CONTRIBUTION OF THE HORSEMAN COMPONENT OF THE HARNESS HORSE INDUSTRY TO THE ONTARIO ECONOMY

by

George L. Brinkman
and
Alfons J. Weersink

Department of Agricultural Economics and Business
University of Guelph
Guelph, Ontario

October, 2004

CONTRIBUTION OF THE HORSEMAN COMPONENT OF THE HARNESS HORSE INDUSTRY TO THE ONTARIO ECONOMY

by

George L. Brinkman and Alfons J. Weersink*

1.0 Introduction

In the mid 1990's the Ontario horse racing industry was experiencing many difficulties, with both race tracks and horse people losing substantial amounts of money. In October, 1998 the Ontario government approved the introduction of slot machines at race tracks, with 20% of the net revenue allocated back into the racing industry. The industry revenue, in turn, was split equally between the race tracks and the horse sector. The infusion of slots revenue has totally revitalized the industry.

The harness horse (standardbred) industry accounts for slightly over 2/3 of Ontario's race horses, with thoroughbreds accounting for the remaining nearly 1/3. Since the introduction of slots revenue in 1998, purses offered by race tracks in Ontario for standardbred racing have more than doubled, to $189 million by 2002. Wagering at race tracks during this time remained relatively constant, so the increase in purse money has come primarily from the slots revenue.

2.0 The Purpose of the Study

The purpose of this study is to identify the impact of the slots revenue on the horse component of the standardbred racing industry, excluding the impacts from the operation of race tracks. The overall Ontario agricultural sector has experienced declining incomes in recent years (Brinkman, 2004), but the horse sector appears to be growing and prospering. As a

---

* The authors are professors, Department of Agricultural Economics and Business, University of Guelph.

consequence, the horse component of the standardbred racing industry presents a good case study for identifying the positive impacts of slots revenue on farm production, supporting service industries, and the rest of the Ontario economy. The specific objectives of the study are:

1. To identify the impact of the additional purse money on growth in the standardbred horse industry since 1998, and
2. To identify the distribution of growth by size of operation and purse earnings.

3.0 Background

The standardbred horse racing and training industry is an agricultural based industry that has linkages throughout the agricultural sector, supporting-service industries, and the rest of the Ontario economy. This industry has a particularly important impact on rural areas, where most of the business activity is located. The horse business generates sales and purchases in the agricultural sector for livestock and feed, as well as new investment in land, buildings, and other facilities. It also provides direct employment and income for thousands of horse farm operators, trainers, grooms, and other horse care workers. In addition, it provides business activity for supporting service workers, such as veterinarians, blacksmiths, farriers, harness and saddle makers, feed and hay dealers, and transportation employees. Other local businesses supported by the standardbred industry also benefit, including vehicle dealerships, building supplies, gas stations, and businesses selling supplies like groceries and clothing to workers supported by the horse industry. Finally, the horse industry plays an important role in the entertainment industry, providing the horses to support racing and associated activities at race tracks throughout Ontario.

A viable horse industry is very important for maintaining a strong agricultural sector for Ontario. In recent years, the performance of the overall Ontario agricultural sector has been weakening substantially, as shown in Table 1. The first column shows a decline from a high of

Table 1. Ontario Farm Income 1981-2003

Year	Farm Income Nominal$ (1)	Farm Income 2003$ (2)	Net Govt Payments Nominal$ (3)	"Market" Income Nominal$ (4)	Debt Nominal$ (5)	Debt to Income Ratio (6)
	million					
1981	569	1,179	248	321	4,773	8.4
1982	347	648	200	146	5,035	14.5
1983	585	1,036	238	347	5,051	8.6
1984	929	1,574	273	656	5,227	5.6
1985	675	1,100	218	457	5,304	7.9
1986	639	1,063	271	368	5,084	8.0
1987	853	1,280	526	328	4,872	5.7
1988	790	1,140	584	206	4,783	6.1
1989	866	1,189	564	302	4,632	5.3
1990	559	733	323	236	4,979	8.9
1991	356	442	406	-50	4,813	13.5
1992	396	484	649	-253	4,798	12.1
1993	472	566	430	42	4,975	10.5
1994	333	399	171	162	5,160	15.5
1995	276	324	192	84	5,457	19.8
1996	450	519	226	224	5,967	13.3
1997	277	314	217	60	6,866	24.8
1998	234	264	169	65	7,635	32.6
1999	231	254	305	-74	8,206	35.5
2000	302	325	397	-95	9,097	30.1
2001	451	474	747	-296	9,692	21.5
2002	329	338	587	-258	11,104	33.8
2003	76	76	539	-467	11,693	153.9

Source: Statistics Canada, Agricultural Statistics Online Catalogues 21010 X1E-21015 X1E, May 2004.

$929 million in aggregate net farm income in 1984 to only $76 million in 2003, with a decline in average income of $792 million over the 1984-1989 period to only $314 million from 1991-2003. In real inflation adjusted terms, the 2003 income of $76 million was only 8% of the 1984 income. Furthermore, recent incomes have only remained positive because of record levels of net government subsidies, amounting to $747 million in 2001, $587 million in 2002, and $539 million in 2003. Without this level of governmental assistance, Ontario farmers in aggregate would have lost $296 million in 2001, $258 million in 2002, and $467 million in 2003. Finally, Ontario farmers have increased their levels of debt by 2.4 times since 1991. The rising debt and falling incomes are now generating debt levels over 30-154 times as high as the level of income, compared to 6 to 14 times the level of income in the early 1980s, and only 2.3 times the level of incomes in the early 1970s. The current level of debt to income is also 6-7 times the level found in the neighbouring U.S. states of Michigan, Ohio, Pennsylvania, and New York (Brinkman, 2004), which shows the increasing vulnerability of Ontario agriculture.

The horse industry is one of the few areas in primary agriculture in Ontario showing significant growth and investment in recent years. Table 2 summarizes the changes in the number of registered Ontario-bred standardbred horses in Canada. This table shows a 46% increase from 1997 to 2002 in broodmares from 3,539 to 5,151, and an overall 17% increase in registered racehorses from 5,952 to 6,951. Table 3 shows the impacts on employment from the standardbred horse industry. This table shows an increase of 33% in the number of horse and stable ownerships and jobs in Ontario Racing Commission licensed positions.

The increase in purse revenues has a widespread impact, as outlined in Figure 1. Horse owners receive 90% of the earnings, while the driver and trainer each receive 5%. The owners in turn may use their purse money to improve the quality of their horses and facilities, and for either caring for their horses themselves or for contracting for care at training facilities. Since 1997 the quality of standardbred horses has steadily improved, with faster racing times, higher

Table 2: Ontario Bred Registered Standardbreds

Type	1997	1998	1999	2000	2001	2002
Broodmares	3539	4013	4354	5464	5500	5161
Foals	2033	2103	2251	2620	3082	3196
Yearlings	1976	2070	2080	2081	2322	2388
Race Horses	5952	5817	5971	6071	6729	6951

Source: Standardbred Canada.

Table 3: Ontario Standardbred Racing Licenses and Employment

	1997	1998	1999	2000	2001	2002	# Increase 1997-2002	% Increase 1997-2002
Owner, New & Renewal	7136	7341	7797	8610	8848	9320	2184	31%
Stable/Multiple Ownership	535	658	719	793	858	906	371	69%
Trainer	2947	3068	3258	3442	3451	3533	586	20%
Driver	1423	1497	1608	1714	1703	1784	361	25%
Groom	3617	3332	3411	3685	3451	4470	853	24%
Tradesmen	86	61	87	97	129	149	63	73%
Occupational	265	141	194	239	336	404	139	52%
Veterinarian	57	56	59	61	62	65	8	14%
Associated Officials	212	218	286	334	415	448	236	111%
Commission Officials	71	70	71	74	82	100	29	41%
Pari-Mutuel	349	512	383	651	659	1109	760	218%
Total	**16698**	**16954**	**17873**	**19700**	**19994**	**22162**	**5464**	**33%**
Change Over Previous Year		1.53%	5.42%	10.22%	1.49%	10.84%		

Source: Ontario Racing Commission 2001 – 2002 Annual Report.

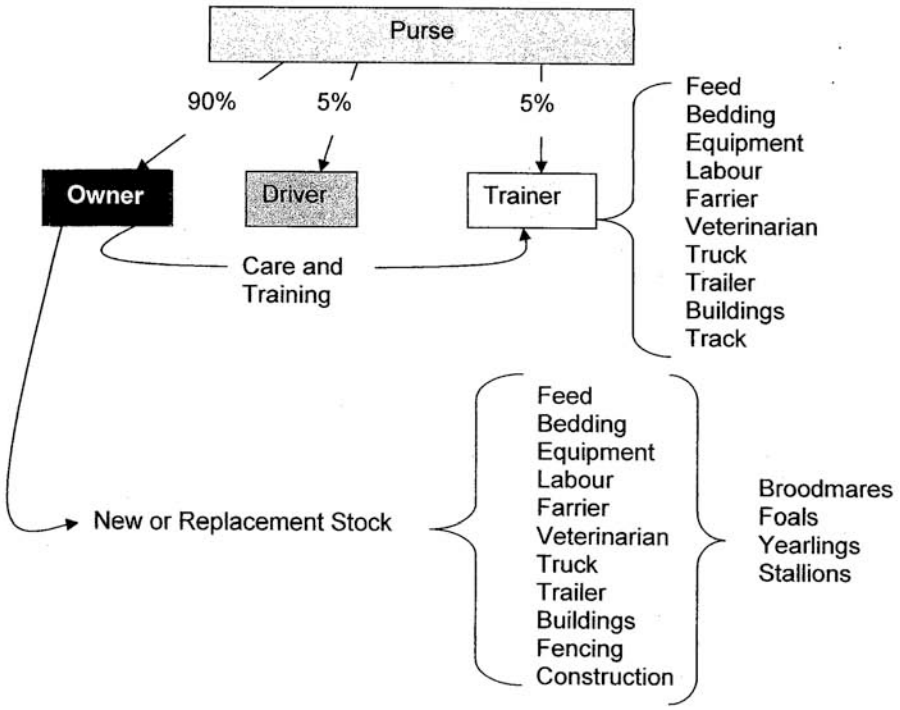


Figure 1: Diagram of Money Flow in Standardbred Racing

valued horses, and international recognition of Ontario as a vastly improved racing and breeding location.

3.1 Previous Studies

A March, 2003 input-output study by Econometric Research Limited showed a substantial economic impact from the horse and race track industry in Ontario. This study used an input-output analysis to examine the combined impact of both standardbred and thoroughbred horses and both horse and racetrack activities. The study, however, did not identify a unique impact from standardbred activities alone. Horse owners and trainers also were not surveyed in this study, but estimates of costs of production were obtained from industry observers and secondary data. The input-output analysis provided important benchmarks for assessing the impacts of the horse industry. For 2002, for example, the study estimated the annual variable costs of production for just the breeding phase of the standardbred horse industry at $180,001,078, compared to $98,216,897 for the thoroughbred industry.

The Econometric Research Limited study also developed a series of multipliers, representing the overall output, income, or employment impacts from indirect and induced spending and responding activities as a multiple of the initial or direct effect. For example, as horse owners expand their business, they purchase horses, feed and equipment from others, who in turn make further indirect and induced purchases from other farmers, local businesses, etc. The overall economic impacts and multipliers derived in the Econometric Research Ltd. Study are summarized in Table 4. The most relevant data for the present study undertaken in the report by Econometric Research Limited are the economic and employment multipliers for the racing and breeding phases of the horse racing industry. While these multipliers were calculated for the standardbred and thoroughbred industries combined, they likely represent a reasonable estimate for the standardbred industry by itself. The key multipliers are 2.27-2.31 for gross output, 1.20-1.27 for value added, and 2.75-3.07 for employment.

Table 4: Economic Impact of Horse Racing and Breeding in Ontario

Impacts	Track Expenditures	Association Expenditures	Racing Phase	Breeding Phase	Slot Operations	Total
	In Thousands of 2002 Dollars					
Initial Expenditures	$314,490	$14,056	$702,022	$278,218	$298,846	$1,607,632
Gross Output						
Direct	$314,490	$14,056	$702,022	$278,218	$298,846	$1,607,632
Indirect & Induced	$418,596	$19,648	$888,560	$363,764	$415,019	$2,105,587
Total	$733,086	$33,704	$1,590,582	$641,982	$713,865	$3,713,219
Multiplier	2.33	2.40	2.27	2.31	2.39	2.31
Value Added						
Direct	$160,641	$8,126	$318,507	$130,677	$156,493	$774,444
Indirect & Induced	$214,778	$10,173	$522,376	$222,711	$215,180	$1,185,218
Total	$375,419	$18,299	$840,883	$353,388	$371,673	$1,959,662
Multiplier	1.19	1.30	1.20	1.27	1.24	1.22
Employment (person yrs)						
Direct	6,044	213	4,469	2,357	3,891	16,974
Indirect & Induced	3,663	171	9,268	4,117	3,668	20,887
Total	9,707	384	13,737	6,474	7,559	37,861
Multiplier	1.61	1.80	3.07	2.75	1.94	2.23
Labour Income						
Direct	$141,604	$7,247	$233,190	$108,071	$109,137	$599,249
Indirect & Induced	$124,228	$5,906	$297,391	$124,339	$125,367	$677,231
Total	$265,832	$13,153	$530,581	$232,410	$234,504	$1,276,480
Taxes						
Federal	$78,397	$3,468	$147,422	$58,578	$64,868	$352,734
Provincial	$44,309	$1,913	$91,357	$37,044	$734,595	$909,217
Local	$25,670	$871	$41,996	$17,251	$74,881	$160,669
Total	$148,376	$6,252	$280,775	$112,873	$874,344	$1,422,620
Imports						
From Other Provinces	$22,895	$1,034	$47,987	$20,776	$21,815	$114,507
From Other Countries	$62,391	$3,024	$126,669	$49,313	$57,331	$298,628
Total	$85,286	$4,058	$174,656	$69,989	$79,146	$413,135

Source: Econometric Research Limited.

