

ECONOMIC CONTRIBUTION OF EQUINE OWNERSHIP IN THE STATE OF VERMONT



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The Vermont Horse Council

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CONTENTS

CONTENTS	2
Acknowledgements	3
Executive Summary	4
Introduction	5
Methodology	7
Survey Instrument and Administration	7
Economic Impact & Contribution Analysis	7
Equine Ownership Data & Analysis Approach	8
Economic Contribution Analysis & Results	10
Economic Contribution Estimates	13
Additional Findings	15
Respondent Demographics	15
Equines in Vermont	17
Equine Ownership in Vermont	18
Equine-Related Enterprises	19
Opportunities & Concerns	20
Conclusion & Recommendations	24
About the Center for Rural Studies	27
References	28
Appendix	29
Survey Instrument	29
Equine Expenditures: Comparison of Average to Median	49



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The Vermont Horse Council, in partnership with the UVM College of Agriculture and Life Sciences (CALs), engaged the UVM Center for Rural Studies to conduct this economic contribution analysis of equine ownership and enterprises in Vermont. The purpose of the study is to gain a deeper understanding of the cost of equine ownership in Vermont, and equine ownership's role and impact in the Vermont economy. This report focuses primarily on equine ownership and peripherally on related enterprises. A previous study of the economic contributions of equine events within the state (completed by this same partnership in April 2019) found spending by out-of-state parties participating in Vermont equine events generated an estimated \$15,462,850 in total direct spending and \$21,680,981 in local economic activity over one competition season.

The results of the current study demonstrate that Vermont equine owners have a measurable impact on the Vermont state economy, and that they make considerable purchases outside of Vermont to support their equine as well. The results also suggest that Vermont's horse owners come from a range of socio-economic backgrounds, and the majority own their horses simply for pleasure and non-competitive riding. Key findings of this study include:

- The survey collected 700 responses with 400 fully completed responses representing 2,334 equine—an estimated 27% of the state's total horse population of 8,500, according to the National Agricultural Statistics Service.
- The median number of horses owned by respondents was two.
- Tick-borne disease and related health implications for equines, access to trails and open land for riding, and traffic/road sharing issues are some of the top concerns of equine owners.
- The most frequently cited suggestion for how to improve communication within the equine community was a centralized website where equine enthusiasts could find information (20%).
- Twenty eight percent of respondents (191 people) reported that they owned, operated, and/or earned income from an equine-related business located within Vermont in 2019. Of those enterprises, 51% (97 people) reported that a registered tradename, LLC, or corporation existed for that equine business.
- For 2019, equine owners reported expenditures that generated a total of \$45,635,922 in local economic activity, including \$27,429,481 in the support industries for agriculture and forestry, vet services, and wholesale trade sectors; and \$6,940,352 in related sectors.
- Equine owner expenditures supported 652 jobs in the Vermont economy, with 525 of those jobs primarily in support industries for agriculture and forestry, vet services, and wholesale trade sectors.
- Every dollar contributed in value added (defined in more detail on page 13) in support industries for agriculture and forestry, vet services, and wholesale trade sectors, such as wages and profit, due to equine ownership, adds an additional \$0.69 to the Vermont economy.
- For every job in the support industries for agriculture and forestry, vet services, and wholesale trade sectors, 0.24 additional jobs are supported in the Vermont economy.

Vermont is home to a thriving and diverse equine community, with horses a common sight across the rural landscape. Vermont's equine sector is comprised of both agricultural and recreational pursuits, including breeding, training, trail riding, education, and boarding activities, as well as an array of competitive activities. Vermonters routinely put their equine to work in traditional ways, such as logging, and wagon and sleigh rides, as well as in innovative ways to support human health and wellbeing, such as through equine-assisted therapy programs. The U.S. Department of Agriculture's National Agricultural Statistics Service (NASS) estimates that more than 8,500 horses and ponies call the Green Mountain State home. NASS also estimates 1,307 operations with equines with the vast majority having fewer than 25 equines per operation (NASS, 2019).

The Vermont Horse Council (VHC), in partnership with the UVM College of Agriculture and Life Sciences (CALs), wishes to better understand how equine ownership, equine-related enterprises, and equine events contribute to Vermont's economy. This partnership investigated the economic contributions of equine events during the 2018 competition season across a variety of disciplines. The analysis found that spending by out-of-state parties participating in equine events generated a total of \$21,680,891 in local economic activity, including adjusted direct spending of \$11,932,621 in the tourism (lodging, food & drink, area attractions), retail, transportation, agricultural and sporting events sectors and \$5,262,681 in related sectors (Hamshaw & Kelsey, 2019).

This study seeks to quantify the economic contribution of equine ownership and equine-related enterprises to Vermont's economy. The analysis is based on survey results from Vermont horse owners, leasers, and enterprise operators who provided detailed information about their equine-related expenses and revenue generation. This report provides estimates for how equine ownership in Vermont supports jobs, earnings, and revenue for local businesses and employees. Additionally, the report summarizes responses to a host of other questions regarding breeds, primary equine use, property use and acreage, demographics, and perspectives on challenges related to equine ownership and equine enterprise operations within Vermont.

The VHC is a volunteer-run organization whose mission is to unite, serve, and support all equine activities and interests in Vermont and beyond. The VHC was incorporated as a 501c3 in 1975 to represent the interests of all equestrians – "Creating a Unified Voice for all Equines". The Council has a tradition as a hardworking practical organization relying on the generosity of volunteers to lead, manage and implement its mission and goals. Maintaining access to trails across the state has always been a priority and the Council has been a leader in equine events including hosting an All Breed Fair, and co-hosting Horsin' Around and the Equine Industry Summit.

The Council supports education through its scholarship programs and free member clinics. Widely known for its organized trail rides, the Council recently transitioned its efforts to advocating for access for equestrian users, and for the provision of amenities at popular locations such as the equine trail system at Groton State Forest. The Council works closely with the Vermont Agency of Natural Resources' Department of Forests, Parks and Recreation to promote equestrian uses on state lands, and partners with the Vermont Farm Bureau to advocate for and represent the equine industry.

The College of Agriculture and Life Sciences (CALs) plays a key role in meeting the University of Vermont's mission as Vermont's Land Grant University with programs that range from the basic science of molecular genetics to plant and animal ecosystems, and from human nutrition to community and international development. CALs offers a

concentration in Equine Studies for its Animal and Veterinary Sciences Bachelor's of Science undergraduate degree program. In addition to its teaching mission, CALS has a strong research focus and serves as Vermont's Agricultural Experiment Station, with an emphasis on research that serves the interest of Vermonters. CALS is also the organizational home of the historic UVM Morgan Horse Farm in Weybridge, Vermont, which is dedicated to the preservation of the Battell, Government, and UVM bloodlines through its breeding program. The Morgan Horse Farm also provides valuable learning experiences for students, interns, and the public.

EQUINE ECONOMIC STUDIES BACKGROUND

Efforts to estimate the economic contributions of the equine sector have been pursued at national, state, and regional scales to provide data, support equine advocacy, and support equine policy. The American Horse Council Foundation completed an economic impact study of the equine industry for the whole of the United States in 2017. Their report concluded that the country's equine industry generates an estimated \$50 billion in direct economic impact to the U.S. economy and \$122 billion if direct and indirect impacts are totaled (AHCF, 2018). Several recent studies have investigated the economic impacts of the equine industry within a given state, county, or township, including studies conducted in Florida, Indiana, Kentucky, Maryland, Massachusetts, South Carolina and Virginia. The equine industry is defined differently for each study, but generally includes all activities involved in breeding, raising, selling and using horses for commercial and recreational purposes, including boarding facilities, rehabilitation facilities, racing facilities, therapeutic riding facilities, veterinarians, and farriers.

Efforts to understand the economic impact of the equine industry and equine ownership have been undertaken in two neighboring states within the past ten years. The New York Horse Racing and Agriculture Industry Alliance commissioned a 2012 report to assess the impact of the whole horse industry to the state's economy. The report estimated 157,500 equine call the Empire State home—generating an impressive \$4,197,623,086 in total economic impact and supporting nearly 33,000 full-time equivalent jobs (The Innovation Group, 2012). The New York equine industry is comprised of large thoroughbred racetracks, harness racetracks, breeding operations, and some of the country's most competitive horse show venues. A 2016 study from the neighboring state of Massachusetts, estimated to have approximately 26,000 horses and about 2,300 farms (Massachusetts Farm Bureau Foundation, 2016), valued the total economic impact of its equine industry at \$386,656,418. The same study estimates that more than 7,000 people were employed either full or part time in the equine industry and that more than 40,000 acres of open land support the state's equine industry.

SURVEY INSTRUMENT AND ADMINISTRATION

To complete this study, the Vermont Horse Council (VHC) and the Center for Rural Studies collaborated to design an online survey with a total of 64 questions. The survey was targeted to any Vermont resident over 18 years of age who owns or leases equines, considers him/herself an equine enthusiast, offers boarding or rent facilities that support equines, or is otherwise involved in a business that is dependent upon equines. There is no statewide mailing list of horse owners, nor of equine business operations in Vermont. As a result, the survey was distributed through VHC's membership list and social media channels, through their partner organizations, as well as through Vermont's Front Porch Forum (regional networks of online neighborhood forums) over a five-month period from January to May 2020. The COVID-19 pandemic affected the state of Vermont while the survey was being conducted, however, the survey asked respondents to answer based on their 2019 expenditures and experiences, prior to the pandemic.

The survey used logic and branching questions to target only the most relevant questions to each respondent. The survey was designed to gather important data about equine trends—including breeds, uses, challenges, and annual expenses, and a special section of the survey was designed for individuals who earn income from equine-related businesses in Vermont. The survey took 20-30 minutes to complete, depending upon the nature of each respondent's equine endeavors, and the full instrument is included in the Appendix. A total of 700 surveys were submitted, with approximately 400 of those surveys completed in full. CRS staff analyzed the survey data and made calculations to estimate the economic contribution of equine ownership in Vermont. The economic contribution analysis and approach are described in more detail below. Data about equine breeds and uses, property acreage and uses, and challenges to owning equine are summarized in the Other Findings section.

