



PREPARED FOR  
**Virginia Equine Alliance**



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# Economic Impact

Virginia-Certified Residency Program  
for Thoroughbred Horses

# 1. Background

The horse industry makes significant contributions to Virginia’s economy. The Virginia Equine Alliance (the Alliance) is the primary organization to promote horse racing in the state. The Alliance is a 501(c) (6) organization which is comprised of the Virginia Harness Horse Association, the Virginia Horsemen’s Benevolent & Protective Association, the Virginia Gold Cup Association, and the Virginia Thoroughbred Association (VTA).

In 2019, the Alliance commissioned Chmura Economics & Analytics (Chmura)<sup>1</sup> to conduct an economic impact analysis of the horseracing and breeding industry in Virginia. Since then, there has arisen an additional need to understand the economic impact of the Virginia-Certified Residency Program for thoroughbred horses in the state.

The Virginia-Certified Residency Program was started by the VTA in 2017. This program requires out-of-state horses to spend at least six consecutive months (prior to turning three years old) on a Virginia farm to receive a certification.

This program benefits the Virginia economy. Hundreds of Virginia horse farms participate in the program and receive income from horse owners outside Virginia. The money is used for farm maintenance, animal feed, training, veterinarians, and other services. The program also supports the preservation of farmland and other green space in the commonwealth. The spending supports many jobs and businesses throughout the state.

The spending by participating horse farms constitutes the direct economic impact of the Virginia-Certified Residency Program. The total economic impact also includes the economic ripple effects from the direct impact (which includes both indirect and induced economic impact). Using spending on veterinarian services as an example, the indirect effects are the benefits to industries that supply veterinarian offices with equipment, medication, and services. The induced effects occur when workers hired by veterinarian offices spend their income in the state.

Ripple effects of the Virginia-Certified Residency Program were estimated using Chmura’s JobsEQ® economic impact model. The direct impact was estimated with data provided by the Alliance. Chmura also estimated state tax revenue generated by the Virginia-Certified Residency Program.

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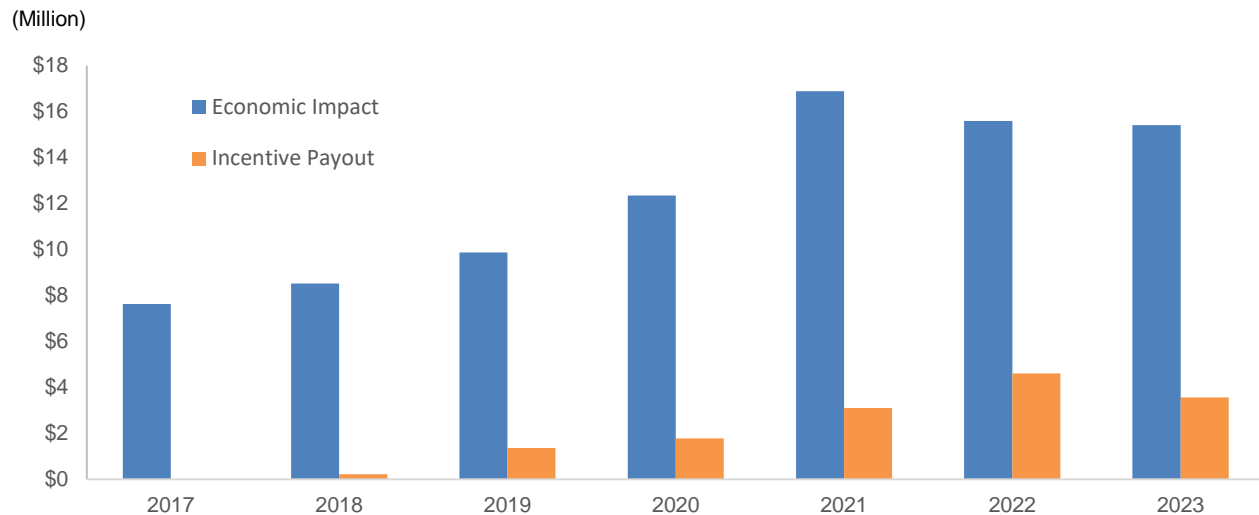
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<sup>1</sup> Chmura provides economic software, consulting, and data to our clients that help them make informed decisions to benefit their communities. Chmura’s PhD economists, data scientists, and strategic planners guide clients through their local labor market. Over the past 26 years, Chmura has served hundreds of clients nationwide with thoroughness, accuracy, and objectivity.