3.2 Study Procedure

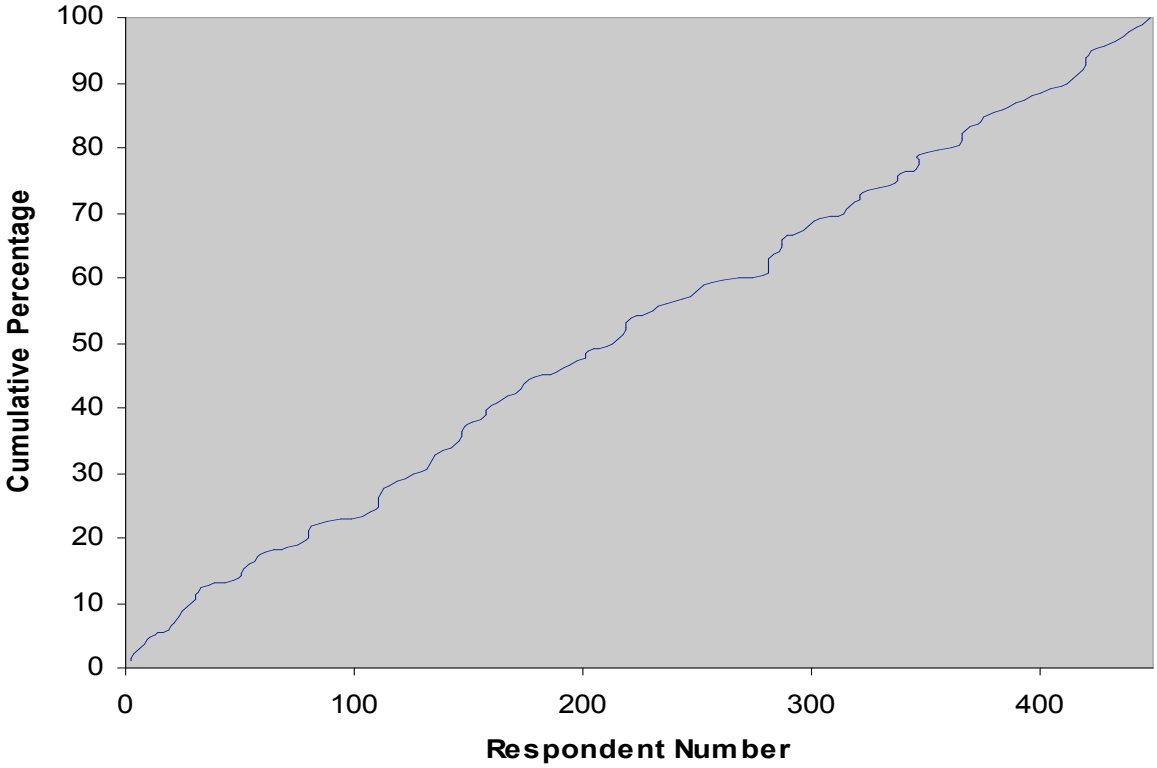
The procedure for this study involved undertaking a series of case-study interviews of horse operators to identify initial impacts and potential questions, and then developing a producer survey to measure industry-wide impacts. Potential interviewees were identified in cooperation with the Ontario Harness Horse Association (OHHA), and seven in-depth interviews were conducted across Ontario with medium-to-large sized horse operations. The information from the interviews was then used to develop the questions for the producer survey.

The producer survey is included in Appendix A. The survey collected information for fiscal year 1998 and 2002. The year 1998 was chosen as the initial starting point of the survey because it represented a substantial part of the year prior to the introduction of slots revenue in October of 1998, and was the most recent year with little impact from the slots revenue. The survey questionnaire includes questions for fiscal year 1998 and 2002 for type of operation/activity, number and value of horses, full and part-time workers, salaries of grooms, value of land and equipment, revenue and costs by various categories, investment expenditures, and percent spent in rural areas. In addition, respondents were asked questions to identify what the current and future size of their current business and the overall industry would have been had there been no slots revenue in 1998, or if slots revenue were now curtailed and purses fell to the pre-slots level. These latter questions are important to identify producer impacts from slots, as the relevant comparison is not just the difference between current conditions and the conditions existing at the start of the slots revenue in 1998. Instead, the relevant comparison is between the initial conditions and what current and future conditions would have been had slots never been introduced. Responses from the interviews indicated that the current industry would have been considerably smaller than even the size of the industry at the start of the slots revenue in 1998, if slots revenue had not been available. As a consequence, part of the benefits from slots revenue should be considered to be the prevention

of further shrinkage of the industry below the pre-slots level, rather than assuming the size of the industry would have remained the same.

The sample for the producer survey was derived by the OHHA from its record of 8,940 registered horse establishments. In order to ensure a uniform distribution of sample respondents by size, the OHHA membership list was first stratified by level of purse earnings. A 5% sample was then selected on the basis of selecting every 20th participant, beginning with the 10th person on the list (i.e. the midpoint of the first 20) and then selecting the 30th, 50th, 70th etc. person on the list. Questionnaires were then mailed out to the 447 participants identified for the survey. Due to a low initial response, follow-up phone calls and a second survey mail out were also conducted. The final response level for the survey was 93 out of 447, or 20.8%. The distribution of respondents by size was very uniform throughout the sample, as indicated in Figure 2. As a consequence, we feel confident that we have captured a reasonably accurate distribution of respondents by size of operation and purse earnings.

Figure 2. Distribution by Respondent



4.0 Interview Results

The results of the 7 in-depth interviews are summarized in the following sections. The interviewees consisted of 2 large training stables and 5 medium-to-large breeding farms. The interviewees consistently indicated that the introduction of the slots revenue has had a very beneficial impact on both the overall industry and their individual businesses.

4.1 Industry Impact

Several knowledgeable interviewees indicated that prior to the introduction of the slots revenue, both the race tracks and the horsemen were experiencing substantial financial difficulty. The consensus of opinion prior to the introduction of the slots revenue was that the racing simulcast system would be implemented, concentrating on the industry in Toronto and eliminating much of the industry in the rest of the province. Several interviewees indicated that the large Toronto area tracks like Woodbine and Mohawk, plus possibly Flamboro, likely would have survived, but that the smaller "B" tracks likely would have failed completely. One respondent, however, further indicated that even Woodbine was in serious trouble. The top training stables likely could have survived by focusing on the Toronto area tracks, but many of the medium-sized and smaller stables would have failed. Without the slots revenue the interviewees estimated that the size of the industry would have been only 35-65% of its present size, or even shrunk to 25% if Woodbine had become non-viable.

The slots revenue is reported to have created many new opportunities for the horse racing industry in Ontario. The slots revenue not only improved the revenue position for the large tracks, but enabled the "B" tracks spread throughout Ontario in smaller communities to make money, stay open, and provide racing opportunities for many of the smaller horse operations. The slots revenue was reported to have made the Ontario Sires Stakes Program the best in North America, with significant benefits going to the professional breeders and top-end horse owners. The majority of the slots purse revenue, however, has been allocated to overnight racing, which provides the small operator and lower-end horse owners with racing

opportunities. Purses at the smaller "B" tracks have more than doubled, with more racing events and larger fields than before the slots program.

The slots revenue was also reported to have had a significant impact on horse values and operation. With the introduction of slots revenue, horsemen in Ontario began purchasing and breeding better quality animals, thereby substantially upgrading their horse quality. Prices of yearlings and other horses were reported to have improved substantially. One respondent reported that the biggest impact was among the middle level quality horses, which have increased in value by an estimated 40% compared to 15% for top-end horses. More top stallions are also being located and bred in Ontario, as compared to before the slots revenue when the top horses went to the U.S. It was reported by one respondent, however, that there also has been an increase in U.S. stallions and mares in Ontario, increasing the competition with Ontario breeders. Because of the large increases in horses now being raised in Ontario, it was reported that some bottom-end horses were even selling for less than before the slots. This indicates that with the overall improvement in quality in the industry, bottom-end horse operators not making the necessary improvements may be losing out (as has happened elsewhere in the agricultural sector).

Finally, the growth in the horse industry has generated well-managed farms, with a pasture and forage based agriculture that is more environmentally friendly than many other farms. Horse operations also typically have the least amount of nutrient management problems of all major types of livestock operations.

4.2 Impact on Individual Operations

The interviewees typically indicated that the introduction of the slots revenue has had a significant impact on their individual operations. All reported increases in horses owned and raised, ranging from increases from 3 mares to 20, 7 race horses to 40, training of 40 horses to 90, training of 60 horses to 100, and from owning 60 mares and 4 stallions to 70 mares and 8 stallions. Interviewees also reported hiring more workers, ranging to adding 2-3 workers to their

operation previously run only by family members to increasing employees from 7 to10, 18 to 35, and 25 to 45. Some interviewees reported substantial new investments of $2 million more in horses and $200,000 in facilities, increasing training stalls from 55 to 100, and doubling the size of their stallion barn. In the absence of the slots revenue one interviewee would have cut back to his pre-slots size, another would possibly have moved to the U.S., another would have shifted to a part-time operation, and several would have gone out of business.

5.0 Mail Survey Results

The results of the standardbred producer mail survey are presented in Tables 5 and 6, and Appendix B Tables. Table 5 presents the findings for the entire sample combined to provide an overview of the industry. Tables B.1-B.9 reported in Appendix B then stratify the sample into thirds by size of purse earnings (Appendix B, Tables B.1-B.3), horse numbers (Appendix B, Tables B.4-B.6), and horse value (Appendix B, Tables B.7-B.9) to show the distribution of impacts by different size measurements. Table 6 summarizes the percentage distribution of various economic impacts by the top, middle, and bottom one-third of the operations stratified according to the three measures of size.

5.1 Type of Activity

Table 5 first summarizes the types of activities at each responding location, classified as owner, breeder, trainer, driver, and groom. Of the 93 respondents returning questionnaires, 85 had been in business since 1998. The 8 new operations represent a 9% increase in horse operations, which is quite similar to the increase in the actual number of registered establishments reported by the OHHA between 1998 and 2002. Overall, the distribution by activity was quite similar for 1998 and 2002, with owners, breeders and trainers representing the top activities.

Table 5: Characteristics of Ontario Standardbred Horse Operations, Entire Sample, 1998 and 2002

	Grand Total		Number Responding		Average (Per Respondent)	
	1998	2002	1998	2002	1998	2002
1. Type of Activity						
Owner	84	93	85	93	0.99	1.00
Breeder	48	50	85	93	0.56	0.54
Trainer	50	51	85	93	0.59	0.55
Driver	21	16	85	93	0.25	0.17
Groom	16	16	85	93	0.19	0.17
2. Horses						
Brood Mares						
Number	128	214	76	83	1.68	2.58
Aggregate Value	1,008,900	3,601,915	76	87	13,275	41,401
Stallions						
Number	10	25	76	83	0.13	0.31
Aggregate Value	250,000	9,544,500	76	87	3,289	109,707
Yearlings						
Number	113	160	76	83	1.49	1.93
Aggregate Value	1,139,300	3,389,945	76	87	14,991	38,965
Horses for Racing						
Number	327	468	76	83	4.30	5.64
Aggregate Value	5,587,160	11,390,440	76	87	73,515	130,925
Total Number	578	867	76	83	7.6	10.4
Total Aggregate Value	7,985,360	27,926,800	76	87	105,071	320,998
Average Value/Horse						
Brood Mares	7,882	16,831				
Stallions	25,000	376,806				
Yearlings	10,082	21,187				
Horses for Racing	17,077	24,339				
Pooled Average	13,827	32,210				
3. Employment						
Owners/Operators	145	186	80	90	1.81	2.07
Full-time Trainers						
Licensed	85	108	80	90	1.06	1.20
Not Licensed	21	25	80	90	0.26	0.28
Part-time Trainers						
Licensed	22	35	80	90	0.28	0.39
Not Licensed	4	12	80	90	0.05	0.13
Grooms: Yearly Earnings			31	31	16,336	22,732
Full-time Grooms						
Licensed	74	123	80	90	0.93	1.36
Not Licensed	7	6	80	90	0.09	0.07
Part-time Grooms						
Licensed	37	64	80	90	0.46	0.71
Not Licensed	2	4	80	90	0.03	0.04
Other Full-time Employees						
Licensed	6	15	80	90	0.08	0.17
Not Licensed	6	10	80	90	0.08	0.11
Other Part-time Employees						
Licensed	11	14	80	90	0.14	0.16
Not Licensed	4	25	80	90	0.05	0.28
Total Number	424	627	80	90	5.3	7.0
4. Land, Facilities & Equipment						
Aggregate Value	14,726,734	30,116,525	68	74	216,570	406,980

Table 5 continued

	1998		2002		Number Responding		Average Per Respondent	
	Value	% of Total	Value	% of Total	1998	2002	1998	2002
5. Racing Related Revenue								
Purses	4,597,872	61	10,283,842	55	78	89	58,947	115,549
Horse Sales	1,466,869	20	4,967,518	27	78	89	18,806	55,815
Stud Fees	120,927	2	106,420	1	78	89	1,550	1,196
Other	1,242,254	17	2,840,711	15	78	89	15,926	31,918
Aggregate Value	7,427,922		18,198,491		78	89	95,230	204,477
6. Horse Purchases and Operating Expenses								
Horse Purchases	1,697,779	22	6,727,006	36	76	86	22,339	78,221
Employee Compensation	1,345,985	17	2,988,452	16	76	86	17,710	34,749
Staking and Starting Fees	431,295	5	801,322	4	76	86	5,675	9,318
Stud Fees	329,290	4	906,692	5	76	86	4,333	10,543
Training and Boarding	1,082,730	14	2,460,046	13	76	86	14,246	28,605
Feed, Hay, Supplements & Bedding	671,706	9	1,279,304	7	76	86	8,838	14,876
Veterinary Fees and Medical Supplies	799,333	10	1,303,368	7	76	86	10,518	15,155
Farrier Service	179,020	2	299,477	2	76	86	2,356	3,482
Grooming, Horse Supplies, and Track	247,605	3	387,354	2	76	86	3,258	4,504
Carts, Other Racing Equip.	92,679	1	187,520	1	76	86	1,219	2,180
Travel and Transportation	375,975	5	477,162	3	76	86	4,947	5,548
Insurance, Utilities, Taxes	408,744	5	457,722	2	76	86	5,378	5,322
and Other	199,297	3	382,315	2	76	86	2,622	4,446
Aggregate Total	7,861,438		18,657,740		76	86	103,440	216,950
Revenue – Purchases	-433,516		-459,249				-5,704	-5,340
7. New Investment								
In New Barns, Stables, Other Structures	391,100	23	3,900,667	29	70	81	5,587	48,156
In Land	490,000	29	3,088,966	23	70	81	7,000	38,135
In New Vehicles & Trailers	794,116	46	1,852,216	14	70	81	11,345	22,867
Other	30,600	2	4,069,847	31	70	81	437	50,245
Total Investment	1,705,816		12,911,696		70	81	24,369	159,393

	Number Responding		Average Percent	
	1998	2002	1998	2002
8. % of Expenditures in Rural Communities	72	79	73	80
9. Economic Size and Value Without Slots (as a % of 1998 Size and Value)				
Size		74		43.2
Value		68		36.6
10. Size of Ontario Harness Industry Without Slots (as a % of the 1998 Size)		77		53.2
11. Future Plans With Slots (as a % of 2002 Size and Value)				
Size		73		89.7
Value		68		101.4
12. Future Plans Without Slot Revenue (as a % of 2002 Size and Value)				
Size		74		28.3
Value		72		26.6

5.2 Horse Numbers and Value

The survey results show a large increase in both the number and value of horses between 1998 and 2002. The number of brood mares increased from 128 to 214 or from 1.68 to 2.58 per respondent, an increase of 54%. The value of brood mares, however, increased at a much higher rate, growing from $1,008,900 to $3,601,915 in aggregate or from an average per respondent of $13,275 to $41,401 (a 212% increase). Stallions reported in the sample increased from 10 to 25, with a huge increase in aggregate value from $250,000 to $9,544,500. Yearlings increased in numbers from 113 to 160 and aggregate value from $1,139,300 to $3,389,945, while horses for racing increased from 327 to 468 and an aggregate value of $5,587,160 to $11,390,440. Overall, reported horse numbers increased by 50% from 578 to 867 and aggregate value increased by 250% from $7,995,360 to $27,926,800. The average increase in value per horse was 114% for mares, 1407% for stallions, 109% for yearlings, and 43% for horses for racing.

