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## THE NEW JERSEY EQUINE INDUSTRY 2007

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### Economic Impact

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# New Jersey Equine Industry, 2007

## Introduction

*There is a reason the state animal of New Jersey is the horse.*

The residents of New Jersey recognize the long and meaningful relationship they have had with horses for more than two centuries and the impact the equine industry has had on the economy of the state, on traditional agriculture, and on the preservation and maintenance of open space. They are aware of the role of the horse in sport, recreation, youth development, therapy for the handicapped, and rehabilitation of adults and children who are troubled or in trouble.

Acknowledging the complexity of the industry and the need for an updated assessment of its value, the Rutgers Equine Science Center led an effort beginning in July 2006 to analyze the economic impact of the horse industry in New Jersey. The Center partnered with several government agencies, industry groups, and private individuals to accomplish this task – the result of which is the “New Jersey Equine Industry - 2007.”

Much more than providing a census of animals and facilities, the research team employed economic modeling to determine the direct and indirect impacts of the horse industry on the state’s economy, on traditional agricultural enterprises, and on the maintenance of the working agricultural landscape – that is, open space that is cared for by the private sector rather than taxpayer dollars.

The result of more than 12 months of work is reported in this document. The numbers show that the horse industry – which generates \$1.1 billion in economic impact annually – is comparable to such widely recognized sectors as golf courses, landscaping, biotechnology, marine fisheries and aquaculture, and many others. In terms of impact on working agriculture, the horse industry accounts for one in five agricultural acres, more than any other segment of agriculture.

In addition to the impressive numbers, the impact on the quality of life in New Jersey is, undoubtedly, the most important contribution the horse industry makes. Horses are in every county in New Jersey and, by all accounts, are one of the top attractions for residents from the cities and suburbs when they tour the state. Clearly New Jersey is horse country, and this report provides the numbers to show why this is true.

Sponsors of this study included the New Jersey Department of Agriculture and its Equine Advisory Board and Sire Stakes units; The New Jersey Sports and Exposition Authority; the Standardbred Breeders and Owners Association of New Jersey; the Thoroughbred Breeders Association of New Jersey; and several private individuals.

# New Jersey Equine Industry, 2007

## Executive Summary

### Economic impact of the equine industry

- Total economic impact of \$1.1 billion annually
  - \$278.2 million annually for racing-related operations, not including racetracks
  - \$262.4 million annually for non-racing operations
  - \$117.8 million annually for equine owners without operations
  - \$647 million annually for the three preceding categories combined
  - \$502.3 million annually for New Jersey racetracks

### Employment

- Nearly 13,000 jobs generated
  - 9,150 jobs generated by equine operations, not including racetracks
  - 3,820 jobs generated by racetracks

### Taxes generated

- An estimated \$160 million annually paid in federal, state, and local taxes
  - \$85 million generated by equine operations and owners
  - \$75 million generated by New Jersey racetracks

### Acres to support equine facilities

- 176,000 total acres reported by equine operations
  - 96,000 of these acres are directly related to equine activities
    - 78,000 of these acres are devoted to pasture and hay production
- 46,000 additional acres in New Jersey produce hay and grain for horses
- New Jersey equine-related acres represent about one-fifth of the state's 790,000 acres in agriculture

### Animals and operations

- 42,500 equine animals housed in New Jersey
  - 30,000 in non-racing activities
  - 12,500 in racing-related activities
    - 8,200 racing-related Standardbreds
    - 4,300 racing-related Thoroughbreds
- 7,200 equine operations in New Jersey
- \$4 billion in equine-related assets
  - \$582 million in equine animals
  - \$2.9 billion in land and buildings (not including racetracks)
  - \$476 million in racetrack assets (land and buildings)



### Annual economic impact of New Jersey equine operations and owners

Of the \$1.1 billion annual economic impact of the horse industry in New Jersey, \$647 million or 59 percent is generated by equine operations (farms and stables that house equine animals) and by horse owners who board their animals on equine operations. Racing-related operations – although fewer in number than non-racing entities – produce \$278.2 million in impact, and non-racing operations account for \$262.4 million in impact. The total economic impact is composed of two parts: (1) direct dollars spent by the equine industry, and (2) the “ripple effect” of those expenditures on other related industries.