## 2. Economic Impact Summary

The **Virginia-Certified Residency Program** for thoroughbred horses benefits the Virginia economy. Figure 2.1 compares the total economic impact (direct, indirect, and induced) of the Virginia-Certified Residency Program with the incentive payout. From 2017 to 2023, **the cumulative economic impact is 5.9 times larger than the total incentive payout**. The economic impact far outweighs the incentive payout each year.

Figure 2.1: Total Economic Impact Far Outweighs Incentives



Source: Chmura Economics & Analytics

**Economic Impact:** Since 2017, a total of 5,031 horses have participated in the Virginia-Certified Residency Program. On average, each horse stayed eight months in Virginia. In 2017, the approximate daily spending on those horses was \$35, which increased to \$52.50 in 2023.<sup>2</sup> As a result, the direct spending of the program was estimated at \$54.5 million for the seven years from 2017 to 2023 (Table 2.1). These spending activities generated ripple (indirect plus induced) effects yielding a total economic impact of **\$86.2 million**, supporting 825 jobs in Virginia.

**Incentive Payout:** Starting in 2018, owners and breeders of Virginia-Certified horses have been eligible to receive bonuses from the Alliance. Wins in Mid-Atlantic regional races can ensure up to a 25% bonus in open races, while wins in state-restricted races can allow for a 10% bonus.<sup>3</sup> Between 2018 and 2023, the program has paid out a total of **\$14.6 million** in bonuses.

The Virginia-Certified Residency Program also generated tax revenue for the state. From 2017 to 2023, the program generated an estimated **\$1.8 million** for the state government.

Table 2.1: Cumulative Economic Impact of Virginia-Certified Residency Program Averaged \$12.3 Million in Virginia from 2017 to 2023

	Direct	Indirect	Induced	Total
<b>Spending (Million)</b>	\$54.5	\$12.5	\$19.2	\$86.2
<b>Employment</b>	633	52	141	825
<b>Tax Revenue (Million)</b>	\$1.8			

Note: Numbers may not sum due to rounding.

Source: JobsEQ by Chmura

<sup>2</sup> Source: Virginia Equine Alliance.

<sup>3</sup> Total annual payments are capped at \$4 million. Since incentives paid out in 2022 exceeded this cap, the amount of funds available for 2023 was reduced accordingly.

## Appendix 1: Details of Economic Impact

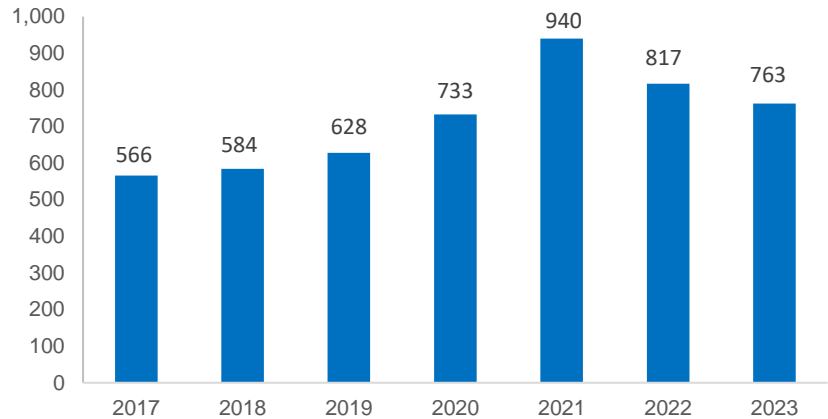
### A1.1. Program Summary

The Virginia-Certified Residency Program was started by the VTA in 2017. This program involves out-of-state horses spending at least six consecutive months on a Virginia farm to receive Virginia-Certified status.