5.3 Employment

The slots revenue also has had a large impact on employment. Overall the respondents reported an increase of 48% in workers, including both owners and employees. The biggest employment increases occurred for full and part-time licensed grooms (increasing by 66% and 73% respectively) and full and part-time licensed trainers (27% and 59% increase, respectively).

5.4 Investment Values

Reported investment values of land, facilities and equipment also increased from $14.7 million to $30.1 million, an increase of 105%. On a per respondent basis, land and facility investment values increased from $216,570 in 1998 to $406,980 in 2002.

5.5 Racing-Related Revenue

The survey responses indicate that the slots revenue has had a large impact on racing-related revenue. Purse revenue for the respondents increased from $4.6 million to $10.3 million, an increase in aggregate of 123%. The value of sales of horses also increased

substantially, from $1.47 million to nearly $5 million, for an increase of 239%, as horsemen upgraded the quality of their horses and experienced stronger markets. Stud fees reported in the survey decreased slightly, but information from the personal interviews indicates growth in stud fees for the industry. Other racing-related revenue reported in the survey more than doubled from $1.24 million to $2.84 million. Overall, the aggregate value of racing-related revenue increased from $7.43 million to $18.2 million, an increase of 145%.

5.6 Horse Purchases and Operating Expenses

The horse purchases and operating expenses reported in Table 5 indicate that horse operators have transformed essentially all of the increased racing-related revenue into expanded business activity and operating expenses. From 1998 to 2002, the respondents increased their annual horse purchases and operating expenses from $7.86 million to $18.66 million (an increase of 137%) with the largest amount of expenditures going into horse purchases, employee compensation, training and boarding (including feed for boarded horses), vet supplies, and feed and hay for horses under the care of the operator. Horse purchases increased from $1.7 million to $6.7 million, and now account for 36% of the combined total of horse and operating expenditures. Employee compensation increased by 122% from $1.35 million to nearly $3.0 million.

When comparing horse purchases and operating expenses to racing-related revenue, the numbers indicate a slight aggregate negative balance, decreasing slightly from -$433,576 in 1998 to -$459,249 in 2002. These negative numbers are consistent with the data reported in the Econometric Research Ltd. Study (2003), which noted that owners often spend large sums of money to own horses for racing, and that the horses often do not net back the costs to the owners immediately in direct purse or sales revenue. It is important to point out that these numbers do not represent negative **incomes**, however, as horse purchases for breeding typically represent additions to inventory, rather than direct operating expenses. Net income calculations should include adjustments for changes in inventory, as well as depreciation

charges. Due to the sensitivity and sometimes difficulty in reporting consistent income calculations across different farms (agricultural operations may report income on either an accrual or cash method of accounting), income numbers were not requested in the survey. Preliminary assessment of the responses, however, indicates that the horse industry may have been considerably more prosperous in recent years than the overall agricultural industry, as indicated in Table 1. This table indicates that Ontario farmers in aggregate have been losing money in the marketplace since 1999 (Column 4), and have earned positive aggregate net income only because of record levels of government assistance.

5.7 New Investment in Land, Facilities, and Equipment

Due to the improved outlook for the standardbred horse industry, horse operators are now making substantial new investments in their business facilities, land, and equipment. Annual investments for these items by the sample respondents increased from $1.71 million in 1998 to $12.9 million in 2002, a 657% increase. The biggest increases have been in the other category (primarily horses) followed by buildings and land. In 1998, the largest category of investment was vehicles, whereas that category was the smallest share in 2002. This indicates that the presence of the slots revenue has provided substantial incentives for horse operators to undertake long-term improvements and expansions in their businesses.

5.8 Share of Expenditures spent in Rural Areas and Small Communities (under 50,000 population)

The producer survey indicates that the slots revenue has had a very beneficial effect on rural and small communities where most of the horse operator's money is spent. Respondents reported spending 73% of their expenditures in rural areas and small communities in 1998, increasing to 80% in 2002.

5.9 Economic Size Without the Slots Revenue

Several additional questions were asked the respondents to measure the expected size and value of their businesses now and in the future without the slots revenue, as well as the

expected overall size of the industry. The operators responding to this question indicated that without slots revenue their businesses in 2002 would have been only 43.2% the size and 36.6% the value of their business in 1998 (at the start of the slots revenue), and that the overall industry would have been only 53.2% as large. The respondents also indicated that with continued slots revenue, their businesses in 5 years would likely be 89.7% the size and 101.4% the value of their 2002 business, compared to only 28.3% the size and 26.3% the value if the slots revenue were terminated today. Clearly, the presence of the slots revenue has had a substantial impact on the standardbred horse industry and is essential for its continued viability.

6.0 Distribution of Survey Impacts

The distribution of survey impacts are summarized in Appendix B, Tables B.1-B.9 for the top 1/3, middle 1/3, and bottom 1/3 of operations stratified according to purse earnings, number of horses, and aggregate value of horses. The differences by percentage distribution are then summarized in Table 6. These tables show that the largest one third of farms by all three measurements both a) generate most of the activity and benefits for the economy and b) receive most of the benefits from the slots revenue. This type of distribution of impacts and benefits is not unique to the horse industry, however, and is very characteristic of the entire agricultural sector where the top 33% of producers generated 88% of all gross sales in 2001. Table 6 indicates that the level of concentration among standardbred horse operations is somewhat less than in the overall agricultural sector, however, as the top 1/3 of producers have 54.0 to 67.0% of the value of investment, earn 69.1 to 81.6% of the purse earnings, and generate 75.0 to 76.7% of the operating expenditures.

Appendix B, Tables B.1-B.9 and Table 6 indicate that 89.2 to 91.3% of the aggregate value of horses is concentrated in the top 1/3 of operations stratified by either horse numbers or aggregate value of horses, compared to only 56.1% of the aggregate value of horses concentrated in the top 1/3 of the operations based on purse earnings. This latter finding

Table 6: Percentage Distribution of Impacts by Size Based on Purse Earnings, Number of Horses, and Aggregate Horse Value, 2002

	% Distribution of Operations By		
	Purses	**Horse Numbers**	**Horse Value**
Top 1/3			
Aggregate Value of Horses	56.1	89.2	91.3
Aggregate Value of Investment in Land, Facilities and Equipment	54.0	67.0	61.8
Racing Related Income			
Purse Earnings	81.6	69.1	74.0
Total	76.0	74.3	77.1
Operating Expenses			
Employee Compensation	70.4	71.1	70.1
Horse Purchases	87.2	80.5	83.1
Total	75.0	75.9	76.7
New Investment	74.3	76.4	73.7
Middle 1/3			
Aggregate Value of Horses	39.3	6.7	6.7
Aggregate Value of Investment in Land, Facilities and Equipment	23.6	24.3	25.4
Racing Related Income			
Purse Earnings	14.9	15.3	20.0
Total	18.7	14.8	18.2
Operating Expenses			
Employee Compensation	22.7	19.2	25.9
Horse Purchases	9.6	12.4	13.2
Total	19.0	16.4	16.8
New Investment	20.0	19.6	18.6
Bottom 1/3			
Aggregate Value of Horses	4.6	4.1	2.0
Aggregate Value of Investment in Land, Facilities and Equipment	22.4	8.7	12.7
Racing Related Income			
Purse Earnings	3.5	15.6	6.0
Total	5.3	10.8	4.7
Operating Expenses			
Employee Compensation	6.9	9.7	4.0
Horse Purchases	3.1	7.1	3.8
Total	6.0	7.7	6.5
New Investment	5.7	4.0	7.7

indicates that purse earnings are not distributed proportionately to either the number of horses owned or value of horses, and that smaller and lower-end horse owners have a better than proportional chance for purse earnings than their share of horse numbers or horse value, even though the bottom 1/3 of operations still typically have low purse and low total racing-related earnings. Table 6 indicates that the lower 1/3 of operations by horse numbers owned only 4.1% of the aggregate value of horses, but earned 15.6% of purse earnings and 10.8% of all racing related income. The lower 1/3 of operations by aggregate value of horses held only 2% of the value of horses, but earned 6.0% of purse earnings and 4.7% of all racing related income.

7.0 Aggregate Direct Impact of the Slots Revenue on the Ontario Harness Horse Industry

The measurement of the overall direct impact on the Ontario harness horse industry involves 3 steps. These are:

1. The sample results must be extrapolated to the entire standardbred horse industry by adjusting by the percentage representation of the population by the survey results.
2. The reported 2002 size and value of the industry must be adjusted to reflect the size and value that the industry would have been had slots revenue not been in place, and
3. The 2002 overall size and value of the industry without slots must be subtracted from the overall size and value of the industry with the slots revenue to determine the direct impact of the industry for 2002.

7.1 Procedure for Estimating the Overall Direct Industry Impact

Since most of the impacts are directly related to the number of horses, the adjustment from the survey results to the full impact of the industry was made on the basis of horse numbers reported in the survey compared to total number of horses estimated by the OHHA for the overall Ontario standardbred industry. Following detailed assessments of Standardbred Canada records, the standardbred horse numbers for Ontario were estimated as 18,111 for

1998 and 23,541 for 2002, as summarized in Table 7. For 1998, the total population of 18,111 was 31.33 times as large as the 578 horses reported in the sample, so the survey results for 1998 were multiplied by 31.33 to represent the entire industry. For 2002, the total population of 23,541 was 27.15 times the 867 horses reported in the survey, so the 2002 survey results were multiplied by 27.15 to represent the entire industry. The one exception to this procedure was for purse earnings, where the actual purse earnings were known and did not need to be estimated by the survey.

Table 7: Estimated Standardbred Horse Numbers for Ontario, 1998 and 2002

	1998	2002
Stallions	174	175
Brood Mares	4,013	5,193
Horses Started in Races	7,370	10,300
Horses Not Started	6,554	7,873
Total Population	18,111	23,541

Source: Estiimates by OHHA from Standardbred Canada data.

The next step is to adjust the 2002 revenue to the level that would have existed had slots revenue not been in place. This estimate is provided by the respondents in Table 5, but it is reported as a percentage of the size and value of 1998 rather than 2002. As a consequence, to measure what the industry would likely have been like in the absence of slots revenue, the 1998 industry values need to be reduced to the estimated size without slots reported by the respondents for 2002. The estimates of reduced size reported by the respondents were 1) to have scaled their operation down by 2002 to an average of 43.2% of their 1998 size and 36.6% of their 1998 economic value for their individual farms, and 2) that in 2002 the overall industry would be only 53.2% of its 1998 size if slots revenue had not been available. Since estimates are provided for both an individual impact (43.2% of size and 36.6% of value) and an overall industry impact (53.2% of size), two estimates of 2002 impacts will be calculated. The first

measurement, called the individual business adjustment, first adjusts the 1998 size estimates for the industry to 43.2% and the 1998 value estimates (value of horses, capital investment) to 36.6%. The adjusted 1998 size and value estimates for the industry are then subtracted from the overall 2002 industry size and value to determine the difference for 2002 with and without the slots revenue. These calculations are presented in Table 8. The second estimate, called the aggregate industry adjustment, is calculated by adjusting both the 1998 industry size and value estimates to 53.2%, and subtracting these reduced values from the actual overall 2002 industry size and value. These calculations are presented in Table 9.

7.2 Total Industry Size in 1998 and 2002

The first two columns of Tables 8 and 9 represent the sample responses, while the 3rd and 4th columns represent the total size of the industry in 1998 and 2002. In 1998 the industry consisted of 18,111 horses with an estimated aggregate value of $250.2 million, and directly supported 13,284 workers (owners and employees), $461.4 million invested in land, facilities and equipment, $234.3 million in racing related income, $247.0 million in horse purchases and operating expenditures, and $53.4 million in new capital investment annually. By 2002, the industry had grown to 23,541 horses with an aggregate value of $758.2 million, and directly supported 17,023 workers, $817.7 million invested in land, facilities and equipment, $503.7 million in racing related income, $513.6 million in operating and horse expenditures, and $350.5 million in new capital equipment.

7.3 Direct Impact of the Slots Revenue

The impacts of the slots revenue under the two estimates for the size of the industry in 2002 had there been no slots revenue are presented in the last column of Tables 8 and 9. The key impacts are also summarized below in Table 10.