ECONOMIC IMPACT & CONTRIBUTION ANALYSIS

An economic impact study measures the changes in spending in a geographic area due to a hypothetical change in economic activity, such as a plant closing or opening, a festival or event, or a natural disaster. In other words, an economic impact study measures "what would happen in the economy if happened." Specifically, an economic impact study calculates the cumulative amount of money that cycles through the economy of the geographic area between industries, households and government agencies as a result of the changes in the industry or events (Day, n.d.).

An economic contribution study, in contrast to an economic impact study, measures the economic activity of existing businesses and industries and estimates their contribution to the local economy. The economic contribution of an activity, industry, or event accounts for three effects on the economy: direct, indirect and induced effects. Using equine ownership as an example:

- The direct effect results from expenditures on equines, such as payments to farriers, vets, supply stores, and boarding facilities, as well as other expenses borne by equine owners.
- The indirect effect results from expenditures made by equine related service providers and vendors, in support of their business enterprises. For instance, farriers, vets, supply store, and boarding facility owners purchase services, equipment, and supplies from other vendors to maintain their operations.

- The induced effect results from the effects of the changes in household income due to the economic activity from the direct and indirect effects. For example, vets, farriers, supply store, and boarding facility owners spend their equine industry related income on a wide range of other goods and services within the state.
- The sum of the direct, indirect and induced effects is the total economic contribution.

CRS utilized IMPLAN software for this study. IMPLAN is an input-output model frequently used by federal and state governments, universities, and among private sector consultants to conduct economic impact and contribution analysis. In the IMPLAN version used for this study, the economy, including transactions between industries, institutions, and households, is represented by 536 sectors based on the North American Industry Classification System (NAICS) codes. Each sector represents a type of industry and the spending patterns within that industry. Matching the expenditure data recorded from equine owners to the appropriate sectors (maintenance, utilities, equine purchase, on farm labor, tack supplies, etc.) allows estimates of what Vermont equine owners spend on an annual basis. Additionally, IMPLAN assists in estimating the percentage of that annual spending that stays in the local economy, and the extent to which that spending circulates through the local economy, creating additional impacts.

EQUINE OWNERSHIP DATA & ANALYSIS APPROACH

The data needed to conduct the analysis included total number of equine in the state of Vermont, average number of equine owned per respondent, and total annual expenditures on equine maintenance, other maintenance, related investments, and labor. Several expenditure subcategories were not included when calculating total spending due to insufficient data and an inability to make valid estimates. Therefore, it is likely that the average total spending on equine in Vermont is greater than what is reported here. Table 1 summarizes all expenditure categories and subcategories included in the survey, and identifies subcategories used in the final calculation. CRS used the following methodology to obtain the data needed to model the economic contribution of Vermont equine ownership.

1. Total number of equine in the state of Vermont was determined based on NASS (2019) estimates. CRS modeled the economic contribution of equine ownership using NASS's estimate of 8,500 equine in the state, as well as a higher estimate of 10,000 equine based on insights from VHC stakeholders. The results for both estimates are included in this report.
2. Other data utilized in the analysis came from the 700 online surveys submitted between January and May 2020.
3. The expenditure data collected in the survey, and the total number of equine estimates noted above, were used to calculate average spending for each expense subcategory, within and outside Vermont.
4. The expenditure subcategories were weighted to estimate the total statewide spending per subcategory.
5. The total spending figures were used to make baseline economic contribution estimates using the input-output model IMPLAN.

TABLE 1: EXPENSE CATEGORIES AND SUBCATEGORIES IN SURVEY

Expense Category	Expense Subcategory	Used in Final Calculations
Equine Maintenance	Purchase of Equine	X
	Lease Payments for Equine	X
	Boarding	X
	Training, Lessons, and Coaching	X
	Competition and Event Entry Fee	X
	Feed	X
	Bedding	X
	Health	X
	Supplies	X
	Farrier	X
	Breeding	
Other Maintenance	Maintenance & Repair: Materials and Equipment	X
	Maintenance & Repair: Labor	X
	Insurance Premiums	X
	Utilities/Fuel	X
	Facility Rent or Lease	
Other Investments	Purchase of Land & Buildings	
	Large Equipment	X
	Registration, Certification, and Professional Membership	X
	Shipping & Travel	X
	Miscellaneous	
	Capital Improvements	
	Other typical expenditures	
	Other non-typical expenditures	
Labor	Equine related vacations	
	Paid Labor	
	Any other labor not previously reported	

ECONOMIC CONTRIBUTION ANALYSIS & RESULTS

SUMMARY OF EQUINE OWNER EXPENDITURES

The average total annual expenditure per equine in Vermont is approximately \$21,300 with total direct spending by equine owners in Vermont estimated to be approximately \$51.5 million. Table 2 summarizes average spending per equine and total direct spending on equine for the four primary expenditure categories included in the survey. Table 3 summarizes total direct spending by Vermont equine owners outside of Vermont, estimated to be between \$11 million and \$13 million based on survey results. Respondents noted key purchases out of state in a limited number of subcategories (i.e., feed purchased across the state border, supplies purchased online), therefore, spending outside of Vermont on a per equine basis is not estimated.

TABLE 2: AVERAGE SPENDING PER EQUINE & TOTAL DIRECT SPENDING ON EQUINE BY VERMONTERS WITHIN VERMONT

	Mean Annual Expenditure per 1 equine	Total Annual Direct Spending 8,500 Equine	Total Annual Direct Spending 10,000 Equine
Equine Maintenance	\$12,862	\$33,017,914	\$38,844,687
Other Maintenance	\$3,438	\$6,627,514	\$7,797,076
Other Investments	\$5,031	\$4,159,471	\$4,893,496
Total in Vermont	\$21,331	\$43,804,900	\$51,535,258

TABLE 3: TOTAL DIRECT SPENDING ON EQUINE BY VERMONTERS OUTSIDE VERMONT

	Total Annual Direct Spending 8,500 Equine	Total Annual Direct Spending 10,000 Equine
Equine Maintenance	\$9,384,438	\$11,040,515
Other Maintenance	\$711,948	\$837,586
Other Investments	\$1,090,467	\$1,282,903
Total	\$11,186,853	\$13,161,004

The tables that follow (Tables 4-7) detail average spending and total direct spending for each of the subcategories (see Table 1 for a listing of all subcategories in the survey). If less than 5% of respondents indicated expenditures within a particular subcategory, that subcategory was omitted from the final calculation. Data was insufficient to make valid estimates.

To calculate total direct spending in each subcategory, mean annual expenditure per equine was multiplied by the total estimated number of equine (8,500 or 10,000). The product was weighted by the percent of respondents answering that question to determine total direct spending within the state. For example, for the “purchase of equine” category below,

$$\$3197 \times 8500 = \$27,174,500.$$

Based on the survey results, we assume that only about 7.46% of Vermont equine owners purchase an equine in a given year. Therefore, total direct spending within Vermont for purchase of equines is estimated to be 7.46% of \$27,174,500, or \$2,027,547.

$$\$27,174,500 \times .0746 = \$2,027,547$$

Equine owners reading this report may be inclined to compare their annual expenses to the mean annual expenditure figures presented below. For some readers, the mean expenditure in each subcategory will seem high, for others it will seem low, depending upon many factors, including whether one's equine live "at home" or are boarded elsewhere, the use of those equines, and variable annual investments in health, equipment, infrastructure, and supplies. The weighting, as described above, allows us to better estimate total annual spending for the whole state, despite the variations in expenditure at the "per equine" scale. As with all models of economic contribution, these results should be used thoughtfully for planning and to inform policy discussions.

TABLE 4: ANNUAL EQUINE MAINTENANCE EXPENDITURES

	Percent of respondents answering	Mean Expenditure per 1 equine	Total Direct Spending 8,500 Equine	Total Direct Spending 10,000 Equine
Purchase of Equine in VT	7.46	\$3,197	\$2,027,547	\$2,385,349
Lease Payments for Equine in VT	2.86	\$1,175	\$285,357	\$335,714
Boarding in VT	28.10	\$2,973	\$7,099,121	\$8,351,907
Training, Lessons, and Coaching in VT	33.17	\$966	\$2,724,663	\$3,205,486
Competition and Event Entry Fees in VT	23.02	\$362	\$708,772	\$833,849
Feed in VT	53.33	\$1,638	\$7,426,388	\$8,736,927
Bedding in VT	39.68	\$405	\$1,364,894	\$1,605,757
Health in VT	63.97	\$1,090	\$5,925,243	\$6,970,874
Supplies in VT	55.56	\$424	\$2,000,348	\$2,353,350
Farrier in VT	64.29	\$632	\$3,455,653	\$4,065,474
Breeding in VT*	0.16	\$650	\$8,770	\$10,317
Total		\$12,862	\$33,017,914	\$38,844,687

*Subcategory omitted from Total line and final economic contribution calculations due to insufficient data.

TABLE 5: OTHER MAINTENANCE EXPENSES

	% of respondents answering	Mean Annual Expenditure per 1 equine	Total Annual Direct Spending 8,500 Equine	Total Annual Direct Spending 10,000 Equine
Maintenance & Repair: Materials and Equipment in VT	32.14	\$1,205	\$3,288,967	\$3,869,373
Maintenance & Repair: Labor in VT	12.29	\$1,645	\$1,717,417	\$2,020,490
Insurance Premiums in VT	11.57	\$590	\$580,068	\$682,433
Utilities/Fuel in VT	22.86	\$536	\$1,041,063	\$1,224,779
Facility Rent or Lease in VT*	2.29	\$5,384	\$1,046,107	\$1,230,714
Purchase of Land & Buildings in VT*	3.57	\$25,992	\$7,890,429	\$9,282,857
Total		\$3,974	\$6,627,514	\$7,797,076

*Subcategory omitted from Total line and final economic contribution calculations due to insufficient data

TABLE 6: OTHER INVESTMENTS

	% of respondents answering	Mean Annual Expenditure per 1 equine	Total Annual Direct Spending 8,500 Equine	Total Annual Direct Spending 10,000 Equine
Large Equipment in VT	7.56	\$4,174	\$2,682,273	\$3,155,615
Registration, Certification, and Professional Membership in VT	17.55	\$110	\$163,725	\$192,618
Shipping & Travel in VT	20.68	\$747	\$1,313,473	\$1,545,263
Miscellaneous in VT*	3.85	\$255	\$83,445	\$98,171
Capital Improvements in VT*	2.57	\$9,655	\$2,107,363	\$2,479,251
Other typical expenditures in VT*	3.71	\$701	\$221,067	\$260,078
Other non-typical expenditures in VT*	1.28	\$2,600	\$283,762	\$333,837
Equine related vacations in VT*	4.85	\$307	\$126,415	\$148,723
Total		\$5,031	\$4,159,471	\$4,893,496

*Subcategory omitted from Total line and final economic contribution calculations due to insufficient data.