Since 2017, a total of 5,031 horses have participated in this program. Figure A1.1 presents the number of horses in the program each year. For example, in 2021, there were 940 horses involved. Though the required stay for a certification is at least six months in Virginia, the horses in this program spent an average of eight months in the state.

Since 2018, owners and breeders of Virginia-Certified horses have been eligible to receive bonuses from the Alliance. If Virginia-Certified horses win any races in the Mid-Atlantic region, they earn up to a 25% bonus in open races and a 10% bonus in state-restricted races. As of 2023, certified awards are no longer earned on out-of-state races during the Colonial Downs meets. In six years, the program has paid out a total of \$14.6 million in bonuses (Figure 1.2).

Figure A1.1: More than 5,000 Horses Have Participated in the Program



Source: Virginia Equine Alliance

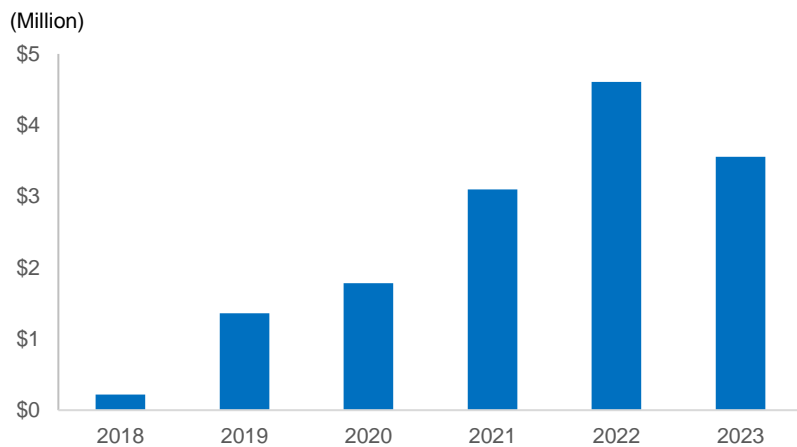
### A1.2. Economic Impact of the Virginia-Certified Residency Program

The Virginia-Certified Residency Program benefits the Virginia economy. Hundreds of Virginia horse farms participate in the program and receive income from horse owners outside Virginia. The money is used for farm maintenance, animal feed, training, veterinary care, and other services. The spending supports many jobs and businesses throughout the state.

Direct program-related spending in Virginia was estimated from the following information. For example, in 2017, there were 566 horses participating in the program. On average, each horse stayed eight months in Virginia. The approximate daily spending on those horses, including training and boarding, was \$35 in 2017.<sup>4</sup> As a result, the direct spending of the program was estimated at \$4.8 million in 2017.

The direct spending amounts in subsequent years were estimated accordingly. The daily spending per horse increased to \$52.50 in 2023, resulting in a total spending of \$9.7 million for the year. In the seven years from 2017

Figure A1.2: The Alliance has Distributed \$14.6 Million in Bonuses



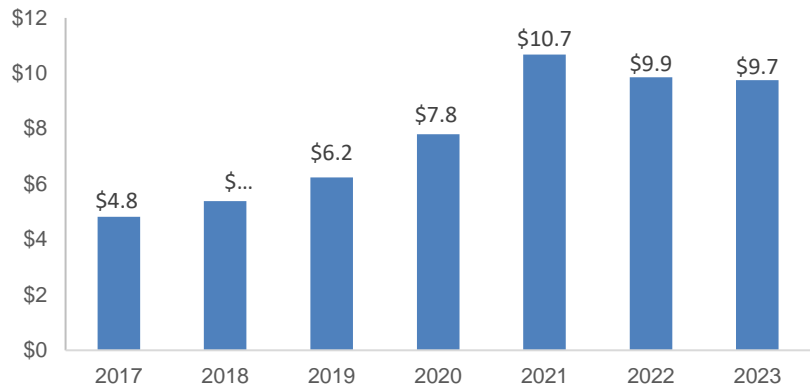
Source: Virginia Equine Alliance

<sup>4</sup> Source: Virginia Equine Alliance.