Table 10 shows a huge annual direct impact from the slots revenue. Based on the impact for 2002 alone, the direct impact of the slots revenue is estimated to be an increase in

Table 8: 1998 and 2002 Ontario Industry Size and Value, and 2002 Impact of Slots Revenue Under the Individual Business Adjustment

	1998 Sample	2002 Sample	1998 Industry Total (1998 sample x 31.33)	2002 Industry Total (2002 sample x 27.15)	2002 Size Without Slots (1998 total x 0.432)	2002 Value Without Slots (1998 total x 0.366)	2002 Impact of Slots (2002-2002 without)
1. Type of Activity							
Owner	84	93	2,632	2,525	1,137		1,388
Breeder	48	50	1,504	1,358	650		708
Trainer	50	51	1,567	1,385	677		708
Driver	21	16	660	434	285		149
Groom	16	16	501	434	216		218
2. Horses							
Brood Mares							
Number	128	214					
Aggregate Value	1,008,900	3,601,915					
Stallions							
Number	10	25					
Aggregate Value	250,000	9,544,500					
Yearlings							
Number	113	160					
Aggregate Value	1,139,300	3,389,945					
Horses for Racing							
Number	327	468					
Aggregate Value	5,587,160	11,390,440					
Total Number	578	867	18,111	23,541	7,824		15,717
Total Aggregate Value	7,985,360	27,926,800	250,181,329	758,212,620		91,566,366	666,646,254
Average Value/Horse							
Brood Mares	7,882	16,831					
Stallions	25,000	376,806					
Yearlings	10,082	21,187					
Horses for Racing	17,077	24,339					
Pooled Average	13,827	32,210					

Table 8 continued

	1998 Sample	2002 Sample	1998 Industry Total (1998 sample x 31.33)	2002 Industry Total (2002 sample x 27.15)	2002 Size Without Slots (1998 total x 0.432)	2002 Value Without Slots (1998 total x 0.366)	2002 Impact of Slots (2002-2002 without)
3. Employment							
Owners/Operators	145	186	4,543	5,050	1,963		3,087
Full-time Trainers							
Licensed	85	108	2,663	2,932	1,150		1,782
Not Licensed	21	25	658	679	284		395
Part-time Trainers							
Licensed	22	35	689	950	298		652
Not Licensed	4	12	125	326	54		272
Full-time Grooms							
Licensed	74	123	2,318	3,339	1,001		2,338
Not Licensed	7	6	219	163	95		68
Part-time Grooms							
Licensed	37	64	1,159	1,738	501		1,237
Not Licensed	2	4	63	109	27		82
Other Full-time Employees							
Licensed	6	15	188	407	81		326
Not Licensed	6	10	188	272	81		191
Other Part-time Employees							
Licensed	11	14	345	380	149		231
Not Licensed	4	25	125	679	54		625
Total Number	424	627	13,284	17,023	5,739		11,284
4. Land, Facilities & Equipment							
Aggregate Value	14,726,734	30,116,525	461,388,576	817,663,654		168,868,219	648,794,435
5. Racing Related Revenue							
Purses	4,597,872	10,283,842	81,193,000*	189,093,000*		35,075,376	154,017,624
Horse Sales	1,466,869	4,967,518	45,957,006	134,868,114		16,820,264	118,047,850
Stud Fees	120,927	106,420	3,788,643	2,889,303		1,386,643	1,502,660
Other	1,242,254	2,840,711	38,919,818	77,125,304		14,244,652	62,880,651
Aggregate Value	7,427,922	18,198,491	166,073,607	403,975,721		67,526,936	336,448,785

* actual amount

Table 8 continued

	1998 Sample	2002 Sample	1998 Industry Total (1998 sample x 31.33)	2002 Industry Total (2002 sample x 27.15)	2002 Size Without Slots (1998 total x 0.432)	2002 Value Without Slots (1998 total x 0.366)	2002 Impact of Slots (2002-2002 without)
6. Horse Purchases and Operating Expenses							
Horse Purchases	1,697,779	6,727,006	53,191,416	182,638,213		19,468,058	163,170,155
Employee Compensation	1,345,985	2,988,452	42,169,710	81,136,472	18,217,315		62,919,157
Staking and Starting Fees	431,295	801,322	13,512,472	21,755,892	5,837,388		15,918,504
Stud Fees	329,290	906,692	10,316,656	24,818,688	4,456,795		20,159,893
Training and Boarding	1,082,730	2,460,046	33,921,931	66,790,249	14,654,274		52,135,975
Feed, Hay, Supplements	671,706	1,279,304	21,044,549	34,733,104	9,091,245		25,641,859
Veterinary Fees	799,333	1,303,368	25,043,103	35,386,441	10,818,620		24,567,821
Farrier Service	179,020	299,477	5,608,697	8,130,801	2,422,957		5,707,844
Grooming, Horse	247,605	387,354	7,757,465	10,516,661	3,351,225		7,165,436
Carts and other Racing	92,679	187,520	2,903,633	5,091,168	1,254,369		3,836,799
Travel	375,975	477,162	11,779,297	12,954,948	5,088,656		7,866,292
Insurance, Utilities	408,744	457,722	12,805,950	12,427,152	5,532,170		6,894,982
Other	199,297	382,315	6,243,975	10,379,852	2,697,397		7,682,455
Aggregate Total	7,861,438	18,657,740	246,298,854	506,557,641	102,890,469		403,667,172
7. New Investment							
In New Barns, Stables, Other Structures	391,100	3,900,667	12,253,163	105,903,109	5,293,366		100,609,743
In Land	490,000	3,088,066	15,351,700	83,840,992	6,631,934		77,209,058
In New Vehicles & Trailers	794,116	1,852,216	24,879,654	50,287,664	10,748,011		39,539,653
Other	30,600	4,069,847	958,698	110,496,346	414,158		110,082,188
Total Investment	1,705,816	12,910,796	53,443,215	350,528,111	23,087,469		327,440,642

Table 9: 1998 and 2002 Ontario Industry Size and Value, and 2002 Impact of Slot Revenue Under the Aggregate Industry Adjustment

	1998 Sample	2002 Sample	1998 Industry Total (1998 sample x 31.33)	2002 Industry Total (2002 sample x 27.15)	2002 Size and Value Without Slots (1998 total x 0.532)	2002 Impact of Slots (2002-2002 without)
1. Type of Activity						
Owner	84	93	2,632	2,525	1,400	1,125
Breeder	48	50	1,504	1,358	800	558
Trainer	50	51	1,567	1,385	833	552
Driver	21	16	660	434	350	84
Groom	16	16	501	434	267	167
2. Horses						
Brood Mares						
Number	128	214				
Aggregate Value	1,008,900	3,601,915				
Stallions						
Number	10	25				
Aggregate Value	250,000	9,544,500				
Yearlings						
Number	113	160				
Aggregate Value	1,139,300	3,389,945				
Horses for Racing						
Number	327	468				
Aggregate Value	5,587,160	11,390,440				
Total Number	578	867	18,111	23,541	9,635	13,906
Total Aggregate Value	7,985,360	27,926,800	250,181,329	758,212,620	133,096,467	625,116,153
Average Value/Horse						
Brood Mares	7,882	16,831				
Stallions	25,000	376,806				
Yearlings	10,082	21,187				
Horses for Racing	17,077	24,339				
Pooled Average	13,827	32,210				

Table 9 continued

	1998 Sample	2002 Sample	1998 Industry Total (1998 sample x 31.33)	2002 Industry Total (2002 sample x 27.15)	2002 Size and Value Without Slots (1998 total x 0.532)	2002 Impact of Slots (2002-2002 without)
3. Employment						
Owners/Operators	145	186	4,543	5,050	2,417	2,633
Full-time Trainers						
Licensed	85	108	2,663	2,932	1,417	1,515
Not Licensed	21	25	658	679	350	329
Part-time Trainers						
Licensed	22	35	689	950	367	583
Not Licensed	4	12	125	326	67	259
Full-time Grooms						
Licensed	74	123	2,318	3,339	1,233	2,106
Not Licensed	7	6	219	163	117	46
Part-time Grooms						
Licensed	37	64	1,159	1,738	617	1,121
Not Licensed	2	4	63	109	34	75
Other Full-time Employees						
Licensed	6	15	188	407	100	307
Not Licensed	6	10	188	272	100	172
Other Part-time Employees						
Licensed	11	14	345	380	184	196
Not Licensed	4	25	125	679	67	612
Total Number	424	627	13,284	17,023	7,067	9,956
4. Land, Facilities & Equipment						
Aggregate Value	14,726,734	30,116,525	461,388,576	817,663,654	245,458,723	572,204,931
5. Racing Related Revenue						
Purses	4,597,872	10,283,842	81,193,000*	189,093,000*	43,194,676	145,898,324
Horse Sales	1,466,869	4,967,518	45,957,006	134,868,114	24,449,124	110,418,990
Stud Fees	120,927	106,420	3,788,643	2,889,303	2,015,558	873,745
Other	1,242,254	2,840,711	38,919,818	77,125,304	20,705,343	56,419,961
Aggregate Value	7,427,922	18,198,491	166,073,607	403,975,721	90,364,701	313,611,020

* actual amount

Table 9 continued

	1998 Sample	2002 Sample	1998 Industry Total (1998 sample x 31.33)	2002 Industry Total (2002 sample x 27.15)	2002 Size and Value Without Slots (1998 total x 0.532)	2002 Impact of Slots (2002-2002 without)
6. Horse Purchases and Operating Expenses						
Horse Purchases	1,697,779	6,727,006	53,191,416	182,638,213	28,297,833	154,340,380
Employee Compensation	1,345,985	2,988,452	42,169,710	81,136,472	22,434,286	58,702,186
Staking and Starting Fees	431,295	801,322	13,512,472	21,755,892	7,188,635	14,567,257
Stud Fees	329,290	906,692	10,316,656	24,818,688	5,488,461	19,128,227
Training and Boarding	1,082,730	2,460,046	33,921,931	66,790,249	18,046,467	48,743,782
Feed, Hay, Supplements	671,706	1,279,304	21,044,549	34,733,104	11,195,700	23,537,404
Veterinary Fees	799,333	1,303,368	25,043,103	35,386,441	13,322,931	22,063,510
Farrier Service	179,020	299,477	5,608,697	8,130,801	2,983,827	5,146,974
Grooming, Horse	247,605	387,354	7,757,465	10,516,661	4,126,971	6,389,690
Carts and other Racing	92,679	187,520	2,903,633	5,091,168	1,544,733	3,546,435
Travel	375,975	477,162	11,779,297	12,954,948	6,266,586	6,688,362
Insurance, Utilities	408,744	457,722	12,805,950	12,427,152	6,812,765	5,614,387
Other	199,297	382,315	6,243,975	10,379,852	3,321,795	7,058,057
Aggregate Total	7,861,438	18,657,740	246,298,854	506,557,641	131,030,990	375,526,651
7. New Investment						
In New Barns, Stables, Other Structures	391,100	3,900,667	12,253,163	105,903,109	6,518,683	99,384,426
In Land	490,000	3,088,066	15,351,700	83,840,992	8,167,104	75,673,888
In New Vehicles & Trailers	794,116	1,852,216	24,879,654	50,287,664	13,235,976	37,051,688
Other	30,600	4,069,847	958,698	110,496,346	510,027	109,986,319
Total Investment	1,705,816	12,910,796	53,443,215	350,528,111	28,431,790	322,096,321

the size of the industry by 13,906 to 15,717 horses and an increase in aggregate value of horses of $625.1 to $666.6 million, plus an increase in industry workers of 9,956 to 11,284. The slots revenue also contributed directly to increases of $572.2 to $648.8 million in investments in real estate, $313.6 to $336.4 million in racing related revenue, $375.5 to $403.7 million in operating and horse expenditures, and $322.1 to $327.4 million in new capital investment.

Table 10: Direct Impact of the Slots Revenue for 2002

Impact	Net Increase	
	Individual Business Adjustment	Aggregate Industry Adjustment
Horses		
Number	15,717	13,906
Aggregate Value	$666.6 million	$625.1 million
Employment		
Owners	3,087	2,633
Employees	8,197	7,323
Total	11,284	9,956
Employee Compensation	$62.9 million	$58.7 million
Value of Land, Buildings and Facilities	$648.8 million	$572.2 million
Racing Related Revenue	$336.4 million	$313.6 million
Horse and Operating Expenses	$403.7 million	$375.5 million
New Capital Investment	$327.4 million	$322.1 million

8.0 Total Direct Plus Indirect and Induced Impacts

In addition to the direct impact of the slots revenue, there are additional indirect and induced effects throughout the economy, as explained in the 2002 Econometric Research Limited Study. These additional impacts occur as establishments doing business with horse owners, their employees, and trainers, etc., in turn utilize the sales and profits from the horse industry to undertake business activity with additional businesses. These indirect and induced business activities are estimated here utilizing key impact indicators derived from the

Econometric Research Study and summarized in Table 4 for the Racing and Breeding Phases of their study.

1. *Gross Output.* The Econometric Research Study calculated gross output multipliers for the racing and breeding phases of the horse racing industry as 2.27 and 2.31 times the initial expenditure. Using the average of 2.27 for the two multipliers, the impacts of the slots revenue on business activity in Ontario in 2002 from the horse purchases and operating expenditures would be 2.29 x the reported expenditures. Under the two estimates of net direct impacts, the overall direct, indirect and induced effects for 2002 would be:

Individual Business Adjustment
$403.7 million x 2.29 = $942.5 million

Aggregate Industry Adjustment
$375.5 million x 2.29 = $859.9 million

It should be noted that this overall impact only measures the effects from horse purchases and operating expenses, and does not include the impact from annual expenditures for new investment in vehicles, facilities, etc. As a consequence, it substantially underestimates the overall impact of the harness horse industry or the overall economy.