LABOR EXPENSES

A small percentage of respondents reported paid labor expenses in support of their equine. Table 7 provides a summary of the labor findings; however, these figures were excluded from the IMPLAN calculations due to such limited data.

TABLE 7: LABOR EXPENSES

	% of respondents answering	Mean Annual Expenditure per 1 equine	Total Annual Direct Spending 8,500 Equine	Total Annual Direct Spending 10,000 Equine
Paid Labor \$ in VT	3.00	\$4,160	\$1,060,775	\$1,247,971
Any other labor not previously reported \$ in VT	1.71	\$663	\$96,578	\$113,621
Total		\$4,823	\$1,157,353	\$1,361,592

ECONOMIC CONTRIBUTION ESTIMATES

Using the direct spending estimates for each subcategory, we can estimate the total economic contribution using IMPLAN. Tables 8 and 9 contain estimates for 8,500 equine and 10,000 equine, respectively. In this narrative, spending figures for 10,000 equine are reported, as VHC stakeholders believe that is a more accurate measure of the number of equines in the state.

Total direct spending (Table 2) for the 10,000 equine that call Vermont homes is estimated to be \$51,535,258. The adjusted direct spending is estimated to be \$27,429,481. The adjusted direct spending represents the amount that stays in the local economy. The difference between the direct and adjusted direct spending is the amount that “leaks” out of the local economy. For example, when an individual pays \$200 to purchase bedding from a neighbor, the vast majority of that expense is likely to stay in the local economy. However, when that same individual spends \$200 to buy a new garden cart at a national retailer, only a small percentage of that expenditure remains in the local economy, with a large portion going to wholesalers and distributors outside of Vermont.

For 2019, equine owners reported expenditures that generated a total of \$45,635,922 in local economic activity, including an adjusted direct expenditure of \$27,429,481 in the support industries for agriculture and forestry, veterinary services, and wholesale trade sectors, and \$6,940,352 in related sectors (Table 9).

A more conservative, accurate measure of the economic contribution of an activity is the total value-added measure. This measure includes wages, profits, dividends, interests, rents, and excise taxes from the indirect and induced effects. Equine owner expenditures contributed \$24,862,228 in total value added, with \$14,666,387 of that in the support industries for agriculture and forestry, vet services, and wholesale trade sectors.

Lastly, equine ownership expenditures supported 652 jobs in the local economy, with 525 of those jobs in the support industries for agriculture and forestry, vet services, and wholesale trade sectors. It is important to note the job number includes full-time, part-time, and seasonal jobs, and that one person can have more than one job. Therefore, we estimate that the Vermont equine industry supports this number of jobs, but not that it creates this number of new jobs.

Another measure of the contribution of an activity is the multiplier effect. The total multiplier effect is calculated by dividing the total effect by the direct effect. The multiplier shows how much a dollar or a job in the initial industry gives back to the economy. For our baseline estimate, every dollar contributed in value added in the support industries for agriculture and forestry, vet services, and wholesale trade sectors, such as wages and profit, adds an additional \$0.69 to the economy. Similarly, for every job in the support industries for agriculture and forestry, vet services, and wholesale trade sectors, 0.24 additional jobs are supported in the Vermont economy.

TABLE 8: ECONOMIC CONTRIBUTION OF 8,500 EQUINE IN VERMONT

Impact Type*	Jobs Supported	Labor Income (\$)	Total Value Added (\$)	Output (\$)
Direct Effect	448	\$11,078,058	\$12,576,202	\$23,530,177
Indirect Effect	39	\$1,845,149	\$3,219,802	\$5,973,754
Induced Effect	70	\$3,141,000	\$5,539,561	\$9,664,233
Total Effect	557	\$16,064,208	\$21,335,566	\$39,168,165
Multiplier	1.240	1.450	1.697	1.666

*See Economic Impact & Contribution Analysis section (pp. 7-8) for Impact Type definitions.

TABLE 9: ECONOMIC CONTRIBUTION OF 10,000 EQUINE IN VERMONT

Impact Type	Jobs Supported	Labor Income (\$)	Total Value Added (\$)	Output (\$)
Direct Effect	525	\$12,926,153	\$14,666,388	\$27,429,481
Indirect Effect	46	\$2,139,105	\$3,738,094	\$6,940,352
Induced Effect	82	\$3,661,627	\$6,457,746	\$11,266,089
Total Effect	653	\$18,726,884	\$24,862,228	\$45,635,922
Multiplier	1.240	1.449	1.695	1.664

SUMMARY OF ADDITIONAL EXPENSE CATEGORIES

As indicated in Table 1, as well as Tables 4-7 above, eight equine expense subcategories from the survey are not represented in the total economic contribution estimates. These eight expense categories are: 1) breeding, 2) facility rent or lease; 3) purchase of land & buildings; 4) capital improvements; 5) equine related vacations; 6) paid labor; 7) miscellaneous expenses; and 8) other expenditures. Facility rent and paid labor are likely ongoing annual expenses; however, the other subcategories represent one time or recurring expenses that may not be annual in nature for the individual owner. Regardless, taken collectively, the total spending in these subcategories across the state of Vermont in one year is significant. It is difficult to estimate spending accurately in these categories due to low response rates. Nevertheless, the modest estimates that appear in the tables above for these eight subcategories account for an additional estimated \$15 million in direct spending in the state of Vermont, or roughly \$7.5 million in adjusted direct spending.

RESPONDENT DEMOGRAPHICS

Understanding the demographics of equine enthusiasts within Vermont is valuable for several reasons, including determining communication strategies, and identifying potential resources to support current and future enthusiasts. Respondents were asked to provide their age (n=411). While the most frequently reported age group was 55-64 years of age (28.7%), the range of ages illustrated in Figure 1 suggests Vermonters in all age groups enjoy equine ownership.

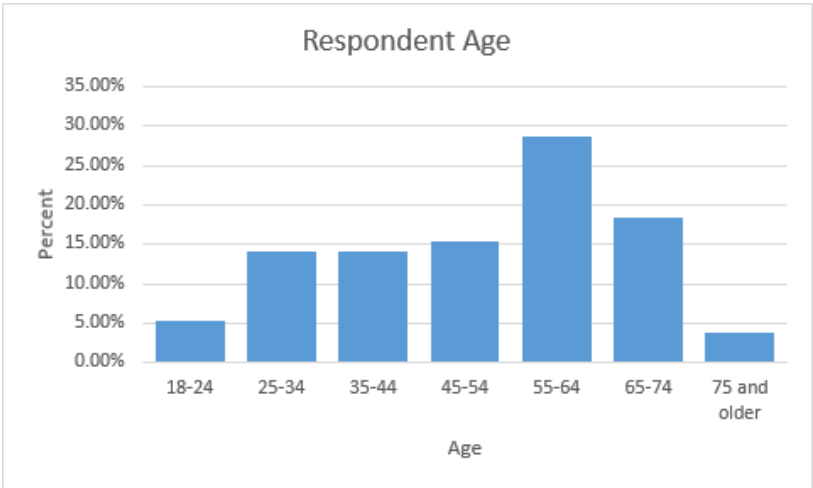


FIGURE 1: RESPONDENT AGE (N=411)

Respondents overwhelmingly reported their gender identity as female (95%). The majority of respondents reported being long-term residents of Vermont with 78% reporting having lived in Vermont for more than 16 years, and with representation from all Vermont counties (Table 10). The majority of respondents reported educational attainment at the Associate’s, Bachelor’s or post-graduate degree level (76%). More than half of the respondents reported working full-time while 17% had part-time employment and 18% were retired. Some comments noted that respondents sought part-time or seasonal work to support their “horse hobby.” Approximately 15% of the total respondents reported having current membership status in the Vermont Horse Council.

TABLE 10: COUNTY OF RESIDENCE

In which Vermont county do you currently live?	Frequency	Percent
Chittenden	116	28.4
Windsor	44	10.8
Addison	43	10.5
Rutland	40	9.8
Orange	29	7.1
Washington	28	6.9
Franklin	26	6.4
Caledonia	20	4.9
Windham	18	4.4
Orleans	16	3.9
Lamoille	12	2.9
Bennington	9	2.2
Grand Isle	5	1.2
Essex	2	0.5
Total	408	100

INCOME

Respondents (n=375) provided their 2019 total household income before taxes. Figure 2 illustrates the range of reported incomes, with more than one third reporting earning more than \$100,000 as a household. This finding is perhaps not surprising given the costs of equine ownership; however, it is important to note that equine enthusiasts exist across the income spectrum within the state of Vermont. The increasing costs of equine ownership are discussed as a challenge later in this report.