Type of Operation	Direct Annual Impact	Indirect/Induced Impact	Total Economic Impact
	(\$ Millions)	(\$ Millions)	(\$ Millions)
Racing-Related Operations	200.0	78.2	278.2
Non-Racing Operations	187.9	74.5	262.4
Horse Owners	88.9	28.9	117.8
<b>Total Operations &amp; Owners*</b>	<b>476.8</b>	<b>170.2</b>	<b>647.0</b>

\* Total economic impact has been adjusted downward to eliminate double counting impacts between operations and horse owners.

### Annual economic impact of New Jersey racetracks

Racetracks located at the Meadowlands, Monmouth Park, Freehold Raceway and the Atlantic City Race Course represent an important economic engine in New Jersey. Together, they produce an annual economic impact of \$502.3 million. This does not include wagering (the “pari-mutuel handle”) at racetracks or the effects of travel and tourism-related contributions to the economy. Other reports have shown that a major one-time event at a racetrack, such as the Breeders Cup, can generate upwards of \$50 million in incremental impact for the surrounding communities and the state.

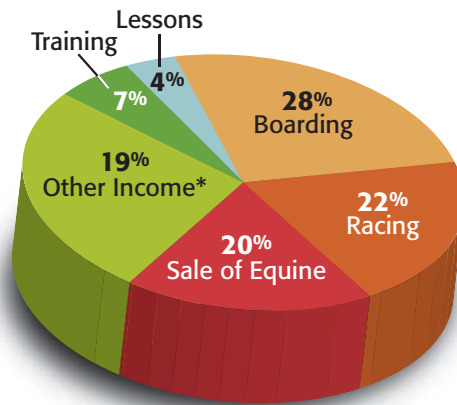
	Annual Impact (\$ Millions)
Direct Annual Impact	282.4
Indirect/Induced Impact	219.9
<b>Total Racetrack Industry Impact</b>	<b>502.3</b>





## Top sources of income for equine operations and owners

Although a large number of equine operations are not businesses pursuing income, other sectors – especially the racing-related and professional boarding and show horse operations – do generate revenues. The main income sources are boarding, racing purses, sale of horses, training, and lessons.



\* Other Income category includes income from breeding, sale of hay & forage, leasing, non-racing competition, shows, trail riding, and other.

## Top 10 annual expense categories for equine operations and owners

Expenditures affect all segments of the horse community, with nearly \$377 million paid out annually, excluding labor costs. The top expenditure categories are equipment purchases and depreciation (\$40 million), capital improvements (\$34 million), horse health costs (\$32 million), training fees (\$31 million), boarding (\$30 million), feed and supplements (\$23 million), hay and forage (\$22 million), and taxes (\$21 million).

Expense Type	Annual Expenses*	
	(\$ Millions)	%
Equipment Purchase & Depreciation	40.0	10.6%
Capital Improvements	33.6	8.9%
Health	32.2	8.5%
Training Fees	30.8	8.2%
Boarding	30.1	8.0%
Grain and Supplements	23.2	6.2%
Hay/Forage	22.2	5.9%
Taxes	21.4	5.7%
Equipment Maintenance	15.7	4.2%
Farrier	13.6	3.6%
All Other Expenses**	114.1	30.3%
<b>Total Expenses</b>	<b>376.8</b>	<b>100.0%</b>

\* Excludes labor expenses. \*\* Other category includes expenses for insurance, breeding, bedding, competitive events, travel, utilities, grazing and cropland maintenance, tack and clothing, supplies, rent, professional fees, contract services, advertising, and other.