2. Employment. The Econometric Research Study calculated employment multipliers for the racing and breeding phases of the horse racing industry as 3.07-2.75 x the initial employment. Using the average multiplier of 2.91, the impact of slots revenue on employment would be 2.91 x the net increase in employment. Under the two estimates of direct impacts, the overall impacts for 2002 would be:

Individual Business Adjustment		
Employees only	8,197 x 2.91 =	23,853
Total (including owners)	11,284 x 2.91 =	32,836
Aggregate Industry Adjustment		
Employees only	7,332 x 2.91 =	21,310
Total (including owners)	9,956 x 2.91 =	28,972

3. Hired Labour Income. In the Econometric Research Limited Study, indirect and induced hired labour income is based on the same multiplier as used for employment. Using the 2.91

average multiplier as used for employment, the overall direct, indirect and induced impact of slots revenues on hired labour income for 2002 would be:

Individual Business Adjustment
$62.9 million x 2.91 = $183.0 million

Aggregate Industry Adjustment
$58.7 million x 2.91 = $170.8 million

4. Tax Revenue. The current survey did not collect any information on taxes paid, so precise measurements of tax revenue generated cannot be made. Ballpark estimates of tax revenue generated can be derived from the relationships between initial expenditures and tax revenue reported in the Econometric Research Limited study. In the Econometric Research Limited study, federal taxes were reported as 9.27% and 9.12% of the total (direct, indirect and induced output expenditures) under the racing and breeding phases respectively, while taxes at the provincial and local level were reported as 5.74% and 5.77%, and 2.64% and 2.69% respectively. Using the average taxation rates for the breeding and racing phases, the overall increase in tax revenue in 2002 from the impact of slots revenue on the horse segment of the harness horse industry under the two estimates of direct impacts is estimated as

Individual Business Adjustment

Federal	$403.7 million x 9.195% =	$37.1 million
Provincial	$403.7 million x 5.755% =	$23.2 million
Local	$403.7 million x 2.665% =	$10.8 million
Total		$71.1 million

Aggregate Industry Adjustment

Federal	$375.5 million x 9.195% =	$34.5 million
Provincial	$375.5 million x 5.755% =	$21.6 million
Local	$375.5 million x 2.665% =	$10.0 million
Total		$66.1 million

9.0 Summary and Conclusions

The introduction of slots revenue in October 1998 has had a pronounced impact in revitalizing the horse racing industry in Ontario. The impact on the harness horse component of the industry has been particularly beneficial, turning around a declining industry into a growing

one. With the slots revenue, harness horse operators expanded their horse numbers, horse values, and horse purchases and operating expenditures by an estimated 30%, 203%, and 106% between 1998 and 2002. In contrast, the survey respondents indicated that in the absence of the slots revenue they would have reduced the size of their business over the same period by an average to 43.2% of the 1998 size and 36.6% of the 1998 value, and that the industry would have declined to only 53.2% of its size. The respondents also indicated that on average their businesses would decline to 26-28% of the present size within 5 years if the slots revenue were terminated today.

The enhanced purse earnings resulting from the slots revenue has helped expand racing-related revenue from around $166.0 million in 1998 to $404.0 million in 2002, and encouraged horse owners to expand and greatly upgrade the quality of their horses. Overall, the introduction of the slots revenue is estimated to have contributed to the raising, training, and racing of around 13,906 to 15,717 more horses per year by 2002 and $625.1 to $666.6 million in horse values by 2002 than might have existed if the slots revenue had not been provided.

The provision of slots revenue to horse operations also has been an effective catalyst for economic development throughout Ontario, particularly in rural areas and smaller communities where up to 80% of the expenditures have been spent. Overall purchases resulting from the slots revenue are estimated for 2002 at $375.5 to $403.7 million more than without the slots revenue for the direct effect, and $859.9 to $942.5 million more when the total (direct plus indirect and induced) effects throughout the economy are considered. Industry respondents also indicate that they likely directly have created 7,323 to 8,197 more jobs for employees and $58.7 to $62.9 million more in wages for just 2002 than would have existed without the slots revenue. When the total (direct plus indirect and induced) effect is considered, the increase in employee jobs and compensation for 2002 is estimated to be around 21,310 to 23,853 more employee jobs and $170.8 to $183.0 million more in employee compensation.

Finally, the provision of slots revenue to harness horse operations also represents a sound fiscal decision for governments. In addition to generating substantial governmental revenue from the initial tax revenue derived from the slots activity, the share returned to the standardbred horse operations generates additional tax revenue that nearly offsets the share of slots revenue allocated to these horse operations. For 2002 alone, this additional tax revenue is estimated as $66.1 to $71.1 million for federal, provincial, and local governments combined.

Overall, the provision of slots revenue to standardbred horse operations has created many benefits for the horse industry, the overall agricultural sector, and the Ontario economy in general. The horse industry in turn has been one of the few bright spots in the agricultural industry in recent years, as the overall agriculture sector has faced growing competition, low prices, and periodic problems with adverse weather and disease. Continued support through slots revenue for the horse component of the horse racing industry has the potential for maintaining the current viability of this industry for many years into the future.

References

Brinkman, George. Changing Issues Facing Canadian Agriculture, Department of Agricultural Economics and Business, University of Guelph, January, 2004.

Econometric Research Limited. The Economic Impacts of Horse Racing and Breeding in Ontario, 2002. Report submitted to the Ontario Ministry of the Attorney General, March, 2003.

APPENDIX A

PRODUCER SURVEY QUESTIONNAIRE

Questionnaire Number _____

	Fiscal Year 1998	Fiscal Year 2002
Background of Operation		
1. Please check each of the following activities that you participated in 1998 and 2002		
a. horse owner	_____	_____
b. breeder	_____	_____
c. trainer	_____	_____
d. driver	_____	_____
e. groom	_____	_____
2. Please list the number and approximate value of your horses for 1998 and 2002		
a. brood mares		
number	_____	_____
aggregate value	_____	_____
b. stallions		
number	_____	_____
aggregate value	_____	_____
c. yearlings		
number	_____	_____
aggregate value	_____	_____
d. horses for racing		
numbers	_____	_____
aggregate value	_____	_____
3. Please list the number of workers for your business including yourself and family members		
owners/operators	_____	_____
full time trainers		
licensed	_____	_____
not licensed	_____	_____
part time trainers		
licensed	_____	_____
not licensed	_____	_____
full time grooms		
licensed	_____	_____
not licensed	_____	_____
part time grooms		
licensed	_____	_____
not licensed	_____	_____
other full time employees		
licensed	_____	_____
not licensed	_____	_____
other part time employees		
licensed	_____	_____
not licensed	_____	_____

	Fiscal Year 1998	Fiscal Year 2002
4. What was the approximate earnings for a groom at your business in 1998 and 2002, including salary, benefits, purse winnings and other earnings?	_____	_____
5. What was your approximate value of land, facilities, and equipment (including vehicles) in 1998 and 2002?	_____	_____

Revenue

6. Please estimate the total amount of money that you received from the following sources associated with your harness racing activities in 1998 and 2002?

Purses	_____	_____
Horse sales	_____	_____
Stud fees	_____	_____
Other (please list)	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
Total Racing Related Income	_____	_____

Operating Expenses

7. Please estimate the total amount of money paid to businesses or individuals (including workers) for the following operating items during 1998 and 2002

a. employee compensation (salaries, wages and benefits) paid to trainers, grooms, drivers, etc. that you employed	_____	_____
b. horse purchases	_____	_____
c. staking and starting fees	_____	_____
d. stud fees	_____	_____
e. training and boarding	_____	_____
f. feed, hay, supplements & bedding	_____	_____
g. Veterinary fees and medical supplies	_____	_____
h. farrier services	_____	_____
i. grooming, horse supplies, and track equipment	_____	_____
j. carts and other racing equipment	_____	_____
k. travel and transportation	_____	_____
l. Insurance, utilities, taxes and licenses	_____	_____
m. Other		
_____	_____	_____
_____	_____	_____
Total Racing Related Operating Expenses For 1998 and 2002	_____	_____

	Fiscal Year 1998	Fiscal Year 2002
Investment Expenditures		
8. Please estimate the total amount of money spent as investment expenditures for the following items during 1998 and 2002		
a. Investment in new barns, stables, other structures	_____	_____
b. Investment in land	_____	_____
c. Investment in new vehicles and trailers	_____	_____
d. Other investment expense items (please list below)		
_____	_____	_____
_____	_____	_____
_____	_____	_____
Total Racing Related Investment Expenses during 1998 & 2002	_____	_____
9. What % of your expenditures do you estimate were spent in rural and small communities (under 50,000 population)	_____%	_____%

Impact without the Slots Revenue

10. What % of your 1998 size and economic value would your business be today if the slots revenue **had not been introduced**?
Comments:

_____% size
_____% economic value

11. What % of the 1998 size do you think the total harness racing industry in Ontario would be today if slots revenue **had not been introduced** ?
Comments:

_____% size

12. What % of your 2002 size and economic value do you plan for your business over the next 5 years if slots revenue for the industry is continued and purses are maintained at the present level.

_____% of 2002 size

_____ % of 2002 economic value

Additional Comments:

13. What % of your 2002 size and economic value would you plan for your business over the next 5 years if slots revenue for the industry was eliminated and purses fell to around the 1998 level.

_____ % of 2002 size

_____ % of 2002 economic value

Additional Comments:

39

APPENDIX B

CHARACTERISTICS OF ONTARIO STANDARDBRED HORSE OPERATIONS STRATIFIED BY PURSE EARNINGS, NUMBER OF HORSES, AND AGGREGATE VALUE OF HORSES

Table B.1: Characteristics of Ontario Standardbred Horse Operations, Top Third by Purses Earned, 1998 and 2002

	Grand Total		Number Responding		Average (Per Respondent)	
	1998	2002	1998	2002	1998	2002
1. Type of Activity						
Owner	26	29	27	29	0.96	1.00
Breeder	18	19	27	29	0.67	0.66
Trainer	13	14	27	29	0.48	0.48
Driver	5	5	27	29	0.19	0.17
Groom	6	5	27	29	0.22	0.17
2. Horses						
Brood Mares						
Number	50	114	26	28	1.92	4.07
Aggregate Value	619,200	2,920,250	26	29	23,815	100,698
Stallions						
Number	3	14	26	28	0.12	0.51
Aggregate Value	155,000	1,425,000	26	29	5,962	49,138
Yearlings						
Number	55	92	26	28	2.13	3.29
Aggregate Value	733,500	2,721,500	26	29	28,212	93,845
Horses for Racing						
Number	130	245	26	28	5.01	8.75
Aggregate Value	2,643,340	8,541,625	26	29	101,667	294,539
Total Number	239	465	26	28	9.2	16.6
Total Aggregate Value	4,151,040	15,608,375	26	29	159,655	538,220
Average Value/Horse						
Brood Mares	12,384	25,616				
Stallions	51,667	99,442				
Yearlings	13,256	29,582				
Horses for Racing	20,306	34,864				
Pooled Average	17,404	32,386				
3. Employment						
Owners/Operators	64	76	25	28	2.56	2.71
Full-time Trainers						
Licensed	40	62	25	28	1.60	2.21
Not Licensed	9	12	25	28	0.36	0.43
Part-time Trainers						
Licensed	7	15	25	28	0.28	0.54
Not Licensed	2	3	25	28	0.08	0.11
Grooms: Yearly Earnings			12	12	19,333	29,125
Full-time Grooms						
Licensed	37	82	25	28	1.48	2.91
Not Licensed	2	2	25	28	0.08	0.07
Part-time Grooms						
Licensed	10	28	25	28	0.40	1.00
Not Licensed	0	1	25	28	0.00	0.04
Other Full-time Employees						
Licensed	3	10	25	28	0.12	0.36
Not Licensed	5	8	25	28	0.20	0.29
Other Part-time Employees						
Licensed	4	5	25	28	0.16	0.18
Not Licensed	0	9	25	28	0.00	0.32
Total Number	183	313	25	28	7.3	11.2
4. Land, Facilities & Equipment						
Aggregate Value	5,844,950	16,036,000	22	24	265,680	668,167

Table B.1 continued

	1998		2002		Number Responding		Average Per Respondent	
	Value	% of Total	Value	% of Total	1998	2002	1998	2002
5. Racing Related Income								
Purses	3,031,427	71	8,396,098	59	26	29	116,593	289,521
Horse Sales	720,550	17	3,879,622	27	26	29	27,713	133,780
Stud Fees	90,000	2	18,000	0	26	29	3,462	621
Other	405,000	9	1,536,268	11	26	29	15,577	52,975
Aggregate Value	4,246,977		13,829,989		26	29	163,345	476,896
6. Horse Purchases and Operating Expenses								
Horse Purchases	980,514	22	5,832,748	42	24	27	40,855	216,028
Employee Compensation	745,372	17	2,028,518	14	24	27	31,057	75,130
Staking and Starting Fees	325,820	7	696,903	5	24	27	13,576	25,811
Stud Fees	127,014	3	545,912	4	24	27	5,292	20,219
Training and Boarding	672,476	15	1,937,715	14	24	27	28,020	71,767
Feed, Hay, Supplements & Bedding	329,546	7	781,102	6	24	27	13,731	28,930
Veterinary Fees and Medical Supplies	361,496	8	710,766	5	24	27	15,062	26,325
Farrier Service	86,873	2	168,200	1	24	27	3,620	6,230
Grooming, Horse Supplies, and Track	147,082	3	248,220	2	24	27	6,128	9,193
Carts, Other Racing Equip.	53,708	1	118,584	1	24	27	2,238	4,392
Travel and Transportation	167,208	4	234,921	2	24	27	6,967	8,701
Insurance, Utilities, Taxes	281,142	6	235,620	2	24	27	11,714	8,727
and Other	106,025	2	217,349	2	24	27	4,418	8,050
Aggregate Total	4,384,276		13,756,558		24	27	182,678	509,502
Aggregate Balance	-137,299		73,431				-5,721	2,720
7. New Investment								
In New Barns, Stables, Other Structures	139,500	20	2,409,000	25	23	24	6,065	100,375
In Land	125,000	18	2,111,900	22	23	24	5,435	87,996
In New Vehicles & Trailers	425,000	61	1,064,500	11	23	24	18,478	44,354
Other	12,000	2	3,972,700	42	23	24	522	165,529
Total Investment	701,500		9,558,100		23	24	30,500	398,254