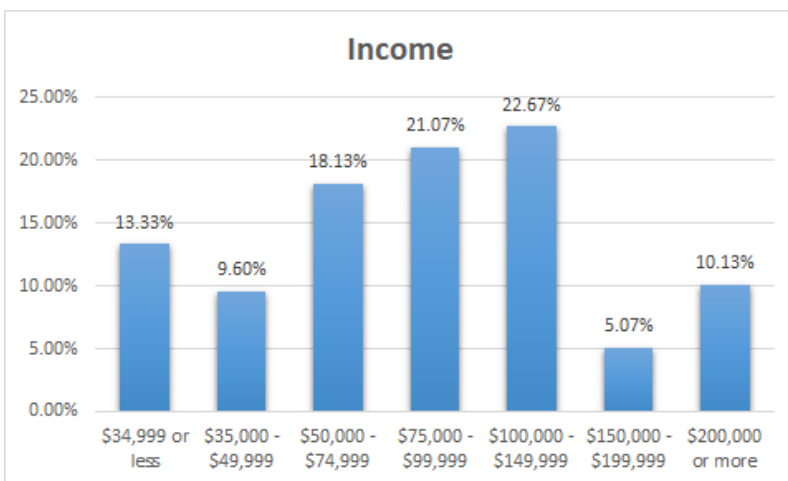


FIGURE 2: RESPONDENT INCOME (N=375)

ROLES

Respondents were asked to “check all that apply” to a list of potential roles in Vermont’s equine sector and were able to select multiple roles. This list is not exhaustive but enables us to understand the different perspectives and experiences

captured in this survey. Respondents could write in responses as well, including: horse show judges, horse show event managers, members of a variety of regional organizations, large animal veterinary technicians, and agricultural and forestry horse-power operators, for example.

TABLE 11: RESPONDENT ROLES

Role	Percent
Equine Owner	87.6
Barn Staff	21.2
Barn Manager	18.7
Horse Trainer	17.1
Riding Instructor	13.7
Commercial Boarding Facility Operator	9.3
Private Boarding Facility Operator	9.1
Horse Lessee	8.8
Horse Lessor	6.0
Youth Equine Program Member	5.6
Working Student	4.7
Horse Enthusiast (Rider)	4.4
Equine Assisted Therapy Operation	4.3
Breeding Services	2.5
Farrier	2.5
Equine Body Work Specialist	2.4
Large Animal Veterinarian	2.1
Equine Rescue or Sanctuary	1.8
Horse Enthusiast (Non-Rider)	1.0

EQUINES IN VERMONT

The average number of equine per owner based on the survey is 3.43, while the median number of equine per owner is two. Table 11 summarizes the total number of equine owned per respondent. Approximately 75% of respondents own three or less equine, while about nine percent own more than six equines. When asked if they leased one or more equines that resided in Vermont in 2019 from another equine owner, 11.4% of respondents replied yes. Twenty-one percent of respondents reported the number of equine they owned changed in 2019. Of this 21%, just over half said the number had increased and just under half said the number had decreased. The primary reason for increase was the purchase, adoption, rescue, or acceptance of gifts of additional equines. The primary reason for decrease was death/euthanasia, followed by sale.

TABLE 12: TOTAL NUMBER OF EQUINE OWNED OR LEASED PER RESPONDENT

Total # of Equines Owned or Leased	Frequency	Percent
1	196	32.4
2	178	29.3
3	86	14.1
4	52	8.6
5	17	2.8
6	24	3.9
>6	54	8.9

Survey respondents also reported their equines by breed/type. Vermont’s equine population reflects the diversity of equine pursuits that take place within the state. Quarter horses and Morgan horses were reported most frequently followed by crossbreeds and warmbloods. Of the 2,334 horses represented in the survey, 321 horses were reported as being retired, idle, or otherwise not currently in work. For those horses currently in work, the top three reported uses were: 1) pleasure and non-competitive riding, 2) pleasure and non-competitive trail riding, and 3) competitive show riding.

Eleven percent of Vermont horses spent some portion of the year out-of-state during 2019, with a cluster of owners reporting a warmer climate destination, such as Florida and South Carolina, destinations known for their winter competition circuits and a warm respite from Vermont winters.

EQUINE OWNERSHIP IN VERMONT

The majority of survey respondents reported that their horses boarded on their own property (60.3%) while nearly one third boarded at a boarding facility. Seventeen percent reported boarding at a commercial boarding facility while 15% were at a private facility. A few owners commented that they keep their horses at home during the summer and move their horses to a facility with an indoor arena for the winter months.

ACREAGE, LAND USE, AND CONSERVATION OF WORKING LANDS

The average acreage of equine operations based on the survey responses (n=344) was 61 acres, while the median acreage was 23.5 acres. The smallest acreage reported was 0.75 acres, while the largest was 2,000 acres. The majority of respondents (69.6%) indicated that the primary function of their operation was as a place to keep horses, ponies or other equine for personal use. Another 16% indicated the primary function of their operation was as a boarding, training, or riding facility. Table 13 offers additional detail on the functions of Vermont’s equine operations.

The survey included three questions about land conservation and enrollment in Vermont’s Use Value Appraisal program. In total, 17.5% of respondents reported that some portion of their land is enrolled in land preservation programs or land trusts. Twenty-nine percent of respondents reported that some portion of their equine operation lands were enrolled in the Use Value Appraisal Program (also referred to as Current Use). When asked if they would enroll if the Use Value Appraisal Program ("Current Use") expanded to include acreage dedicated to equine operations, 47% responded in the affirmative. These findings highlight the potential for greater alignment between the equine community and other efforts to preserve Vermont’s working landscape for current and future generations—whether conserving land for pastures, hay production, wildlife habitat, or recreational purposes.

TABLE 13: PRIMARY USE OF EQUINE PROPERTY

For the total acres reported previously, what do you consider to have been the primary function of the operation in 2019?	Frequency	Percent
A place to keep horses, ponies, or other equine for personal use	231	69.6
Boarding, training, or riding facility (including recreational places)	53	16.0
Farm or Ranch (Dairy, Beef, Vegetable, etc.)	25	7.5
Other	11	3.3
Equine-assisted therapy facility	6	1.8
A breeding service place (breeding operation)	4	1.2
Equine rescue/sanctuary	2	0.6
Total	332	100

EQUINE-RELATED ENTERPRISES

Equine-related enterprises support horse ownership, and benefit from it. One goal of this study was to learn more about equine enterprises in the state of Vermont. Twenty-eight percent of respondents (191 people) reported that they owned, operated, and/or earned income from an equine-related business located within Vermont in 2019. Of those enterprises, 51% (97 people) reported that they had a registered tradename, LLC, or corporation for their equine business. The survey asked several questions about business revenue and expenses. However, because only a limited number of respondents providing this information, it is difficult to draw any clear conclusions as to the size and scope of Vermont’s equine enterprises. A summary of selected enterprise related results is included here.

Approximately 115 people provided business information about their equine enterprise, illustrating that there are both formal and informal equine businesses operating in Vermont. Seventy-three percent of respondents indicated they kept financial statements for their enterprise, 67% reported having borrowed money for their equine business, and 61% reported holding another job or jobs in addition to working for their enterprise. Approximately 56% reported that the enterprise was their primary source of income, but based on other results, it is apparent that the majority of equine enterprise owners represented in this survey have additional source of income.

TABLE 14: EQUINE ENTERPRISE INFORMATION

	Yes	No	Uncertain	Total
Does this enterprise keep financial statements? (n= 115)	73.0	20.0	7.0	100.0
Have you borrowed money for your business? (n= 114)	66.7	32.5	0.9	100.0
Do you hold a job or jobs in addition to working for this enterprise (n=116)	61.2	37.9	0.9	100.0
Is there a formal written business plan for this enterprise? (n= 114)	59.6	32.5	7.9	100.0
Has this enterprise been registered as a legal entity? (n= 114)	56.1	37.7	6.1	100.0
Is this enterprise your primary source of income? (n= 114)	56.1	40.4	3.5	100.0
Does this enterprise have its own website? (n=117)	51.3	47.0	1.7	100.0

When presented with a list of 14 potential issues of concern, 79 equine enterprise owners and operators responded (Table 15). Overall, these respondents identified property taxes as their greatest concern, with over 55% noting taxes

were either an extreme or a moderate concern. Liability was an extreme or moderate concern for 39% of respondents, followed by extreme weather events, which was an extreme or moderate concern for nearly 35% of respondents.

TABLE 15: ISSUES OF CONCERN FOR EQUINE ENTERPRISE OWNERS/OPERATORS

Please indicate how much of a concern each item was for you in 2019	Extreme Concern	Moderate Concern	Slight Concern	Somewhat Of A Concern	Not At All A Concern	N/A	Total
Taxes	35.9	20.5	7.7	12.8	16.7	6.4	100.0
Liability	19.5	19.5	11.7	22.1	19.5	7.8	100.0
Insurance/Workers Compensation	16.9	10.4	7.8	7.8	41.6	15.6	100.0
Hiring /Keeping Qualified Help	12.8	14.1	12.8	6.4	33.3	20.5	100.0
Regulations Affecting Farm Operation	10.4	13.0	13.0	18.2	36.4	9.1	100.0
Extreme Weather Events	8.0	26.7	28.0	20.0	16	1.3	100.0
Trespassing and Vandalism	6.5	15.6	23.4	6.5	40.3	7.8	100.0
Marketing Your Farm Operation	5.3	10.5	13.2	9.2	44.7	17.1	100.0
Availability of Veterinary & Farrier Services	5.1	20.3	19.0	12.7	41.8	1.3	100.0
Best Management Practices	4.1	14.9	23.0	13.5	37.8	6.8	100.0
Neighbor Complaints Concerning Farming Operations	4.1	6.8	12.2	6.8	58.1	12.2	100.0
Availability of Quality Feed/Hay	3.8	15.2	27.8	16.5	31.6	5.1	100.0
Availability of Machinery & Parts	1.3	7.6	20.3	11.4	48.1	11.4	100.0
Availability of Technical Assistance	1.3	7.8	27.3	10.4	45.5	7.8	100.0

OPPORTUNITIES & CONCERNS

This section provides a summary of one rating question from the survey, as well as summaries of the responses to three open-ended survey questions. These questions were asked in order to inform VHC’s efforts to engage, support, and expand their membership.

Respondents rated a list of eleven concerns related to their personal enjoyment of equines in 2019 using a five-point scale, from “not at all a concern” to “extreme concern”. Table 15 provides a detailed summary. Two thirds of respondents rated horse health related to diseases and tick-borne illnesses as either an extreme or moderate concern. Respondents were also very concerned about having access to trails and open lands for riding purposes.