### Employment impact of the New Jersey equine industry

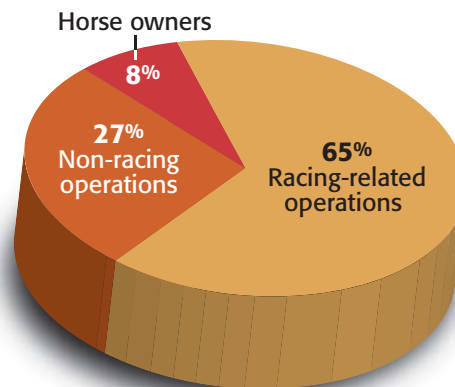
An estimated 13,000 jobs are generated by the equine industry in New Jersey, including a total of 5,670 directly employed by equine operations and horse owners and another 2,048 by the racetracks. In addition, 5,252 jobs are generated by the equine industry through the ripple effect on other industries.

Type of Operation	Directly Employed	Indirect/Induced # Jobs Generated	Total #Jobs Generated
Racing-Related Operations	1,480	1,711	3,191
Non-Racing Operations	3,805	1,359	5,164
Horse Owners	386	764	1,150
<b>All Operations &amp; Owners*</b>	<b>5,670</b>	<b>3,480</b>	<b>9,150</b>
<b>New Jersey Racetracks</b>	<b>2,048</b>	<b>1,772</b>	<b>3,820</b>

\* Total employment impact has been adjusted downward to eliminate double counting impacts between operations and horse owners.

### Proportion of labor expenses by type of operation and horse owners

Racing-related operations accounted for almost two-thirds of labor expenditures in the horse industry. Twenty-seven percent of labor expenses are generated by non-racing operations, and horse owners accounted for another eight percent.



### Annual tax impact of the New Jersey equine industry\*

The equine industry generates an estimated \$160 million in tax revenues for the federal government, the state, and municipalities. More than \$60 million goes to state and local authorities in the form of corporate, personal, and property taxes.

Type of Operation	Federal Tax Impact (\$ Millions)	State and Local Tax Impact (\$ Millions)	Total Tax Impact (\$ Millions)
All Equine Operations and Owners	53.4	31.9	85.3
New Jersey Racetracks	44.2	31.2	75.4

\*Estimated tax impacts include federal, state, and local taxes generated from the direct, indirect, and induced impacts of the equine industry. Included are estimates of corporate profits tax, personal taxes, Social Security taxes, and property taxes. Estimate may include a small percentage of overlap.

Estimates are adjusted for the fact that the New Jersey Sports and Exposition Authority (operating Meadowlands and Monmouth Park) is exempt from taxation, but does make payments in lieu of taxes to local municipalities.





## Asset value of the New Jersey equine industry

The 7,200 equine operations in New Jersey hold assets valued at nearly \$4 billion, including \$582 million in horses and other equine animals and \$2.9 billion in land and buildings. New Jersey's racetracks account for an additional \$476 million in land and building assets.

Type of Operation	Land and Capital (\$ Millions)	Equine Animals (\$ Millions)	Total Value (\$ Millions)
Racing-Related Operations	833	316	1,149
Non-Racing Operations	2,076	175	2,251
<b>All Equine Operations</b>	<b>2,909</b>	<b>491</b>	<b>3,400</b>
<b>New Jersey Racetracks</b>	<b>476</b>	<b>91</b>	<b>567</b>