	Number Responding		Average Percent	
	1998	2002	1998	2002
8. % of Expenditures in Rural Communities	20	24	71	85
9. Economic Size and Value Without Slots (as a % of 1998 Size and Value)				
Size		24		40.8
Value		23		38.0
10. Size of Ontario Harness Industry Without Slots (as a % of the 1998 Size)		22		54.3
11. Future Plans With Slots (as a % of 2002 Size and Value)				
Size		24		102.7
Value		23		113.3
12. Future Plans Without Slot Revenue (as a % of 2002 Size and Value)				
Size		24		15.2
Value		24		15.4

Table B.2: Characteristics of Ontario Standardbred Horse Operations, Top Third by Number of Horses, 1998 and 2002

	GrandTotal		Number Responding		Average (Per Respondent)	
	1998	2002	1998	2002	1998	2002
1. Type of Activity						
Owner	27	27	27	27	1.00	1.00
Breeder	23	24	27	27	0.85	0.89
Trainer	13	13	27	27	0.48	0.48
Driver	5	5	27	27	0.19	0.19
Groom	5	5	27	27	0.19	0.19
2. Horses						
Brood Mares						
Number	90	174	26	27	3.46	6.44
Aggregate Value	810,900	3,359,915	25	26	32,436	129,228
Stallions						
Number	5	22	26	27	0.19	0.83
Aggregate Value	189,000	9,484,000	25	26	7,560	364,769
Yearlings						
Number	67	125	26	27	2.58	4.63
Aggregate Value	764,300	3,056,945	25	26	30,572	117,575
Horses for Racing						
Number	204	290	26	27	7.85	10.74
Aggregate Value	4,263,660	8,613,475	25	26	170,546	331,288
Total Number	366	611	26	27	14.1	22.6
Total Aggregate Value	6,027,860	24,514,335	25	26	241,114	942,859
Average Value/Horse						
Brood Mares	9,010	19,310				
Stallions	37,800	424,720				
Yearlings	11,407	24,456				
Horses for Racing	20,900	29,702				
Pooled Average	17,128	41,642				
3. Employment						
Owners/Operators	60	68	25	26	2.40	2.62
Full-time Trainers						
Licensed	37	43	25	26	1.48	1.65
Not Licensed	6	7	25	26	0.24	0.27
Part-time Trainers						
Licensed	9	18	25	26	0.36	0.69
Not Licensed	1	2	25	26	0.04	0.08
Grooms: Yearly Earnings			12	12	18,508	25,792
Full-time Grooms						
Licensed	37	71	25	26	1.48	2.73
Not Licensed	2	2	25	26	0.08	0.08
Part-time Grooms						
Licensed	13	17	25	26	0.52	0.65
Not Licensed	2	3	25	26	0.08	0.12
Other Full-time Employees						
Licensed	2	5	25	26	0.08	0.19
Not Licensed	5	9	25	26	0.20	0.35
Other Part-time Employees						
Licensed	3	3	25	26	0.12	0.12
Not Licensed	3	17	25	26	0.12	0.65
Total Number	180	265	25	26	7.2	10.2
4. Land, Facilities & Equipment						
Aggregate Value	8,416,284	17,531,925	22	23	382,558	762,258

Table B.2 continued

	1998		2002		Number Responding		Average Per Respondent	
	Value	% of Total	Value	% of Total	1998	2002	1998	2002
5. Racing Related Income								
Purses	3,182,078	60	6,821,522	52	26	27	122,388	252,649
Horse Sales	1,157,725	22	3,945,700	30	26	27	44,528	146,137
Stud Fees	96,000	2	21,500	0	26	27	3,692	796
Other	835,000	16	1,990,697	15	26	27	32,115	73,730
Aggregate Value	5,184,403		12,779,419		26	27	199,400	473,312
6. Horse Purchases and Operating Expenses								
Horse Purchases	1,189,946	22	5,072,863	38	25	26	47,598	195,110
Employee Compensation	870,382	16	1,911,580	14	25	26	34,815	73,522
Staking and Starting Fees	342,543	6	665,555	5	25	26	13,702	25,598
Stud Fees	245,290	5	782,192	6	25	26	9,812	30,084
Training and Boarding	752,956	14	1,880,904	14	25	26	30,118	72,342
Feed, Hay, Supplements & Bedding	419,197	8	850,995	6	25	26	16,768	32,731
Veterinary Fees and Medical Supplies	568,658	11	822,470	6	25	26	22,746	31,633
Farrier Service	105,157	2	180,311	1	25	26	4,206	6,935
Grooming, Horse Supplies, and Track	164,935	3	228,956	2	25	26	6,597	8,806
Carts, Other Racing Equip.	51,775	1	107,984	1	25	26	2,071	4,153
Travel and Transportation	207,140	4	245,586	2	25	26	8,286	9,446
Insurance, Utilities, Taxes	336,948	6	295,861	2	25	26	13,478	11,379
and Other	77,173	1	100,025	1	25	26	3,087	3,847
Aggregate Total	5,332,100		13,145,282		25	26	213,284	505,588
Aggregate Balance	-147,697		-365,863				-5,908	-14,022
7. New Investment								
In New Barns, Stables, Other Structures	207,000	35	2,345,667	25	21	22	9,857	106,621
In Land	0	0	2,214,000	24	21	22	0	100,636
In New Vehicles & Trailers	354,116	61	809,116	9	21	22	16,863	36,778
Other	24,000	4	4,004,402	43	21	22	1,143	182,018
Total Investment	585,116		9,373,185		21	22	27,863	426,054

	Number Responding		Average Percent	
	1998	2002	1998	2002
8. % of Expenditures in Rural Communities	21	23	74	84
9. Economic Size and Value Without Slots (as a % of 1998 Size and Value)				
Size		25		46.8
Value		23		41.7
10. Size of Ontario Harness Industry Without Slots (as a % of the 1998 Size)		23		56.3
11. Future Plans With Slots (as a % of 2002 Size and Value)				
Size		24		100.6
Value		22		105.7
12. Future Plans Without Slot Revenue (as a % of 2002 Size and Value)				
Size		25		24.4
Value		24		25.6

Table B.3: Characteristics of Ontario Standardbred Horse Operations, Top Third by Aggregate Value of Horses

	GrandTotal		Number Responding		Average (Per Respondent)	
	1998	2002	1998	2002	1998	2002
1. Type of Activity						
Owner	28	29	28	29	1.00	1.00
Breeder	19	22	28	29	0.68	0.76
Trainer	12	12	28	29	0.43	0.41
Driver	6	6	28	29	0.21	0.21
Groom	4	4	28	29	0.14	0.14
2. Horses						
Brood Mares						
Number	71	159	27	28	2.63	5.68
Aggregate Value	789,900	3,327,915	27	29	29,256	114,756
Stallions						
Number	4	22	27	28	0.15	0.80
Aggregate Value	187,000	9,532,000	27	29	6,926	328,690
Yearlings						
Number	57	116	27	28	2.12	4.14
Aggregate Value	872,800	3,096,445	27	29	32,326	106,774
Horses for Racing						
Number	169	263	27	28	6.27	9.38
Aggregate Value	3,201,160	9,537,825	27	29	118,561	328,891
Total Number	302	560	27	28	11.2	20.0
Total Aggregate Value	5,050,860	25,494,185	27	29	187,069	879,110
Average Value/Horse						
Brood Mares	11,125	20,930				
Stallions	46,750	426,870				
Yearlings	15,223	26,693				
Horses for Racing	18,922	36,335				
Pooled Average	16,752	43,969				
3. Employment						
Owners/Operators	66	72	26	28	2.54	2.57
Full-time Trainers						
Licensed	36	51	26	28	1.38	1.82
Not Licensed	8	8	26	28	0.31	0.29
Part-time Trainers						
Licensed	9	18	26	28	0.35	0.64
Not Licensed	1	0	26	28	0.04	0.00
Grooms: Yearly Earnings			13	13	17,585	26,115
Full-time Grooms						
Licensed	42	80	26	28	1.62	2.86
Not Licensed	4	2	26	28	0.15	0.07
Part-time Grooms						
Licensed	10	14	26	28	0.38	0.50
Not Licensed	2	3	26	28	0.08	0.11
Other Full-time Employees						
Licensed	2	5	26	28	0.08	0.18
Not Licensed	2	6	26	28	0.08	0.21
Other Part-time Employees						
Licensed	4	4	26	28	0.15	0.14
Not Licensed	2	16	26	28	0.08	0.57
Total Number	188	279	26	28	7.2	10.0
4. Land, Facilities & Equipment						
Aggregate Value	6,959,284	18,244,925	24	25	289,970	729,797

Table B.3 continued

	1998		2002		Number Responding		Average Per Respondent	
	Value	% of Total	Value	% of Total	1998	2002	1998	2002
5. Racing Related Income								
Purses	3,007,026	63	7,461,444	54	27	29	111,371	257,291
Horse Sales	834,150	17	4,056,600	29	27	29	30,894	139,883
Stud Fees	91,000	2	58,000	0	27	29	3,370	2,000
Other	790,000	17	1,900,697	14	27	29	29,259	65,541
Aggregate Value	4,722,176		13,476,741		27	29	174,895	464,715
6. Horse Purchases and Operating Expenses								
Horse Purchases	1,099,306	22	5,453,363	39	25	27	43,972	201,976
Employee Compensation	838,134	17	1,887,762	14	25	27	33,525	69,917
Staking and Starting Fees	370,447	7	705,555	5	25	27	14,818	26,132
Stud Fees	168,614	3	756,192	5	25	27	6,745	28,007
Training and Boarding	814,048	16	2,005,504	14	25	27	32,562	74,278
Feed, Hay, Supplements & Bedding	407,281	8	841,671	6	25	27	16,291	31,173
Veterinary Fees and Medical Supplies	431,728	9	761,679	6	25	27	17,269	28,210
Farrier Service	104,345	2	176,671	1	25	27	4,174	6,543
Grooming, Horse Supplies, and Track	157,475	3	227,755	2	25	27	6,299	8,435
Carts, Other Racing Equip.	48,303	1	109,934	1	25	27	1,932	4,072
Travel and Transportation	192,928	4	242,706	2	25	27	7,717	8,989
Insurance, Utilities, Taxes	327,868	6	280,040	2	25	27	13,115	10,372
and Other	75,857	1	132,206	1	25	27	3,034	4,897
Aggregate Total	5,036,334		13,581,038		25	27	201,453	503,001
Aggregate Balance	-314,158		-104,297				-12,566	-3,863
7. New Investment								
In New Barns, Stables, Other Structures	183,500	21	2,215,167	23	24	25	7,646	88,607
In Land	295,000	34	2,314,000	24	24	25	12,292	92,560
In New Vehicles & Trailers	373,000	43	926,000	10	24	25	15,542	37,040
Other	15,500	2	4,029,852	42	24	25	646	161,194
Total Investment	867,000		9,485,019		24	25	36,125	379,401

	Number Responding		Average Percent	
	1998	2002	1998	2002
8. % of Expenditures in Rural Communities	22	23	64	80
9. Economic Size and Value Without Slots (as a % of 1998 Size and Value)				
Size		25		42.4
Value		24		35.2
10. Size of Ontario Harness Industry Without Slots (as a % of the 1998 Size)		24		57.7
11. Future Plans With Slots (as a % of 2002 Size and Value)				
Size		24		92.3
Value		23		95.2
12. Future Plans Without Slot Revenue (as a % of 2002 Size and Value)				
Size		25		24.2
Value		25		21.6

Table B.4: Characteristics of Ontario Standardbred Horse Operations, Middle Third by Purses Earned, 1998 and 2002

	GrandTotal		Number Responding		Average (Per Respondent)	
	1998	2002	1998	2002	1998	2002
1. Type of Activity						
Owner	29	30	29	30	1.00	1.00
Breeder	16	18	29	30	0.55	0.60
Trainer	15	16	29	30	0.52	0.53
Driver	6	4	29	30	0.21	0.13
Groom	4	3	29	30	0.14	0.10
2. Horses						
Brood Mares						
Number	52	76	26	26	2.00	2.92
Aggregate Value	247,400	541,665	27	27	9,163	20,062
Stallions						
Number	6	10	26	26	0.23	0.38
Aggregate Value	40,000	8,109,500	27	27	1,481	300,352
Yearlings						
Number	35	48	26	26	1.35	1.85
Aggregate Value	225,300	490,445	27	27	8,344	18,165
Horses for Racing						
Number	139	132	26	26	5.35	5.08
Aggregate Value	2,434,320	1,791,915	27	27	90,160	66,367
Total Number	232	266	26	26	8.9	10.2
Total Aggregate Value	2,947,020	10,933,525	27	27	109,149	404,945
Average Value/Horse						
Brood Mares	4,758	7,127				
Stallions	6,667	810,950				
Yearlings	6,437	10,218				
Horses for Racing	17,513	13,575				
Pooled Average	12,232	39,581				
3. Employment						
Owners/Operators	45	65	29	30	1.55	2.17
Full-time Trainers						
Licensed	23	21	29	30	0.79	0.70
Not Licensed	9	9	29	30	0.31	0.30
Part-time Trainers						
Licensed	7	11	29	30	0.24	0.37
Not Licensed	0	3	29	30	0.00	0.10
Grooms: Yearly Earnings			11	11	10,827	16,409
Full-time Grooms						
Licensed	18	21	29	30	0.62	0.70
Not Licensed	1	0	29	30	0.03	0.00
Part-time Grooms						
Licensed	18	19	29	30	0.62	0.63
Not Licensed	2	2	29	30	0.07	0.07
Other Full-time Employees						
Licensed	1	2	29	30	0.03	0.07
Not Licensed	1	2	29	30	0.03	0.07
Other Part-time Employees						
Licensed	5	5	29	30	0.17	0.17
Not Licensed	3	14	29	30	0.10	0.47
Total Number	133	174	29	30	4.6	5.8
4. Land, Facilities & Equipment						
Aggregate Value	4,511,784	7,018,425	24	26	187,991	269,939