TABLE 15: AREAS OF CONCERN FOR EQUINE OWNERS

Please indicate how much of a concern each item was for you in 2019	Extreme concern	Moderate concern	Somewhat of a concern	Slight concern	Not at all a concern	Total
Diseases and tick-borne illnesses	33.7	32.4	17.9	13.8	2.2	100.0
Access to trails for riding equines	29.3	23.5	17.1	14.9	15.2	100.0
Access to open land for riding equines	24.1	23.7	20.2	13.1	19.0	100.0
Cost of land for keeping equines	14.9	25.3	14.9	14.4	30.4	100.0
Access to quality training facilities in my area	12.4	15.9	14.6	18.1	39.1	100.0
Availability of hay	11.6	17.6	16.6	24.7	29.5	100.0
Access to quality boarding facilities in my area	11.0	12.1	13.5	18.1	45.3	100.0
Extreme weather events	10.7	20.6	22.1	28.0	18.6	100.0
Access to equine care professionals in my area (veterinarians, farriers, other specialists)	8.9	15.8	14.8	17.3	43.2	100.0
Manure management/disposal	6.7	17.6	18.7	21.0	36.0	100.0
Availability of bedding	4.9	8.3	8.5	19.4	58.8	100.0

Improving Communication

One hundred sixty-eight people responded to the question “How could communication within the Vermont equine community be improved?” with a total of 197 ideas/suggestions (some respondents offered one idea, while others offered five or more ideas in their responses). All responses were coded into major themes. Table 16 includes themes noted by four or more people. The most frequently cited suggestion for improving communication was a centralized website where equine enthusiasts could find information (20%). Other online communication venues were also mentioned, such as social media (14.5%), online forums (3.0%), and email distribution lists (2.4%). Within the comments themselves, it is evident that many respondents feel it is important to be able to have an inclusive voice across disciplines, yet do not feel that goal is currently being met. While Vermont is a relatively small state, the diversity of the equine community presents a challenge for communication, coordination and collaboration across regional and discipline boundaries. These findings suggest VHC has opportunity to increase awareness of its efforts to be a central voice and advocate for all equine enthusiasts within the state.

TABLE 16: IMPROVING COMMUNICATION WITHIN THE VERMONT EQUINE COMMUNITY

How could communication within the Vermont equine community be improved?	Frequency	Percent
Centralized Website	33	19.9
Social Media, Facebook Group/s & Page/s	24	14.5
Cohesion Across Equine Groups and Enthusiasts	15	9.0
Newsletter	12	7.2
Central Organization	6	3.6
More Activities/Events	5	3.0
Not Aware Of Existing Communications	5	3.0
Online Forum	5	3.0
Connect Newer Riders To Resources	4	2.4
Email Distribution List	4	2.4
Strengthen Inclusivity	4	2.4
Other	49	29.4
Total	166	100.0

Information Sources

Nearly 350 individuals responded to the question “Where do you go to get information about events, activities, resources for your equine endeavors?” with a total of 766 responses. Some respondents offered one information source while others offered five or more information sources in their individual responses. All responses were coded into major themes. Table 17 includes themes noted by ten or more people.

The responses to this question (Table 17) range from very general categories of “Facebook/Social Media” and “Online” to specific organizational sources such as GMHA and VHC. More than one third of respondents are getting information digitally, from social media (20%) and online resources (18.5%). “Word of mouth” is also important (7.1%) while others cited friends, trainers, barn managers, and barn mates as key resources for information.

TABLE 17: INFORMATION SOURCES FOR EQUINE ENDEAVORS

Where do you go to get information about events, activities, resources for your equine endeavors?	Frequency	Percent
Facebook/Social Media	154	20.1
Online	142	18.5
Friends	61	8.0
Word of Mouth	54	7.1
GMHA	35	4.6
VHC	27	3.5
Club Resources	22	2.9
Feed/Tack Store	21	2.7
Trainer/s	16	2.1
Barn (Includes Barn, Barn Manager, Barn Mates, Barn Owner)	13	1.7
Local Club Resources	10	1.3
Other	211	26.3
Total	766	100.0

Other Thoughts

One hundred thirty people responded to the prompt “Please share any other thoughts or concerns that you feel are important to the equine industry in Vermont”, with a total of 199 additional thoughts. As noted above, some offered one thought, while others offered multiple thoughts in their responses. All responses were coded into major themes. Table 18 includes themes noted by four or more people.

There is clear concern across the board for trail riding access and traffic safety when riding on roads. Many comments discussed changes over time in open space, availability of property for horseback riding, concerns about continued development pressure, and private property owners choosing to post their property. Additionally, many responses shared concerns about riding along roadways with drivers and bikers not understanding or not caring for how to safely share the road with horses and riders. Comments also pointed to concerns for the high costs of horse ownership for individuals, as well as concerns for loss of boarding facilities in their areas. A few comments specifically called for equine operations to be considered as agricultural operations (and therefore eligible for the Use Value Appraisal program) and increased recognition for the value equines offer in terms of maintaining pasture and the rural working landscape.

TABLE 18: OTHER THOUGHTS

Please share any other thoughts or concerns that you feel are important to the equine industry in Vermont	Frequency	Percent
Trail Riding Access	44	22.1
Traffic/Road Sharing Issues	29	14.5
High Costs Of Horse Ownership	12	6.0
Traffic/Road Sharing Issues	11	5.5
Lack Of/Loss Of Equine & Boarding Facilities	7	3.5
Lack Of/Loss Of Hayfields/Hay Shortage	7	3.5
Survey Comment (comments About Length, Interest In Results)	7	3.5
Equine Should Be Agricultural	6	3.0
Resources/Support For Businesses & Events	6	3.0
Ticks/Tick-borne Disease	6	3.0
Decrease In Youth Interest/Fewer Riders/Lack Of New Riders	5	2.5
Value Of/Lack Of/Loss Of Open Land/Land For Horse-keeping	5	2.5
Lack Of/Loss Of Shows/Competitions	4	2.0
Other	61	30.5
Total	199	100.0

The equine industry is clearly an important element of the Vermont economy, and has the potential to grow. Coupled with the previous Vermont equine events study, this second study, assessing the economic contribution of horse ownership and related businesses in the state, provides Vermont's first comprehensive look at the equine industry in the state. While these reports focus on the economic contributions of equine ownership, enterprises, and events within the state, it is clear that Vermont's equine community also provides valuable cultural, social, and health benefits for those who enjoy equines and equestrian pursuits, as well as for those who appreciate the working landscapes that support equines.

The analysis for this report is based on primary survey research conducted by the UVM Center for Rural Studies on behalf of the Vermont Horse Council. Over 700 individuals at least partially completed the survey with slightly more than 400 individuals fully completing the survey.

KEY FINDINGS:

- The survey collected 700 responses with 400 fully completed responses, representing 2,334 equine—an estimated 27% of the state's total horse population of 8,500 according to the National Agricultural Statistics Service.
- The median number of horses owned by respondents was two horses per owner.
- Annual spending by equine owners and enterprises in 2019 generated a total of \$45,635,922 in local economic activity, including adjust direct spending of \$27,429,481 in the support industries for agriculture and forestry, vet services, and wholesale trade sectors and \$6,940,352 in related sectors.
- Equine owner expenditures supported 652 jobs in the local economy, with 525 of those jobs primarily in support industries for agriculture and forestry, vet services, and wholesale trade sectors.
- Total direct spending by Vermont equine owners outside of Vermont totaled \$13,161,004. While it would be impossible to confine all spending by Vermont equine owners within state boundaries, this does represent potential economic opportunity within Vermont.
- Out of state purchases were most consistently reported in the "supplies" category. Presumably, many of these supply purchases are those made online due to convenience, competitive pricing, or lack of local availability. (Note: Vermont is a small state and residents who live near state boundaries may in fact be supporting their local economy by making purchases in New York or New Hampshire.)
- Vermont's equine owners and enterprises contribute to maintaining and supporting the state's working landscape and open lands. Seventeen percent of respondents reported enrolling some portion of their land in land preservation programs or land trusts while 29% of respondents reported that some portion of their equine operation lands were enrolled in the Use Value Appraisal Program.
- Tick-borne disease and related health implications for equines, access to trails and open land for riding, and traffic/road sharing issues are some of the top concerns of equine owners.
- The most frequently cited suggestion for improving communication within the equine community was a centralized website where equine enthusiasts could find information (20%).
- Twenty eight percent of respondents (191 people) reported that they owned, operated, and/or earned income from an equine-related business located within Vermont in 2019. Of those enterprises, 51% (97 people) reported that they had a registered tradename, LLC, or corporation for their equine business.

- Although substantial, the value of the impact reported here is likely a conservative estimate for a number of reasons, such as:
 - Numerous expense categories were omitted from calculations due to limited data. In some instances, this was likely not because people did not have expenses in these categories, but because they chose not to enter expenses, for any number of reasons. This is a natural element of survey research.
 - People think about their investments in different ways. In all likelihood, equine owners make some investments to support their equine endeavors, but may not have considered them relevant when responding to the survey (i.e., purchase of a tractor, trailer, or other equipment that serves multiple uses on a property, some related to equine and some not).

RECOMMENDATIONS

- As with any study, there are limitations of time and resources. A dedicated core of Vermont Horse Council volunteers worked diligently to recruit participants who completed nearly 700 surveys used to craft this report. While this report provides a solid baseline to begin to quantify the impact of equine ownership in Vermont, a greater number of survey responses with more detailed and accurate economic reporting would lead to more refined results.
- Future studies would benefit from a more accurate accounting of the number of equines and the number of equine owners in Vermont. The estimate of number of horses provided by the USDA's National Agricultural Statistics Service is based on sampling, not a registry or census of equine within the state.
- To gain a better sense of equine enterprises and their characteristics, a further targeted study using interviews or focus group strategies would be a valuable follow-up to these first two reports.

CONCLUSION

Vermont's equine community reflects a diverse range of breeds, disciplines, and uses. Equine owners themselves span across demographic categories—illustrating how equines can be enjoyed across the lifespan, from those beginning riding lessons as a child and those with serious competitive pursuits to those enjoying retired equine companions in their backyards. The increasing costs of equine ownership, loss of open lands for riding, and concerns about horse health are serious challenges. Those challenges aside, there is great potential for the Vermont Horse Council to continue to create a unified voice on behalf of the equine community in order to advocate and promote policies and programs that will support Vermont's equines for generations to come.

