-up questions.

(Name)	(Farm Na	ame)
(Mailing Address)		
(City)	(State)	(Zip)
(Residence County)	(Farm Co	ounty)

 In what capacity were you actively involved in the capacity of the capacity active participant had a that apply) 	<u> </u>	•
Owner and/or Breeder	Kennel Booking	None of the Above
2. In what capacity were you actively involvances in 2012? An active participant had a that apply)		•
Owner and/or Breeder	Kennel Booking	None of the Above
3. If you are an owner or a Kennel Booking activities at the Wheeling Island races?	g, what percent of your over	all business in 2012 was related to
	%	
4. If you are an owner or a Kennel Booking activities at Mardi Gras/Tri-State races?	g, what percent of your over	all business in 2012 was related to
	%	
5. If you are an Owner , please indicate the West Virginia racetrack in 2012:	e number of greyhounds that	t you own that participated at a
Number of greyho	ounds:	
5. If you are a Breeder , please indicate the	e average number of greyhou	unds on your farm in 2012:
Number of greyho	ounds:	
6. a. What critical factors are curre	ently affecting your long terr	n breeding program?

7. If you are a **Kennel Booking**, please indicate the number of greyhounds in your kennel booking that participated at a West Virginia racetrack in 2012:

	Number of Greyhounds at Mardi Gras/Tri-State	Number of Greyhounds that Wheeling Island
Greyhounds That You Own		
Greyhounds That You Raced For WV Clients		
Greyhounds That You Raced For Out-of-State Clients		
Total		

Section 2: Financial and Employment Information

Please complete the following section as completely as possible so that the BBER can accurately calculate and quantify the economic impact of the greyhound racing industry on West Virginia for 2012. All data will be strictly confidential and after being entered in our database it will be destroyed. All financial information will be aggregated so that it will be impossible to identify any individual.

8.	Please indicate whether your greyhound racing business operated at a profit or loss in 2012.
	Profit Loss

9. Indicate your total greyhound racing revenues for 2012 as an owner, breeder, and/or kennel booking: (Note: be sure to include all bonus and supplemental purse payments received in 2012)

Greyhound Racing Revenues 2012	Check One
Less than \$10,000	
\$10,000 - \$24,999	
\$25,000 - \$49,999	
\$50,000 - \$74,999	
\$75,000 - \$99,999	
\$100,000 - \$124,999	
\$125,000 - \$149,999	
\$150,000 - \$199,999	
\$200,000 - \$349,999	
\$350,000 - \$499,999	
\$500,000 or greater	

10. In 2012, indicate your total operating expenditures as a greyhound racing owner, breeder, and/or kennel booking: (Note: Do not include capital expenditures)

Greyhound Racing Expenditures 2012	Check One
Less than \$10,000	
\$10,000 - \$24,999	
\$25,000 - \$49,999	
\$50,000 - \$74,999	
\$75,000 - \$99,999	
\$100,000 - \$124,999	
\$125,000 - \$149,999	
\$150,000 - \$199,999	
\$200,000 - \$349,999	
\$350,000 - \$499,999	
\$500,000 or greater	

10. a. What percentage of greyhound racing expenditures were for the following categories in 2012? (Note: expenditure breakdowns allow for the accurate calculation of the economic impact as well as elimination of double counting.)

Greyhound Racing Expenditures	% of Total Expenditures 2012
Wages and Salaries	%
Employee Benefits	%
Feed, Bedding	%
Veterinarian	%
State Licenses/Permits	%
Entry Fees	%
Stall/Barn Rentals	%
Property Taxes	%
All Other Taxes	%
All Other Expenditures	%
Total	100%

	L1.	What	percentage	of vour	grevhound	racing	expenditures	in	2012	occurred	within
--	-----	------	------------	---------	-----------	--------	--------------	----	------	----------	--------

_% in Ohio County
% in Kanawha and/or Putnam County
% Rest of West Virginia (excluding Ohio, Kanawha, and Putnam Counties)

12. What was the value of new investments in equipment, land, and structures made in 2012 for your greyhound operation?

Greyhound Racing Capital Expenditure	Expenditures in 2012
Equipment	\$
Land	\$
Structures	\$
Total	\$

13. Please indicate the average number of paid employees in your greyhound racing operations in 2012
on a full and part time basis: (Please include yourself if you are self-employed).

Employee Category	Full Time Average	Part Time Average	Total Average 2012
Farm employees			
Kennel employees			
Office employees			
Total			

14. In order to understand how many of those involved in greyhound racing in West Virginia reside in the state, please provide the following information on your full and part time employees for 2012:

	Average Number of Employees 2012
Permanent Ohio Co. residents	
Permanent Kanawha/Putnam Co. residents	
Permanent WV (non-Ohio/non-Kanawha/non- Putnam Co.) residents	

15. If you are a West Virginia resident, how long have yo	ou lived in West Virginia?
I have lived here my entire life.	I moved here in

Section 3: Greyhound Racing Future

.6. How would your greyhound racing operation be affected if there was a reduction in racing activity at he Wheeling Island races or Mardi Gras/Tri-State races (i.e., a reduction in purses or racing days)?
.7. What would be the impact on your greyhound racing operation if there was an increase in racing lays at the Wheeling Island races or Mardi Gras/Tri-State races (i.e,. an increase in purses or racing lays)?
.8. How do you think the greyhound racing industry could be showcased better in West Virginia? (Check
Enhance race track itself
Enhance racing facility activities to make it more attractive to racing spectators
Develop training tracks in West Virginia
Increase advertising
Expansion and improvement of seating and concessions at racing facility
Other Suggestions

Please return surveys to:

Bureau of Business and Economic Research
ATTN: Eric Bowen
PO Box 6025
Morgantown, WV 26506

Or FAX to 304.293.7061

About the Bureau of Business and Economic Research

Since the 1940s, the BBER's mission has been to serve the people of West Virginia by providing the state's business and policymaking communities with reliable data and rigorous applied economic research and analysis that enables the state's leaders to design better business practices and public policies. BBER research is disseminated through policy reports and briefs, through large public forums, and through traditional academic outlets. BBER researchers are widely quoted for their insightful research in state and regional news media. The BBER's research and education/outreach efforts to public- and private-sector leaders are typically sponsored by various government and private-sector organizations.

The BBER has research expertise in the areas of public policy, health economics, energy economics, economic development, economic impact analysis, economic forecasting, tourism and leisure economics, and education policy, among others. The BBER has a full-time staff of three PhD economists, two master's-level economists, and one bachelor's-level economist. This staff is augmented by graduate student research assistants. The BBER also collaborates with affiliated faculty from within the College of Business and Economics as well as from other parts of WVU.

To learn more about our research, please visit our website at http://www.be.wvu.edu/bber.