Table B.4 continued

	1998		2002		Number Responding		Average Per Respondent	
	Value	% of Total	Value	% of Total	1998	2002	1998	2002
5. Racing Related Income								
Purses	1,011,871	46	1,529,935	45	27	30	37,477	50,998
Horse Sales	632,503	29	935,317	28	27	30	23,426	31,177
Stud Fees	23,800	1	75,090	2	27	30	881	2,503
Other	522,200	24	859,265	25	27	30	19,341	28,642
Aggregate Value	2,190,374		3,399,607		27	30	81,125	113,320
6. Horse Purchases and Operating Expenses								
Horse Purchases	582,940	23	644,942	19	28	29	20,819	22,239
Employee Compensation	396,692	16	654,942	19	28	29	14,168	22,584
Staking and Starting Fees	82,128	3	69,946	2	28	29	2,933	2,412
Stud Fees	166,776	7	311,280	9	28	29	5,956	10,734
Training and Boarding	335,030	13	406,213	12	28	29	11,965	14,007
Feed, Hay, Supplements & Bedding	187,996	8	319,032	9	28	29	6,714	11,001
Veterinary Fees and Medical Supplies	312,782	13	414,944	12	28	29	11,171	14,308
Farrier Service	46,186	2	87,549	3	28	29	1,650	3,019
Grooming, Horse Supplies, and Track	76,105	3	105,272	3	28	29	2,718	3,630
Carts, Other Racing Equip.	25,267	1	46,943	1	28	29	902	1,619
Travel and Transportation	119,476	5	139,914	4	28	29	4,267	4,825
Insurance, Utilities, Taxes	79,992	3	128,436	4	28	29	2,857	4,429
and Other	82,402	3	149,449	4	28	29	2,943	5,153
Aggregate Total	2,493,772		3,478,862		28	29	89,063	119,961
Aggregate Balance	-303,398		-79,255				-10,837	-2,733
7. New Investment								
In New Barns, Stables, Other Structures	193,000	29	1,192,467	46	22	29	8,773	41,120
In Land	320,000	47	782,066	30	22	29	14,545	26,968
In New Vehicles & Trailers	135,116	20	504,116	19	22	29	6,142	17,383
Other	16,500	2	94,697	4	22	29	750	3,265
Total Investment	664,616		2,573,346		22	29	30,210	88,736

	Number Responding		Average Percent	
	1998	2002	1998	2002
8. % of Expenditures in Rural Communities	28	29	69	73
9. Economic Size and Value Without Slots (as a % of 1998 Size and Value)				
Size		26		31.7
Value		25		26.8
10. Size of Ontario Harness Industry Without Slots (as a % of the 1998 Size)		27		45.7
11. Future Plans With Slots (as a % of 2002 Size and Value)				
Size		26		90.8
Value		23		97.6
12. Future Plans Without Slot Revenue (as a % of 2002 Size and Value)				
Size		25		29.4
Value		23		25.7

Table B.5: Characteristics of Ontario Standardbred Horse Operations, Middle Third by Number of Horses, 1998 and 2002

	Grand Total		Number Responding		Average (Per Respondent)	
	1998	2002	1998	2002	1998	2002
1. Type of Activity						
Owner	26	28	26	28	1.00	1.00
Breeder	16	19	26	28	0.62	0.68
Trainer	18	19	26	28	0.69	0.68
Driver	8	6	26	28	0.31	0.21
Groom	6	5	26	28	0.23	0.18
2. Horses						
Brood Mares						
Number	30	36	26	28	1.15	1.29
Aggregate Value	128,000	173,000	25	27	5,120	6,407
Stallions						
Number	2	2	26	28	0.08	0.07
Aggregate Value	6,000	500	25	27	240	19
Yearlings						
Number	35	30	26	28	1.40	1.07
Aggregate Value	173,000	239,500	25	27	6,920	8,870
Horses for Racing						
Number	69	119	26	28	2.65	4.25
Aggregate Value	699,000	1,419,315	25	27	27,960	52,567
Total Number	136	187	26	28	5.2	6.7
Total Aggregate Value	1,006,000	1,832,315	25	27	40,240	67,864
Average Value/Horse						
Brood Mares	4,267	4,806				
Stallions	3,000	250				
Yearlings	4,943	7,983				
Horses for Racing	10,130	11,927				
Pooled Average	7,693	10,161				
3. Employment						
Owners/Operators	46	68	25	27	1.84	2.52
Full-time Trainers						
Licensed	26	34	25	27	1.04	1.26
Not Licensed	5	7	25	27	0.20	0.26
Part-time Trainers						
Licensed	5	9	25	27	0.20	0.33
Not Licensed	1	4	25	27	0.04	0.15
Grooms: Yearly Earnings			9	9	15,413	24,411
Full-time Grooms						
Licensed	20	33	25	27	0.80	1.22
Not Licensed	4	1	25	27	0.16	0.04
Part-time Grooms						
Licensed	13	31	25	27	0.52	1.15
Not Licensed	0	0	25	27	0.00	0.00
Other Full-time Employees						
Licensed	1	6	25	27	0.04	0.22
Not Licensed	0	0	25	27	0.00	0.00
Other Part-time Employees						
Licensed	5	6	25	27	0.20	0.22
Not Licensed	0	7	25	27	0.00	0.26
Total Number	126	206	25	27	5.0	7.6
4. Land, Facilities & Equipment						
Aggregate Value	3,982,000	6,372,600	24	26	165,917	245,100

Table B.5 continued

	1998		2002		Number Responding		Average Per Respondent	
	Value	% of Total	Value	% of Total	1998	2002	1998	2002
5. Racing Related Income								
Purses	592,227	61	1,512,596	59	23	26	25,749	58,177
Horse Sales	143,918	15	579,955	23	23	26	6,257	22,306
Stud Fees	13,800	1	35,092	1	23	26	600	1,350
Other	222,601	23	422,080	17	23	26	9,678	16,234
Aggregate Value	972,546		2,549,273		23	26	42,285	98,066
6. Horse Purchases and Operating Expenses								
Horse Purchases	224,925	17	781,231	28	24	25	9,372	31,249
Employee Compensation	247,542	19	516,520	18	24	25	10,314	20,661
Staking and Starting Fees	34,176	3	50,517	2	24	25	1,424	2,021
Stud Fees	68,000	5	85,500	3	24	25	2,833	3,420
Training and Boarding	174,556	13	333,316	12	24	25	7,273	13,333
Feed, Hay, Supplements & Bedding	129,022	10	246,023	9	24	25	5,376	9,841
Veterinary Fees and Medical Supplies	98,618	8	198,297	7	24	25	4,109	7,932
Farrier Service	37,390	3	73,901	3	24	25	1,558	2,956
Grooming, Horse Supplies, and Track	43,169	3	91,143	3	24	25	1,799	3,646
Carts, Other Racing Equip.	18,204	1	43,236	2	24	25	759	1,729
Travel and Transportation	89,667	7	133,731	5	24	25	3,736	5,349
Insurance, Utilities, Taxes	48,490	4	119,322	4	24	25	2,020	4,773
and Other	100,430	8	165,168	6	24	25	4,185	6,607
Aggregate Total	1,314,189		2,837,905		24	25	54,758	113,516
Aggregate Balance	-341,643		-288,632				-14,235	-11,545
7. New Investment								
In New Barns, Stables, Other Structures	170,000	22	983,000	41	24	27	7,083	36,407
In Land	340,000	44	711,966	30	24	27	14,167	26,369
In New Vehicles & Trailers	254,500	33	646,100	27	24	27	10,604	23,930
Other	6,500	1	61,145	3	24	27	271	2,265
Total Investment	771,000		2,402,211		24	27	32,125	88,971

	Number Responding		Average Percent	
	1998	2002	1998	2002
8. % of Expenditures in Rural Communities	24	25	70	78
9. Economic Size and Value Without Slots (as a % of 1998 Size and Value)				
Size		24		29.2
Value		23		27.6
10. Size of Ontario Harness Industry Without Slots (as a % of the 1998 Size)		24		47.0
11. Future Plans With Slots (as a % of 2002 Size and Value)				
Size		23		90.7
Value		23		101.8
12. Future Plans Without Slot Revenue (as a % of 2002 Size and Value)				
Size		22		25.7
Value		22		24.5

Table B.6: Characteristics of Ontario Standardbred Horse Operations, Middle Third by Aggregate Value of Horses, 1998 and 2002

	GrandTotal		Number Responding		Average (Per Respondent)	
	1998	2002	1998	2002	1998	2002
1. Type of Activity						
Owner	26	29	27	29	0.96	1.00
Breeder	14	15	27	29	0.52	0.52
Trainer	19	19	27	29	0.70	0.66
Driver	8	6	27	29	0.30	0.21
Groom	6	4	27	29	0.22	0.14
2. Horses						
Brood Mares						
Number	28	28	26	27	1.08	1.04
Aggregate Value	125,200	200,000	27	29	4,637	6,897
Stallions						
Number	5	1	26	27	0.19	0.04
Aggregate Value	12,000	2,000	27	29	444	69
Yearlings						
Number	35	26	26	27	1.35	0.96
Aggregate Value	176,500	227,500	27	29	6,537	7,845
Horses for Racing						
Number	105	146	26	27	4.04	5.39
Aggregate Value	1,927,000	1,455,315	27	29	71,370	50,183
Total Number	173	201	26	27	6.7	7.4
Total Aggregate Value	2,240,700	1,884,815	27	29	82,989	64,994
Average Value/Horse						
Brood Mares	4,471	7,143				
Stallions	2,400	2,000				
Yearlings	5,043	8,750				
Horses for Racing	18,352	10,002				
Pooled Average	12,472	8,752				
3. Employment						
Owners/Operators	38	63	26	28	1.46	2.25
Full-time Trainers						
Licensed	30	32	26	28	1.15	1.14
Not Licensed	10	13	26	28	0.38	0.46
Part-time Trainers						
Licensed	6	6	26	28	0.23	0.21
Not Licensed	1	3	26	28	0.04	0.11
Grooms: Yearly Earnings			10	10	14,481	21,120
Full-time Grooms						
Licensed	17	27	26	28	0.65	0.95
Not Licensed	1	0	26	28	0.04	0.00
Part-time Grooms						
Licensed	14	28	26	28	0.54	1.00
Not Licensed	0	1	26	28	0.00	0.04
Other Full-time Employees						
Licensed	2	5	26	28	0.08	0.18
Not Licensed	3	3	26	28	0.12	0.11
Other Part-time Employees						
Licensed	3	5	26	28	0.12	0.18
Not Licensed	1	3	26	28	0.04	0.11
Total Number	126	189	26	28	4.8	6.7
4. Land, Facilities & Equipment						
Aggregate Value	4,814,450	7,487,500	22	24	218,839	311,979

Table B.6 continued

	1998		2002		Number Responding		Average Per Respondent	
	Value	% of Total	Value	% of Total	1998	2002	1998	2002
5. Racing Related Income								
Purses	844,535	52	2,011,759	63	24	27	35,189	74,510
Horse Sales	490,750	30	636,095	20	24	27	20,448	23,559
Stud Fees	11,800	1	22,090	1	24	27	492	818
Other	282,601	17	518,401	16	24	27	11,775	19,200
Aggregate Value	1,629,686		3,188,345		24	27	67,904	118,087
6. Horse Purchases and Operating Expenses								
Horse Purchases	424,073	27	865,464	29	24	26	17,670	33,287
Employee Compensation	268,661	17	696,670	23	24	26	11,194	26,795
Staking and Starting Fees	25,259	2	58,123	2	24	26	1,052	2,236
Stud Fees	63,676	4	78,000	3	24	26	2,653	3,000
Training and Boarding	100,608	6	188,711	6	24	26	4,192	7,258
Feed, Hay, Supplements & Bedding	151,218	10	286,246	10	24	26	6,301	11,009
Veterinary Fees and Medical Supplies	240,182	15	296,429	10	24	26	10,008	11,401
Farrier Service	38,447	2	79,091	3	24	26	1,602	3,042
Grooming, Horse Supplies, and Track	58,921	4	119,890	4	24	26	2,455	4,611
Carts, Other Racing Equip.	34,076	2	61,093	2	24	26	1,420	2,350
Travel and Transportation	95,405	6	123,232	4	24	26	3,975	4,740
Insurance, Utilities, Taxes	54,364	3	104,860	4	24	26	2,265	4,033
and Other	10,686	1	24,981	1	24	26	445	961
Aggregate Total	1,565,576		2,982,790		24	26	65,232	114,722
Aggregate Balance	64,110		205,565				2,671	7,906
7. New Investment								
In New Barns, Stables, Other Structures	56,500	12	1,258,000	52	24	26	2,354	48,385
In Land	150,000	33	492,900	20	24	26	6,250	18,958
In New Vehicles & Trailers	231,116	51	635,116	26	24	26	9,630	24,428
Other	10,000	2	3,850	0	24	26	417	148
Total Investment	447,616		2,389,866		24	26	18,651	91,918

	Number Responding		Average Percent	
	1998	2002	1998	2002
8. % of Expenditures in Rural Communities	24	28	79	82
9. Economic Size and Value Without Slots (as a % of 1998 Size and Value)				
Size		25		31.6
Value		25		27.4
10. Size of Ontario Harness Industry Without Slots (as a % of the 1998 Size)		25		45.6
11. Future Plans With Slots (as a % of 2002 Size and Value)				
Size		26		102.3
Value		25		119.2
12. Future Plans Without Slot Revenue (as a % of 2002 Size and Value)				
Size		24		22.7
Value		24		22.7

Table B.7: Characteristics of Ontario Standardbred Horse Operations, Bottom Third by Purses Earned, 1998 and 2002