Finally, survey participants had the opportunity to provide any additional comments they had at the end of the survey. Many of these open-ended comments expressed appreciation to the Vermont Horse Council for pursuing this research and called for increased recognition of the role that equine play in the working landscape. A sampling of those of comments appears below:

- *Vermont is lacking in good equestrian trails. Hopefully this survey will help to show the state just how much equine owners are spending in the state and realize the importance to the economy. The equine world is very diverse in its use and therefore it's hard to join together as a single group to support all the different uses.*
- *There is much activity and help for bike, ski and foot trails, but how do we ensure horse trails and safe passage to trail riding in Vermont do not go away. Since the road in front was paved, the 35 MPH road now has trucks and vehicles that speed at 50-60 MPH.*
- *I would like to see our undeveloped areas more protected - Act 250 is not even strong enough ...we don't want to look like New Jersey - we want a rural place with modern technology. Our farms of all kinds need protecting! I can barely afford to keep my horses ... but because I am not a farm and am under 10 acres, I get no land use break - you need to care about the small acreage too!!! PATCHWORKED - it all connects to a lot of land*

- *I am pleased that you are undertaking this research. The equine industry is quite extensive in Vermont but many of those in decision-making roles statewide are not aware of the significance to the local economy.*
- *Thank you! The equine industry and enthusiasts need more recognition and appreciation in Vermont. We help keep land open and contribute to the bucolic environment that is so important here. And the financial impact of the industry is huge.*



ABOUT THE CENTER FOR RURAL STUDIES

The Center for Rural Studies (CRS) is a nonprofit, fee-for-service research organization that addresses social, economic, and resource-based problems of rural people and communities. Based in the College of Agriculture and Life Sciences at the University of Vermont (UVM), CRS provides consulting and research services in Vermont, the United States, and abroad. The research areas are divided into five main areas: Agriculture, Human Services and Education, Program Evaluation, Rural Community and Economic Development, and Vermont Community Data. The mission of CRS is to promote the dissemination of information through teaching, consulting, research and community outreach. Primary emphasis is placed upon activities that contribute to the search for solutions and alternatives to rural problems and related issues. Bringing decades of experience to its work, CRS recognizes that answers to critical and timely questions often lie within a community or organization.

For any questions or comments about this report, please contact Amy Kelsey, Research Specialist at the Center for Rural Studies at 802-598-4551 or at amy.kelsey@uvm.edu

The Center for Rural Studies is located at: 206 Morrill Hall, Burlington, VT 05405.

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SURVEY INSTRUMENT

**Economic Contribution of Equine Ownership in the State of Vermont
2020 Survey**

The Vermont Horse Council, in partnership with the University of Vermont's Center for Rural Studies, is investigating the economic contribution of equine ownership within the State of Vermont. If you own or lease equines, consider yourself an equine enthusiast, offer boarding or rent facilities that support equines, or are otherwise involved in a business that is dependent upon equines, we value your input!

This survey is designed to gather important data about equine trends—including breeds, uses, challenges, and annual expenses. A special section of the survey is designed for individuals who earn income from equine-related businesses in Vermont. The overall results will be compiled into a report that the Vermont Horse Council will make available at the end of the project and will use to advocate for supporting equine ownership in Vermont. This survey could take up to 25-30 minutes, depending upon the nature of your equine endeavors.

Your responses are helpful in our efforts to develop baseline information about the economic contribution of equine ownership in the State of Vermont. Your participation is completely voluntary and no responses are reported individually. By completing this survey you agree that: you have read the following information sheet, you have voluntarily agreed to participate, you are at least 18 years of age, and you have not previously completed this survey. Thank you for your input!

If you need to leave the survey and return to it later, click the "resume later" button at the top of the screen. When you click this button, your responses will be saved and you can return to the survey to finish it later. If you are using a mobile phone or have otherwise made your browser window very narrow, you may not be able to see the button. Try zooming out or making your browser window wider so that the "resume later" option is visible.

If you have further questions about this study, please contact the Vermont Horse Council or Amy Kelsey at the UVM Center for Rural Studies, Amy.Kelsey@uvm.edu or 802-598-4551.

Title: Vermont Equine Economic Impact Study

Principal Investigator: Kelly Hamshaw, UVM Center for Rural Studies

Introduction

The Vermont Horse Council, in partnership with the UVM Center for Rural Studies (CRS), are conducting an online survey of equine owners, equine enthusiasts, and equine-related businesses to understand the economic impact of equine ownership within the state of Vermont. The survey will also provide respondents an opportunity to share their perspectives on issues affecting equine ownership and other activities in the state as well as ask respondents for key characteristics about their equine ownership, businesses (if applicable), and demographic information.

Study Procedures

If you take part in the study, you will be asked to complete the up to 62 question survey that follows (note: not all respondents will answer all sections of the survey depending on your role). The survey should take 20-30 minutes or less to complete.

Benefits

As a participant in this research study, there may not be any direct benefit for you; however, information from this study may benefit others involved with equines and related businesses in Vermont now or in the future.

Risks

We will do our best to protect the information we collect from you during this study. We will not collect any information that will identify you to further protect your confidentiality and avoid any potential risk for an accidental breach of confidentiality.

Costs & Compensation

There will be no costs to you for participation in this research study. You will not be paid for taking part in this study.

Confidentiality

We will not collect any information that will identify you to protect your confidentiality. All survey data and information will be saved on the password protected UVM server. Any paper copies that are requested on a case by case basis will be sent without any survey identifiers to requestors with self-addressed pre-stamped envelopes to protect confidentiality.

Voluntary Participation/Withdrawal

Taking part in this study is completely voluntary. You are free to not answer any questions, or to stop taking the survey at any time without submitting. You may choose not to take part in this study at any time prior to submitting the survey by simply exiting the online survey or by not submitting the completed hardcopy. Given that responses are anonymous, it is not possible to withdraw from the study once the survey has been submitted.

Questions

If you have any questions about this study now or in the future, you may contact Amy Kelsey, Research Specialist at CRS, at (802) 598-4551. If you have questions or concerns about your rights as a research participant, then you may contact the Director of the UVM Research Protections Office at (802) 656-5040. This research has been reviewed according to UVM IRB procedures for research involving human subjects.

INTRODUCTORY QUESTIONS

1. Did you own one or more equines (horse, pony, miniature horse, donkey, mule) that resided in Vermont in 2019? Please choose only one of the following:

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

2. Did you lease one or more equines that resided in Vermont in 2019 from another equine owner? For example, did you have a formal rental agreement between yourself and another person to ride that person's horse? Please choose only one of the following:

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

3. Did you own/operate/earn income from an equine-related business located within Vermont in 2019? Please choose only one of the following:

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

4. Have you registered a tradename, LLC, or corporation for your equine business (this is not required to operate a business)? Please choose only one of the following:

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

5. Are you completing this survey on behalf of a minor (under 18)?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

6. Please check all roles that applied to you in 2019. Please check all that apply

Barn manager	<input type="checkbox"/>
Barn staff	<input type="checkbox"/>
Boarding: commercial facility operator (facility is registered as a business with Vermont Secretary of State)	<input type="checkbox"/>
Boarding: private farm owner offering board	<input type="checkbox"/>
Breeding services (broodmare or stallion)	<input type="checkbox"/>
Equine-assisted therapy operations	<input type="checkbox"/>
Equine bodywork specialist	<input type="checkbox"/>
Farrier	<input type="checkbox"/>
Horse enthusiast (non-rider who does not currently own or lease horses)	<input type="checkbox"/>

Horse enthusiast (rider who does not currently own or lease horses, but may take riding lessons, for example)	<input type="checkbox"/>
Horse lessee (you lease one or more equine from others)	<input type="checkbox"/>
Horse lessor (you lease one or more equine to others)	<input type="checkbox"/>
Horse Owner	<input type="checkbox"/>
Horse trainer	<input type="checkbox"/>
Large animal vet	<input type="checkbox"/>
Member of Pony Club, 4-H, other youth programs	<input type="checkbox"/>
Rescue or sanctuary operation	<input type="checkbox"/>

Riding instructor	
Working student	

Other:	
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BREED AND USE

7. Please indicate how many horses by breed you owned or leased between January 1, 2019 and December 31, 2019.
If you did not own or lease a horse in 2019, skip to question 13.

Appaloosa	
Arabian & Half-Arabian	
Belgian	
Clydesdale	
Crossbreed/Mixed	
Donkey, Mule, and/or Burro	
Hackney Horse	
Haflinger	
Miniature Horse	
Morgan	
Mountain Horse Breed	
Paint	

Paso Fino	
Percheron	
Pony	
Quarter Horse	
Saddlebred	
Standardbred	
Thoroughbred	
Walking Horse	
Warmblood	
Other (please describe)	
Other (please describe)	
Other (please describe)	

8. Please indicate how many of those equines were primarily used for any of the following uses:

Breeding stallions	
Broodmares	
Competitive Driving	
Competitive Endurance/Trail Rides	
Competitive Show	
Farm or Forest Work	
Pleasure and Non-competitive Driving	

Pleasure and Non-competitive Riding	
Pleasure and Non-competitive Trail Riding	
Retired/idle/not working	
Training	
Use in a Lesson or Therapy Program	
Youngstock (foals, weanlings, yearlings)	
Other activities	

9. If you indicated "other activities" as a primary use in the previous question, please describe here:

<p>9. If you indicated "other activities" as a primary use in the previous question, please describe here:</p>
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10. Was there a net change in the number of equines you owned during 2019? In other words, was there a difference between the total number of equines you owned at the start of the year and the number you owned at the end of the year? For example:

If you owned 1 equine at the start of the year and 4 equines at the end of the year, the net change would be 3 and your answer would be "yes".

If you owned 2 equines at the start of the year, sold one, and purchased one before the end of the year, then the net change would be 0 and you would answer "no".

Yes	
No	

If you answered no to question 10, skip to question 11

10A. If you indicated a change in the number of equines you owned in 2019, did the number of equine you own increase or decrease?

Increase	
Decrease	

If you answered "increased" to question 10A, complete 10B and 10C, then skip to question 11.

If you answered "decreased" to question 10A, skip 10B and 10C.