to 2023, \$54.5 million was directly spent by the program in Virginia, averaging \$7.8 million per year. The spending peaked at \$10.7 million in 2021. Of the total impact, \$7.8 million was estimated as annual direct spending in the state to provide care for horses in the program, supporting 90 jobs in the state. The annual indirect impact was estimated at \$1.8 million and seven jobs, while the annual induced impact was estimated at \$2.7 million and 20 jobs.

Direct spending is allocated to feed, grooming supplies, veterinary services, and other categories. This information was acquired from Chmura’s survey on the horseracing industry in 2020.<sup>5</sup>

Figure A1.3: Direct Spending of the Program Reached \$54.5 Million



Source: Virginia Equine Alliance

Chmura used its JobsEQ economic impact model to estimate the total economic impact of the program in Virginia. As Table A1.1 shows, from 2017 to 2023, the total annual economic impact (direct, indirect, and induced) of the program was estimated at \$12.3 million per year, supporting 118 jobs in Virginia. Of the total impact, \$7.8 million was estimated as annual direct spending in the state to provide care for horses in the program, supporting 90 jobs in the state. The indirect impact was estimated at \$1.8 million and seven jobs, while the induced impact was estimated at \$2.7 million and 20 jobs. The cumulative impact of the program was estimated to reach \$86.2 million in Virginia from 2017 to 2023.

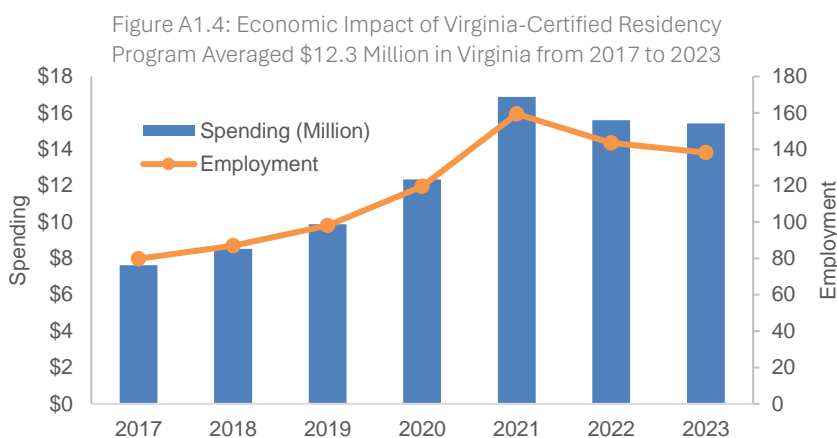
Table A1.1: Economic Impact of the Virginia-Certified Residency Program in Virginia Averaged \$12.3 Million per Year

		Direct	Indirect	Induced	Total Impact
<b>Cumulative (2017-2023)</b>	<b>Spending (Million)</b>	\$54.5	\$12.5	\$19.2	\$86.2
	<b>Employment</b>	633	52	141	825
<b>Annual Average (2017-2023)</b>	<b>Spending (Million)</b>	\$7.8	\$1.8	\$2.7	\$12.3
	<b>Employment</b>	90	7	20	118

Note: Numbers may not sum due to rounding.  
 Source: JobsEQ by Chmura

<sup>5</sup> Chmura Economics & Analytics, “Economic Impact of Virginia Horse Racing and Breeding Industry”, February 2021.