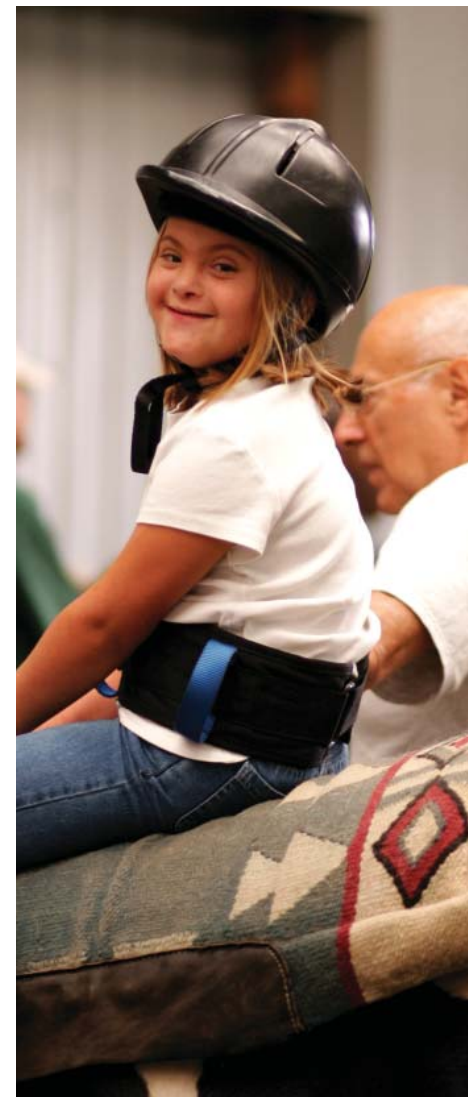
## Agricultural land in New Jersey supporting New Jersey's equine animals

Including land in New Jersey that is used to grow forage and grain for the state's horses, approximately 142,000 acres are used to support the equine industry. This is almost one-fifth of the state's estimated 790,000 acres in farms.

Type of Operation	Number of Operations	Total Facility Acres	Acres that are Equine-Related	Acres Used for Pasture, Hay, and Grain
Racing-Related Operations	700	34,000	24,000	22,000
Non-Racing Operations	6,500	142,000	72,000	56,000
<b>All Equine Operations</b>	<b>7,200</b>	<b>176,000</b>	<b>96,000</b>	<b>78,000</b>
Farms Without Any Equine**	nc*	nc*	46,000	46,000
<b>All New Jersey Operations Supporting Equine Animals</b>	<b>nc*</b>	<b>nc*</b>	<b>142,000</b>	<b>124,000</b>

\*nc = not collected as part of this study

\*\* i.e., farms that produce forage, straw, and grain for equine animals



### Equine operations and associated land, by county

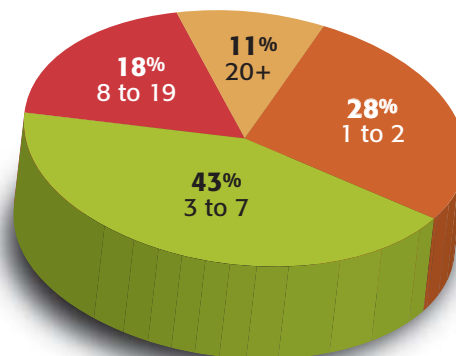
The top three counties in both acres and number of operations are Hunterdon, Monmouth, and Burlington. The industry appears to be growing in the state's northwestern counties.

County	Number of Operations	Total Facility Acres	Acres that are Equine-Related	Acres Used for Pasture, Hay, and Grain
Atlantic	270	3,100	2,100	1,500
Burlington	850	20,700	12,100	10,100
Camden	160	1,600	1,100	1,000
Cape May	230	2,500	1,700	1,300
Cumberland	270	8,200	3,300	2,800
Gloucester	490	6,200	3,600	2,800
Hunterdon	1,110	29,400	16,600	14,000
Mercer	110	3,500	2,300	2,100
Middlesex	160	4,200	2,400	1,900
Monmouth	960	27,300	19,900	15,700
Morris	260	3,700	2,100	1,600
Ocean	290	4,000	1,500	1,100
Salem	500	12,900	5,600	4,700
Somerset	250	7,600	3,500	2,900
Sussex	640	20,000	10,300	7,800
Warren	500	18,800	6,800	5,300
All other NJ counties	150	2,100	1,100	900
<b>Statewide Total</b>	<b>7,200</b>	<b>176,000</b>	<b>96,000</b>	<b>78,000</b>



### Operations by number of head

This is largely an industry of smaller farms. More than 70 percent of the state's 7,200 equine operations had fewer than eight equine animals in 2006. These operations include not only small commercial facilities, but also horses kept in "backyards" and commodity farms that happen to keep a few horses. Although they make up only 29 percent of all operations, those having eight or more animals account for three-quarters of New Jersey's equine inventory of 42,500, while operations with 20 or more animals account for a third.