10B. If the number of equines you owned increased, please indicate why. Choose all that apply.

Purchased one or more equines	
Bred one or more equines	
Other (please describe):	

10C. If the number of equines you owned increased in 2019, please indicate by how many. Only numbers should be entered

Please write your answer here:	
--------------------------------	--

10D. If the number of equines you owned decreased, please indicate why. Choose all that apply.

Sold one or more equine	
Experienced death of one or more equine	
Other (please describe):	

10E. If the number of equines you owned decreased in 2019, please indicate by how many.

Only numbers may be entered in this field. Only numbers should be entered

Please write your answer here:	
--------------------------------	--

11. Did any of your equines reside outside of Vermont for a portion of 2019? (Do not include equines you purchased from out of state during 2019.)

Yes	
No	

If you answered no to question 11, skip to question 12

11A. Please provide the following information for any of your equines that resided outside of Vermont in 2019.

How many of your equines resided outside of Vermont for a portion of 2019?	
For how many months did your equines reside outside of Vermont?	

11B. In what state or states did you keep your equines when not in Vermont during 2019?

Please write your answer here:	
--------------------------------	--

LAND AND FACILITIES

12. Which of the following best describes your equines’ primary living situation in 2019? Please choose only one of the following:

Resided on my own property	
Resided on property that was leased or loaned to me (does not include standard boarding arrangements)	

Boarded at a commercial boarding facility	
Boarded at a private boarding facility	
Not applicable	
Other	

13. Did you own personal or commercial property that supported equine in Vermont in 2019?

Yes	
No	

If you answered no to question 13, skip to question 14

13A. Did your personal or commercial property support your own equine-related business in 2019?

Yes	
No	

13B. Did you lease any portion of your personal or commercial property to another equine-related enterprise or person in 2019? (This does not include standard boarding arrangements.)

Yes	
-----	--

No	<input type="checkbox"/>
----	--------------------------

If you answered no to question 13B, skip to question 14

13C. Please indicate how the personal or commercial property that you leased to another equine-related enterprise or person was used in 2019. Please choose all that apply:

Hay	<input type="checkbox"/>
Interior space, such as a commercial barn, office, or retail space	<input type="checkbox"/>
Pasture	<input type="checkbox"/>
Other Agricultural Uses	<input type="checkbox"/>
Other:	<input type="checkbox"/>

13D. Approximately how much personal or commercial property did you lease to another equine-related entity or person in 2019. Please choose the best unit of measure below. (You do not need to provide both acres and square feet.)

Acres	<input type="checkbox"/>
Square Feet	<input type="checkbox"/>

14. Did you rent or lease property from another person for your equines or equine-related business in 2019? For example, were you a tenant on a property, leasing pasture or barn facilities from another person or entity? (This does not include standard board arrangements.)

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

15. How many total acres (owned and/or leased from others) were in your Vermont operation on December 31, 2019?

If you did not lease or own land for your equine operation, leave blank and skip to question 18

Home and barn site acres	<input type="text"/>
Pasture acres	<input type="text"/>
Tillable acres	<input type="text"/>
Wooded acres	<input type="text"/>
Wetland, lake, or pond acres	<input type="text"/>

15A. Of the total acres reported previously, how many acres were devoted specifically to your equine operation in 2019? Only numbers should be entered

Please write your answer here:	<input type="text"/>
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15B. For the total acres reported previously, what do you consider to have been the primary function of the operation in 2019? Please choose only one of the following:

Farm or Ranch (Dairy, Beef, Vegetable, etc.)	<input type="checkbox"/>
Boarding, training, or riding facility (including recreational places)	<input type="checkbox"/>

A breeding service place (breeding operation)	
Equine rescue/sanctuary	
Equine-assisted therapy facility	
A place to keep horses, ponies, or other equine for personal use	
Other	

16. Were any acres in this operation enrolled in land preservation programs or land trusts?

Yes	
No	

If you answered no to question 16, skip to question 16D

16A. How many acres were enrolled in land preservation programs or conserved via a land trust? Only numbers should be entered

Please write your answer here:	
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16B. Were any acres in this operation enrolled in the Use Value Appraisal Program (also referred to as Current Use)?

Yes	
No	

16C. How many acres were enrolled in the Use Value Appraisal Program (also referred to as "Current Use")? Only numbers should be entered

Please write your answer here:	
--------------------------------	--

16D. If the Use Value Appraisal Program ("Current Use") were expanded to include acreage dedicated to equine operations, would you enroll? The minimum acreage to enroll is 25 acres.

Yes	
No	

17. Did you have any paid employees supporting your equine property in 2019?

Yes	
No	

CONTINUED ON NEXT PAGE

EQUINE EXPENDITURES

This section asks questions about your personal equine expenditures. If you own or operate an equine related business, a separate section of the survey will ask about your business expenditures. If you did not have expenses in any of the listed categories, please leave the cells blank.

This series of questions assumes that 100% of your 2019 equine expenditures were made in Vermont. If you had relevant equine expenditures out of Vermont (including online purchases) for any of the listed categories, please estimate the percentage spent outside of Vermont and enter it in the appropriate column.

For example:

If you purchased a horse in Vermont for \$5000, you would leave the percentage column blank, as 100% of the expenditure was made in Vermont.

If you purchased a horse in New York and moved it to Vermont, you would enter "100" in the percentage column, as 100% of the expenditure was made outside Vermont.

If your competition and event expenses were mostly, but not entirely, spent out of state, you might enter "80" in the percentage column.

18. For each equine maintenance category below, please provide your best estimate of your expenditures (in dollars) for 2019. If you did not have expenses in any of the listed categories, please leave the cells blank. Only numbers should be entered.

EQUINE MAINTENANCE EXPENSES

	Estimated 2019 Personal Expenditure in Dollars	% of Estimated Expenditure Spent outside Vermont
Purchase of Equines		
Lease Payments for Equines (if leasing an equine from another owner)		
Boarding		
Training, Lessons, and Coaching		
Competition and Event Entry Fees		
Feed (If home-grown, estimate value. Include grain, hay, and supplements)		
Bedding (If home-grown, estimate value)		
Health (Veterinarian fees, medicine, lab work, alternative therapies, etc.)		
Supplies (Tack, clippers, soaps, oils, sprays, brushes, equine clothing, etc.)		
Farrier		
Breeding Fees		

19. For each maintenance category below, please provide your best estimate of your expenditures (in dollars) for 2019. If you did not have expenses in any of the listed categories, please leave the cells blank.

MAINTENANCE EXPENSES

	Estimated 2019 Personal Expenditure in Dollars	% of Estimated Expenditure Spent outside Vermont
Maintenance & Repair Materials and Equipment (Include materials for maintenance of pasture, buildings, fencing, facilities, equipment, etc.)		
Maintenance & Repair Labor (Include contract or wage labor for maintenance of pasture, buildings, fencing, facilities, equipment, etc.)		
Insurance Premiums (Equine related liability, mortality, etc.)		
Utilities/Fuel (Equine related telephone, water, natural gas, heating oil, electricity, etc.)		
Taxes (Include property tax on equine related land and buildings)		
Facility Rent or Lease		
Purchase of Land and Buildings (Turnout sheds, indoor riding arenas, etc.)		

20. For each expense category below, please provide your best estimate of your expenditures (in dollars) for 2019. If you did not have expenses in any of the listed categories, please leave the cells blank.

OTHER EXPENSES

	Estimated 2019 Personal Expenditure in Dollars	% of Estimated Expenditure Spent outside Vermont
Large Equipment (Tractor, Haying, etc.)		
Registration, Certification, and Professional Membership		
Shipping & Travel (equine related air travel, fuel, truck, trailer, van, and car expenses, shipping of equine, etc.)		
Miscellaneous (Include cost of advertising, commission on sales, subscriptions, etc.)		
Capital Improvements		
Other typical expenditures		
Other non-typical expenditures		
Equine related vacations		

21. For each labor category below, please provide your best estimate of your expenditures (in dollars) for 2019. If you did not have expenses in any of the listed categories, please leave the cells blank.

LABOR EXPENSES

	Estimated 2019 Personal Expenditure in Dollars	% of Estimated Expenditure Spent outside Vermont
Paid Labor (consistent paid labor provided on an ongoing basis)		
Any other labor not previously reported		
Equine Business Information		

CONTINUED ON NEXT PAGE

EQUINE BUSINESS OWNER/OPERATOR QUESTIONS

If you did not own or operate an equine related business, skip to question 30 on Page 15

22. Please tell us more about your enterprise.

	YES	UNCERTAIN	NO
Does this enterprise have its own website?			
Does this enterprise keep financial statements?			
Is there a formal written business plan for this enterprise?			
Has this enterprise been registered as a legal entity?			
Is this enterprise your primary source of income?			
Do you hold a job or jobs in addition to working for this enterprise?			
Have you borrowed money for your business?			

23. Please indicate how many employees supported your enterprise in 2019.

Full time		Seasonal		Other	
Part time		Barter			

24. If you indicated "other" as an employee type in the previous question, please specify.

Please write your answer here:

25. Please indicate all services that you received income for in 2019 by entering your estimated gross revenue before expenses for the year. If not applicable, please leave cells blank.

Income Category	Estimated 2019 Income
Boarding	
Training	
Lessons/instruction	
Breeding (stud services)	
Breeding (broodmares and foaling services)	
Horse sales or leases	
Agent Commission	
Facility or Land Rental or Lease	
Barn management	
Barn/groom labor (stalls, feeding horses, etc.)	
Farrier	
Licensed Veterinarian (such as chiro, dental, &	
Bodywork - (such as magnawave, massage,	
Dental (non-veterinarian)	

Horse transportation	
Equine-assisted therapy	
Equine rehabilitation/lay-up services	
Hay	
Equine Products (Tack, Jewelry, Clothing, etc.)	
Hosting events/Schooling shows	
Other (please describe):	

This series of questions assumes that 100% of your 2019 equine business expenditures were made in Vermont. If you had relevant equine business expenditures out of Vermont (including online purchases) for any of the listed categories, please estimate the percentage spent outside of Vermont and enter it in the appropriate column.

For example:

If your business purchased a horse in Vermont for \$5000, you would leave the percentage column blank, as 100% of the expenditure was made in Vermont.