Figure A1.4 summarizes the annual economic impact of the Virginia-Certified Residency Program from 2017 to 2023. The economic impact (direct, indirect, and induced) was estimated to be \$7.6 million and supported 80 jobs in 2017. This impact increased steadily, reaching \$16.9 million in 2021 which supported 159 jobs in the state. The impact has declined slightly in the past two years. In 2022, the total economic impact was estimated at \$15.6 million, supporting 143 jobs in the state. Finally, in 2023, the total economic impact was estimated to be \$15.4 million which supported 138 jobs.



Source: Chmura Economics & Analytics

### A1.3. Tax Revenue from the Virginia-Certified Residency Program

The Virginia-Certified Residency Program also contributes tax revenue to the state government. Program-related spending in Virginia can generate the following major revenue streams: sales, individual, and corporate income taxes. In order to be conservative, only tax revenue from the direct impact is estimated in this section.<sup>6</sup>

Spending to care for horses (including purchase of feed, grooming supplies, and other tangible goods) generates sales tax for the state. In Virginia, the total state sales tax rate is 5.3%; 4.3% goes to the state government, and 1.0% goes to local governments.<sup>7</sup> From 2017 to 2023, sales tax for the state government was estimated at \$447,351.

Table A1.2: The Program Contributed \$1.8 Million State Tax Revenue from 2017 to 2023

Year	Sales	Individual Income	Corporate Income	Total Tax
2017	\$39,545	\$97,655	\$18,708	\$155,908
2018	\$44,203	\$109,157	\$20,912	\$174,272
2019	\$51,190	\$126,411	\$24,217	\$201,818
2020	\$64,016	\$158,086	\$30,285	\$252,387
2021	\$87,568	\$216,244	\$41,427	\$345,239
2022	\$80,866	\$199,695	\$37,830	\$318,391
2023	\$79,964	\$197,467	\$37,830	\$315,260
<b>Total</b>	<b>\$447,351</b>	<b>\$1,104,715</b>	<b>\$211,209</b>	<b>\$1,763,275</b>

Note: Numbers may not sum due to rounding.  
 Source: JobsEQ by Chmura

Additionally, The Virginia-Certified Residency Program produces individual income tax revenue for the state when participants hire workers. Based on the estimated labor income of the industry, it was estimated that total individual income tax was \$1.1 million from 2017 to 2023. In addition, the state received an estimated \$211,209 corporate income tax from participants involved in the program.

Combined, from 2017 to 2023, the Virginia-Certified Residency Program generated an estimated \$1.8 million in tax revenue for the state government, averaging \$0.25 million per year.

<sup>6</sup> This approach is recommended by Burchell and Listokin in *The Fiscal Impact Handbook*.

<sup>7</sup> Virginia Department of Taxation, "Retail Sales and Use Tax", accessed February 5, 2024, <https://www.tax.virginia.gov/sales-and-use-tax#:~:text=The%20sales%20tax%20rate%20for,a%20reduced%20rate%20of%201%25.> Please note that overall tax rates in certain regions are higher to collect funding for transportation projects.

## Appendix 2: Impact Analysis Glossary

*JobsEQ Economic Impact*—an economic impact assessment modeling system. It allows the user to build economic models to estimate the impacts of economic changes in states, counties, or communities.

*Input-Output Analysis*—an examination of business-business and business-consumer economic relationships capturing all monetary transactions in a given period, allowing one to calculate the effects of a change in an economic activity on the entire economy (impact analysis).

*Direct Impact*—economic activity generated by a project or operation. For construction, this represents the activity of the contractor; for operations, this represents activity by tenants of the property.

*Indirect Impact*—secondary economic activity that is generated by a project or operation. An example might be a new office building generating demand for parking garages.

*Induced (Household) Impact*—economic activity generated by household income resulting from direct and indirect impacts.

*Ripple Effect*—the sum of induced and indirect impacts. In some projects, it is more appropriate to report ripple effects than indirect and induced impacts separately.

*Multiplier*—the cumulative impacts of a unit change in economic activity on the entire economy.