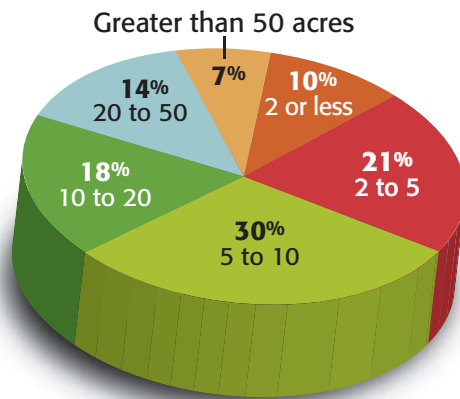






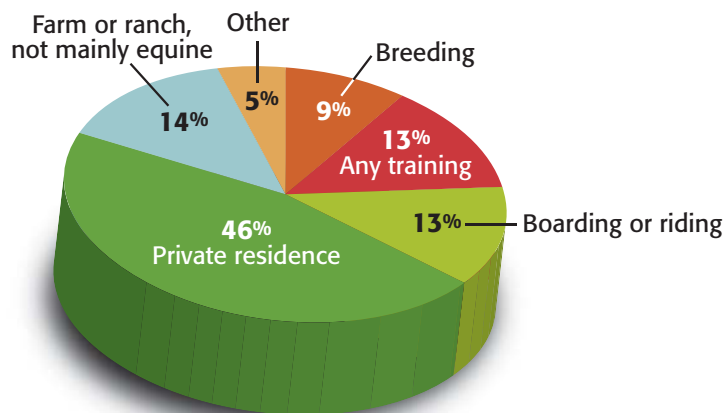
### Operations by number of equine-related acres

The distribution of operations by size follows the distribution by number of head. More than half of all operations have fewer than 10 acres that can be characterized as equine-related. Although constituting a minority of all operations, those with more than 10 acres nevertheless account for 86 percent of the 96,000 equine-related acres on operations, while operations with more than 20 acres account for 71 percent of this total. Racing-related operations are, on average, about three times the size of non-racing operations, and account for one-quarter of operation acres devoted to equine activities.



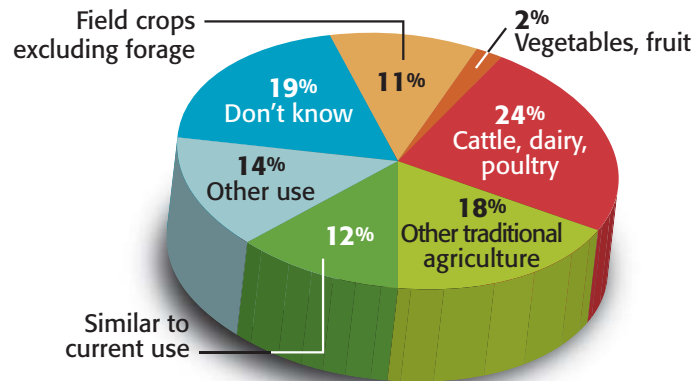
### Equine operations by primary function

The chart below highlights the importance of the pleasure portion of the equine industry, with 46 percent of facilities with horses reporting that they are private residences, not commercial operations. The breeding and training categories, making up 22 percent of all operations, are the ones most likely to be racing-related.