If your business purchased a horse in New York and moved it to Vermont, you would enter "100" in the percentage column, as 100% of the expenditure was made outside Vermont.

If your business had competition and event expenses that were mostly, but not entirely, spent out of state, you might enter "80" in the percentage column.

26. For each equine maintenance category below, please provide your best estimate of your expenditures (in dollars) for 2019. If you did not have expenses in any of the listed categories, please leave the cells blank.

EQUINE MAINTENANCE EXPENSES

	Estimated 2019 Business Expenditure in Dollars	% of Estimated Expenditure Spent outside Vermont
Purchase of Equines		
Lease Payments (if you lease horses from another owner)		
Boarding		
Lessons, Training, and Coaching		
Competition or Event Entry Fees		
Feed (If home-grown, estimate value. Include grain, hay, and supplements)		
Bedding (If home-grown, estimate value)		
Health (Veterinarian fees, medicine, lab work, etc.)		
Supplies (Include tack & other equipment, clippers, soaps, oils, sprays, brushes, equine clothing, etc.)		
Farrier		
Breeding Fees		

27. For each maintenance expense category below, please provide your best estimate of your expenditures (in dollars) for 2019. If you did not have expenses in any of the listed categories, please leave the cells blank.

MAINTENANCE EXPENSES

	Estimated 2019 Business Expenditure in Dollars	% of Estimated Expenditure Spent outside Vermont
Maintenance & Repair (Include materials and equipment for maintenance of pasture, buildings, facilities, fencing, equipment, etc.)		
Maintenance & Repair (Include wages and contracted labor for maintenance of pasture, buildings, facilities, fencing, equipment, etc.)		
Insurance Premiums (liability, instructor's, worker's comp, etc.)		
Utilities/Fuel (Equine related telephone, water, natural gas, heating oil, electricity, etc.)		
Taxes (Include property tax on equine related land and buildings)		
Facility Rent or Lease		
Purchase of Land and Buildings (Turnout sheds, indoor riding arenas, etc.)		

28. For each expense category below, please provide your best estimate of your business expenditures (in dollars) for 2019. If you did not have expenses in any of the listed categories, please leave the cells blank.

OTHER EXPENSES

	Estimated 2019 Business Expenditure in Dollars	% of Estimated Expenditure Spent outside Vermont
Large Equipment (Tractor, Haying, etc.)		
Registration, Certification, Professional Memberships		
Shipping & Travel (air travel, fuel, truck, trailer, van, and car expenses, meals, shipping of equine, etc.)		
Miscellaneous (Include cost of advertising, commission on sales, subscriptions, etc.)		
Capital Improvements		
Other typical expenditures		
Other non-typical expenditures		

29. For each labor category below, please provide your best estimate of your business expenditures (in dollars) for 2019. If you did not have expenses in any of the listed categories, please leave the cells blank.

LABOR EXPENSES

	Estimated 2019 Business Expenditure in Dollars	% of Estimated Expenditure Spent outside Vermont
Paid Labor (consistent paid labor provided on an ongoing basis)		
Any Other Labor Not Previously Reported		

CONTINUED ON NEXT PAGE

CONCERNS

30. Please indicate how much of a concern each item was for you in 2019.

	Not at all a concern	Slight concern	Somewhat of a concern	Moderate concern	Extreme concern	Not applicable
Access to equine care professionals in my area (veterinarians, farriers, other specialists)						
Access to open land for riding equines						
Access to quality boarding facilities in my area						
Access to quality training facilities in my area						
Access to trails for riding equines						
Availability of bedding						
Availability of hay						
Cost of land for keeping equines						
Extreme weather events						
Diseases and tick-borne illnesses						
Manure management/disposal						

31. Please indicate how much of a concern each item was for your equine-related business enterprise in 2019.

	Not at all a concern	Slight concern	Somewhat of a concern	Moderate concern	Extreme concern	Not applicable
Availability of machinery and parts						
Availability of quality feed and hay						
Availability of technical assistance						
Availability of veterinary and farrier services						
Best Management Practices						
Extreme weather events						
Hiring and keeping qualified help						
Insurance/Workers Compensation						
Liability						
Marketing your farm operation						
Neighbor complaints concerning farming operations						
Regulations affecting farm operation						

Taxes						
Trespassing and vandalism						
32. Please share any other thoughts or concerns that you feel are important to the equine industry in Vermont here:						

EQUINE INDUSTRY INFORMATION AND COMMUNICATION

33. Where do you go to get information about events, activities, resources for your equine endeavors?

34. Where are you most likely to seek reputable information when it comes to your horse’s nutritional needs? Please number each box in order of preference from 1 to 11

Information Source	Rank
Veterinarian	
Feed store representative	
Google or other online search engine	
Facebook, Instagram or other social media sites	
Horse related association websites or publications	
Horse related association meetings, conferences or seminars	
Feed manufacturer representative	
Friends or other horse owners	
Trainer or Boarding facility owner	
Print publications such as magazines	
Other	

35. How could communication within the Vermont equine community be improved?

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DEMOGRAPHIC INFORMATION

The last section asks for some brief demographic information. Again, all individual responses are confidential.

36. Are you currently a member of the Vermont Horse Council?

Yes	
No	
Prefer not to answer	

37. Approximately how many years have you resided in Vermont?

Less than 5	
5-15	
16-30	
Over 30	
Part-time resident	
Not a resident	
Prefer not to answer	

38. In which Vermont County do you currently live? Please choose only one of the following:

Addison	
Bennington	
Caledonia	
Chittenden	
Essex	
Franklin	

Grand Isle	
Lamoille	
Orange	
Orleans	
Rutland	
Washington	

Windham	
Windsor	
Not Applicable	
Prefer not to answer	

39. What is your age? Please choose only one of the following:

18-24	
25-34	
35-44	

45-54	
55-64	
65-74	

75 and older	
Prefer not to answer	

40. With which gender do you identify? Please choose only one of the following:

Man	
Woman	

Transgender	
Non-binary	

Other	
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Prefer not to answer	
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41. With which race/s do you most identify? Please select all that apply to you.

American Indian or Alaska Native	
Asian	
Black or African American	
Native Hawaiian or Other Pacific Islander	

White	
Other:	
Prefer not to answer	

42. Are you of Spanish, Hispanic or Latino ethnicity?

Yes	
No	
Prefer not to answer	

43. Please select the option that best represents your 2019 total household income before taxes.

\$34,999 or less	
Between \$35,000 - \$49,999	
Between \$50,000 - \$74,999	
Between \$75,000 - \$99,999	

Between \$100,000 - \$149,999	
Between \$150,000 - \$199,999	
\$200,000 or more	
Prefer not to answer	

44. What is your highest level of educational attainment?

Less than high school	
High school graduate or GED	
Some college or vocational	
Associates degree or equivalent	

Bachelor's degree or equivalent	
Master's degree or equivalent	
Doctoral degree or equivalent	
Prefer not to answer	

45. What is your current employment status?

Employed, full-time	
Employed, part-time	
Not employed, looking for work	
Not employed, not looking for work	

Retired	
Disabled, not able to work	
Other	
Prefer not to answer	

46. Please take a moment to include any relevant questions or comments regarding this research in the space below.

Thank you for completing the survey!

Please mail the completed survey to:

**Amy Kelsey
Center for Rural Studies
University of Vermont
146 University Place
Burlington, VT 05405**

EQUINE EXPENDITURES: COMPARISON OF AVERAGE TO MEDIAN

	Mean Annual Expenditure per 1 equine	Median Annual Expenditure per 1 equine
Equine Maintenance	\$12,862	\$7,729
Other Maintenance	\$3,438	\$1,050
Other Investments	\$5,0301	\$1,310
Total in Vermont	\$21,331	\$10,089

ANNUAL EQUINE MAINTENANCE EXPENDITURES

	Percent of respondents answering	Mean Expenditure per 1 equine	Median Expenditure per 1 equine
Purchase of Equine in VT	7.46	\$3,197	\$1,250
Lease Payments for Equine in VT	2.86	\$1,175	\$1,225
Boarding in VT	28.10	\$2,973	\$2,125
Training, Lessons, and Coaching in VT	33.17	\$966	\$500
Competition and Event Entry Fees in VT	23.02	\$362	\$265
Feed in VT	53.33	\$1,638	\$1,000
Bedding in VT	39.68	\$405	\$229
Health in VT	63.97	\$1,090	\$500
Supplies in VT	55.56	\$424	\$200
Farrier in VT	64.29	\$632	\$450
Breeding in VT*	0.16	\$650	\$650
Total		\$12,862	\$7,729

*Subcategory omitted from Total line and final economic contribution calculations due to insufficient data.

OTHER MAINTENANCE EXPENSES

	% of respondents answering	Mean Annual Expenditure per 1 equine	Median Annual Expenditure per 1 equine
Maintenance & Repair: Materials and Equipment in VT	32.14	\$1,204	\$250
Maintenance & Repair: Labor in VT	12.29	\$1,645	\$425
Insurance Premiums in VT	11.57	\$590	\$375
Utilities/Fuel in VT	22.86	\$536	\$250
Facility Rent or Lease in VT*	2.29	\$5,384	\$2,775
Purchase of Land & Buildings in VT*	3.57	\$25,992	\$5,000

Total		\$3,974	\$1,050
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*Subcategory omitted from Total line and final economic contribution calculations due to insufficient data.

OTHER INVESTMENTS

	% of respondents answering	Mean Annual Expenditure per 1 equine	Median Annual Expenditure per 1 equine
Large Equipment in VT	7.56	\$4,174	\$1,000
Registration, Certification, and	17.55	\$110	\$60
Shipping & Travel in VT	20.68	\$747	\$250
Miscellaneous in VT*	3.85	\$255	\$50
Capital Improvements in VT*	2.57	\$9,655	\$625
Other typical expenditures in VT*	3.71	\$701	\$238
Other non-typical expenditures in VT*	1.28	\$2,600	\$250
Equine related vacations in VT*	4.85	\$307	\$233
Total		\$5,031	\$1,310

*Subcategory omitted from Total line and final economic contribution calculations due to insufficient data.