### Acres by prior use of equine operation\*

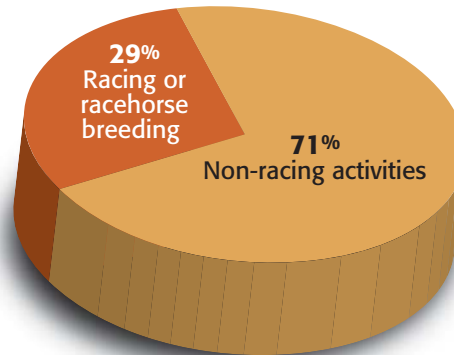
As urbanization continues, horses may prove to be a more profitable use of open land than more traditional agricultural commodities. More than a third of the land currently in equine operations was in field crops, livestock, or fruits and vegetables before becoming a horse farm.



\*Current primary use must be equine. Figure includes acres on entire operation.

### Equine operations involved in racing-related activities

Racing represents a significant portion of the New Jersey equine industry, even far from the track. The racing-related operations shown below — 29% of the total — have more than half of their inventory in Standardbreds or Thoroughbreds that are foals, breeding stock, or active racehorses.



### Demographic profile of the equine industry

New Jersey's horse people are a seasoned and committed group. Only a fifth, however, list the equine industry as a full-time occupation. This reflects not only the industry's pleasure component, but also the need for virtually all farm families to supplement their earnings with off-farm income.

Demographic Profile of the Equine Industry	
Male	40%
Female	60%
Average age	52
Own at least one equine animal	76%
Average years owning equine	23
Own an operation	52%
Primary occupation is in equine industry	20%





## Study Authors

This study is a joint effort of an inter-disciplinary research team of the New Jersey Agricultural Experiment Station (NJAES) of Rutgers University. Paul Gottlieb of the Department of Agricultural, Food, and Resource Economics served as principal investigator. Brian Schilling and Kevin Sullivan of the Rutgers Food Policy Institute had primary responsibility for the economic impact portion of the analysis. Drawing on their detailed knowledge of the equine industry in New Jersey, Karyn Malinowski and Diana Orban Brown of the Rutgers Equine Science Center contributed significantly to the execution of the study and communication of the findings.

## Methodology

The study is based on an extensive survey of the equine industry conducted by the National Agricultural Statistics Service (NASS), a statistical agency of the United States Department of Agriculture. NASS mailed the survey to a list of nearly 10,000 potential horse owners and operations, and had staff visit 103 segments or parcels of land representative of New Jersey's agricultural and urban geography. The data collected from horse owners and operations in the geographical portion of the study was combined with the mail response to provide indications on equine inventory and the impact of the equine industry on the state's economy. This list-segment procedure is a highly recognized statistical methodology.

Expenditure information from the 2006 NASS survey was fed into IMPLAN, a highly-regarded computer model of the New Jersey economy. This enabled the research team to estimate the "multiplier" portion of the equine industry's impact on the New Jersey economy. Expenditure data was also combined with 2006 feed prices and 2002 agricultural yield figures to estimate the number of acres on non-equine farms used to feed New Jersey's horses. (A survey of the local hay industry, conducted by NJAES in 2004, was helpful for estimating prices, product mix, and interstate trade; see "NJAES Extension Bulletin E305.") Finally, telephone interviews were conducted with the state's racetracks and with a number of industry participants, both customers and suppliers.

## Acknowledgements

The authors would like to thank Troy Joshua and his team of statisticians at the New Jersey office of the National Agricultural Statistics Service for their thorough data-gathering efforts. We would also like to thank Sarah Ralston and David Tulloch of Rutgers' School of Environmental and Biological Sciences; Ed Wengryn of the New Jersey Farm Bureau; and S. P. Dey II, Jane Gilbert, and David Meirs II, active equine industry participants, for providing suggestions on methodology. Several members of Rutgers Cooperative Extension gave technical advice, including Donna Foulk, Dan Kluchinski, Carey Williams, Joe Heckman, and Bob Mickel. Any errors or omissions are the authors' alone.

*Further information related to the study is available on the Equine Science Center website at [www.esc.rutgers.edu](http://www.esc.rutgers.edu)*



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