	Grand Total		Number Responding		Average (Per Respondent)	
	1998	2002	1998	2002	1998	2002
1. Type of Activity						
Owner	25	30	26	30	0.96	1.00
Breeder	11	10	26	30	0.42	0.33
Trainer	19	18	26	30	0.73	0.60
Driver	10	7	26	30	0.38	0.23
Groom	5	7	26	30	0.19	0.23
2. Horses						
Brood Mares						
Number	23	21	22	27	1.05	0.78
Aggregate Value	125,300	120,000	23	29	5,448	4,138
Stallions						
Number	1	1	22	27	0.05	0.04
Aggregate Value	55,000	10,000	23	29	2,391	345
Yearlings						
Number	18	16	22	27	0.82	0.59
Aggregate Value	166,500	162,000	23	29	7,239	5,586
Horses for Racing						
Number	54	82	22	27	2.45	3.04
Aggregate Value	501,500	1,000,900	23	29	21,804	34,514
Total Number	96	120	22	27	4.4	4.4
Total Aggregate Value	848,300	1,292,900	23	29	36,883	44,583
Average Value/Horse						
Brood Mares	5,448	5,714				
Stallions	55,000	10,000				
Yearlings	9,250	10,125				
Horses for Racing	9,287	12,206				
Pooled Average	8,452	10,031				
3. Employment						
Owners/Operators	33	42	24	30	1.38	1.40
Full-time Trainers						
Licensed	19	21	24	30	0.79	0.70
Not Licensed	3	4	24	30	0.13	0.13
Part-time Trainers						
Licensed	8	9	24	30	0.33	0.30
Not Licensed	2	6	24	30	0.08	0.20
Grooms: Yearly Earnings			7	7	15,759	13,243
Full-time Grooms						
Licensed	15	15	24	30	0.63	0.50
Not Licensed	4	4	24	30	0.17	0.13
Part-time Grooms						
Licensed	9	16	24	30	0.38	0.53
Not Licensed	0	1	24	30	0.00	0.03
Other Full-time Employees						
Licensed	2	3	24	30	0.08	0.10
Not Licensed	0	0	24	30	0.00	0.00
Other Part-time Employees						
Licensed	2	4	24	30	0.08	0.13
Not Licensed	1	2	24	30	0.04	0.07
Total Number	98	127	24	30	4.1	4.2
4. Land, Facilities & Equipment						
Aggregate Value	4,045,000	6,657,100	20	22	202,250	302,595

Table B.7 continued

	1998		2002		Number Responding		Average Per Respondent	
	Value	% of Total	Value	% of Total	1998	2002	1998	2002
5. Racing Related Income								
Purses	554,574	56	357,809	37	25	30	22,183	11,927
Horse Sales	113,816	11	152,579	16	25	30	4,553	5,086
Stud Fees	7,127	1	13,330	1	25	30	285	444
Other	315,054	32	445,178	46	25	30	12,602	14,839
Aggregate Value	990,571		968,896		25	30	39,623	32,297
6. Horse Purchases and Operating Expenses								
Horse Purchases	108,625	14	208,416	19	22	27	4,938	7,719
Employee Compensation	157,921	21	197,992	18	22	27	7,178	7,333
Staking and Starting Fees	14,947	2	20,973	2	22	27	679	777
Stud Fees	28,500	4	44,500	4	22	27	1,295	1,648
Training and Boarding	75,224	10	116,118	11	22	27	3,419	4,301
Feed, Hay, Supplements & Bedding	99,164	13	123,170	11	22	27	4,507	4,562
Veterinary Fees and Medical Supplies	83,055	11	117,658	11	22	27	3,775	4,358
Farrier Service	39,961	5	37,728	3	22	27	1,816	1,397
Grooming, Horse Supplies, and Track	22,418	3	31,362	3	22	27	1,019	1,162
Carts, Other Racing Equip.	12,904	2	20,993	2	22	27	587	778
Travel and Transportation	59,791	8	69,327	6	22	27	2,718	2,568
Insurance, Utilities, Taxes	46,810	6	92,666	8	22	27	2,128	3,432
and Other	10,870	1	15,517	1	22	27	494	575
Aggregate Total	760,190		1,096,420		22	27	34,554	40,608
Aggregate Balance	230,381		-127,524				10,412	-4,723
7. New Investment								
In New Barns, Stables, Other Structures	44,500	14	281,000	26	23	26	1,935	10,808
In Land	45,000	14	195,000	18	23	26	1,957	7,500
In New Vehicles & Trailers	229,000	71	253,600	23	23	26	9,957	9,754
Other	2,100	1	2,450	0	23	26	91	94
Total Investment	320,600		732,050		23	26	13,939	28,156

	Number Responding		Average Percent	
	1998	2002	1998	2002
8. % of Expenditures in Rural Communities	23	25	75	78
9. Economic Size and Value Without Slots (as a % of 1998 Size and Value)				
Size		21		62.4
Value		18		52.5
10. Size of Ontario Harness Industry Without Slots (as a % of the 1998 Size)		25		57.9
11. Future Plans With Slots (as a % of 2002 Size and Value)				
Size		22		74.6
Value		21		93.7
12. Future Plans Without Slot Revenue (as a % of 2002 Size and Value)				
Size		24		40.6
Value		24		39.0

Table B.8: Characteristics of Ontario Standardbred Horse Operations, Bottom Third by Number of Horses, 1998 and 2002

	Grand Total		Number Responding		Average (Per Respondent)	
	1998	2002	1998	2002	1998	2002
1. Type of Activity						
Owner	23	28	24	28	0.96	1.00
Breeder	5	3	24	28	0.21	0.11
Trainer	11	11	24	28	0.46	0.39
Driver	3	3	24	28	0.13	0.11
Groom	2	3	24	28	0.08	0.11
2. Horses						
Brood Mares						
Number	5	4	25	28	0.20	0.14
Aggregate Value	30,000	14,000	25	28	1,200	500
Stallions						
Number	3	1	25	28	0.12	0.04
Aggregate Value	5,000	50,000	25	28	200	1,786
Yearlings						
Number	8	5	25	28	0.33	0.18
Aggregate Value	141,500	68,500	25	28	5,660	2,446
Horses for Racing						
Number	49	59	25	28	1.97	2.11
Aggregate Value	539,000	1,009,900	25	28	21,560	36,068
Total Number	66	69	25	28	2.6	2.5
Total Aggregate Value	715,500	1,142,400	25	28	28,620	40,800
Average Value/Horse						
Brood Mares	6,000	3,500				
Stallions	1,667	50,000				
Yearlings	16,981	13,700				
Horses for Racing	10,961	17,117				
Pooled Average	10,922	16,557				
3. Employment						
Owners/Operators	26	37	23	28	1.13	1.32
Full-time Trainers						
Licensed	15	19	23	28	0.65	0.68
Not Licensed	6	7	23	28	0.26	0.25
Part-time Trainers						
Licensed	8	8	23	28	0.35	0.29
Not Licensed	2	6	23	28	0.09	0.21
Grooms: Yearly Earnings			5	5	14,800	17,100
Full-time Grooms						
Licensed	7	6	23	28	0.30	0.20
Not Licensed	1	3	23	28	0.04	0.11
Part-time Grooms						
Licensed	7	12	23	28	0.30	0.43
Not Licensed	0	1	23	28	0.00	0.04
Other Full-time Employees						
Licensed	0	0	23	28	0.00	0.00
Not Licensed	0	0	23	28	0.00	0.00
Other Part-time Employees						
Licensed	1	2	23	28	0.04	0.07
Not Licensed	1	1	23	28	0.04	0.04
Total Number	74	102	23	28	3.2	3.6
4. Land, Facilities & Equipment						
Aggregate Value	1,305,450	2,272,000	16	18	81,591	126,222

Table B.8 continued

	1998		2002		Number Responding		Average Per Respondent	
	Value	% of Total	Value	% of Total	1998	2002	1998	2002
5. Racing Related Income								
Purses	470,618	82	1,535,705	82	23	28	20,462	54,847
Horse Sales	89,541	16	221,927	12	23	28	3,893	7,926
Stud Fees	127	0	30,028	2	23	28	6	1,072
Other	13,853	2	75,276	4	23	28	602	2,688
Aggregate Value	574,139		1,862,936		23	28	24,963	66,533
6. Horse Purchases and Operating Expenses								
Horse Purchases	173,208	30	444,575	33	21	26	8,248	17,099
Employee Compensation	84,608	15	259,780	19	21	26	4,029	9,992
Staking and Starting Fees	35,126	6	63,450	5	21	26	1,673	2,440
Stud Fees	0	0	7,000	1	21	26	0	269
Training and Boarding	139,218	24	227,826	17	21	26	6,629	8,763
Feed, Hay, Supplements & Bedding	43,702	8	64,338	5	21	26	2,081	2,475
Veterinary Fees and Medical Supplies	32,209	6	76,342	6	21	26	1,534	2,936
Farrier Service	11,469	2	24,808	2	21	26	546	954
Grooming, Horse Supplies, and Track	18,501	3	37,855	3	21	26	881	1,456
Carts, Other Racing Equip.	6,700	1	14,800	1	21	26	319	569
Travel and Transportation	17,500	3	38,900	3	21	26	833	1,496
Insurance, Utilities, Taxes	14,124	2	29,249	2	21	26	673	1,125
and Other	4,700	1	50,500	4	21	26	224	1,942
Aggregate Total	581,065		1,339,423		21	26	27,670	51,516
Aggregate Balance	-6,926		523,513				-330	20,135
7. New Investment								
In New Barns, Stables, Other Structures	0	0	33,800	4	22	24	0	1,408
In Land	0	0	163,000	19	22	24	0	6,792
In New Vehicles & Trailers	120,000	92	285,000	33	22	24	5,455	11,875
Other	100	0	4,300	1	22	24	5	179
Total Investment	120,100		486,100		22	24	5,459	20,254

	Number Responding		Average Percent	
	1998	2002	1998	2002
8. % of Expenditures in Rural Communities	21	24	69	73
9. Economic Size and Value Without Slots (as a % of 1998 Size and Value)				
Size		19		50.3
Value		18		41.4
10. Size of Ontario Harness Industry Without Slots (as a % of the 1998 Size)		23		57.8
11. Future Plans With Slots (as a % of 2002 Size and Value)				
Size		21		87.1
Value		19		106.1
12. Future Plans Without Slot Revenue (as a % of 2002 Size and Value)				
Size		22		28.6
Value		21		24.3

Table B.9: Characteristics of Ontario Standardbred Horse Operations, Bottom Third by Aggregate Value of Horses, 1998 and 2002

	Grand Total		Number Responding		Average (Per Respondent)	
	1998	2002	1998	2002	1998	2002
1. Type of Activity						
Owner	24	29	24	29	1.00	1.00
Breeder	11	9	24	29	0.46	0.31
Trainer	14	15	24	29	0.58	0.52
Driver	6	3	24	29	0.25	0.10
Groom	4	6	24	29	0.17	0.21
2. Horses						
Brood Mares						
Number	21	21	23	26	0.91	0.81
Aggregate Value	78,800	74,000	25	29	3,152	2,552
Stallions						
Number	1	1	23	26	0.04	0.04
Aggregate Value	51,000	10,500	25	29	2,040	362
Yearlings						
Number	14	15	23	26	0.61	0.58
Aggregate Value	90,000	66,000	25	29	3,600	2,276
Horses for Racing						
Number	45	54	23	26	1.96	2.08
Aggregate Value	459,000	397,300	25	29	18,360	13,700
Total Number	81	91	23	26	3.5	3.5
Total Aggregate Value	678,800	547,800	25	29	27,152	18,890
Average Value/Horse						
Brood Mares	3,752	3,524				
Stallions	51,000	10,500				
Yearlings	6,429	4,400				
Horses for Racing	10,200	7,357				
Pooled Average	7,710	5,397				
3. Employment						
Owners/Operators	32	41	24	29	1.33	1.41
Full-time Trainers						
Licensed	14	19	24	29	0.58	0.66
Not Licensed	2	3	24	29	0.08	0.10
Part-time Trainers						
Licensed	5	9	24	29	0.21	0.31
Not Licensed	2	9	24	29	0.08	0.31
Grooms: Yearly Earnings			4	4	20,125	22,375
Full-time Grooms						
Licensed	11	8	24	29	0.46	0.28
Not Licensed	2	4	24	29	0.08	0.14
Part-time Grooms						
Licensed	12	20	24	29	0.50	0.69
Not Licensed	0	0	24	29	0.00	0.00
Other Full-time Employees						
Licensed	1	4	24	29	0.04	0.14
Not Licensed	0	0	24	29	0.00	0.00
Other Part-time Employees						
Licensed	3	4	24	29	0.13	0.14
Not Licensed	0	5	24	29	0.00	0.17
Total Number	84	126	24	29	3.5	4.3
4. Land, Facilities & Equipment						
Aggregate Value	2,413,000	3,767,100	19	21	127,000	179,386

Table B.9 continued

	1998		2002		Number Responding		Average Per Respondent	
	Value	% of Total	Value	% of Total	1998	2002	1998	2002
5. Racing Related Income								
Purses	599,962	88	601,960	74	23	29	26,085	20,757
Horse Sales	60,184	9	114,886	14	23	29	2,617	3,962
Stud Fees	7,127	1	10,830	1	23	29	310	373
Other	13,853	2	89,955	11	23	29	602	3,102
Aggregate Value	681,126		817,631		23	29	29,614	28,194
6. Horse Purchases and Operating Expenses								
Horse Purchases	75,200	11	247,342	21	22	27	3,418	9,161
Employee Compensation	100,537	15	107,448	9	22	27	4,570	3,980
Staking and Starting Fees	10,229	2	15,044	1	22	27	465	557
Stud Fees	12,500	2	45,000	4	22	27	568	1,667
Training and Boarding	142,768	21	229,563	20	22	27	6,489	8,502
Feed, Hay, Supplements & Bedding	57,922	9	76,439	7	22	27	2,633	2,831
Veterinary Fees and Medical Supplies	48,975	7	63,901	6	22	27	2,226	2,367
Farrier Service	26,974	4	24,038	2	22	27	1,226	890
Grooming, Horse Supplies, and Track	20,009	3	29,509	3	22	27	910	1,093
Carts, Other Racing Equip.	8,800	1	14,993	1	22	27	400	555
Travel and Transportation	48,574	7	68,779	6	22	27	2,208	2,547
Insurance, Utilities, Taxes	22,945	3	69,177	6	22	27	1,043	2,562
and Other	95,760	14	158,506	14	22	27	4,353	5,871
Aggregate Total	671,193		1,149,739		22	27	30,509	42,583
Aggregate Balance	9,933		-332,108				-895	-12,300
7. New Investment								
In New Barns, Stables, Other Structures	137,000	38	409,300	30	20	25	6,850	16,372
In Land	45,000	13	282,066	21	20	25	2,250	11,283
In New Vehicles & Trailers	170,000	48	269,100	20	20	25	8,500	10,764
Other	5,100	1	36,145	3	20	25	255	1,446
Total Investment	357,100		996,621		20	25	17,855	39,865

	Number Responding		Average Percent	
	1998	2002	1998	2002
8. % of Expenditures in Rural Communities	23	25	71	74
9. Economic Size and Value Without Slots (as a % of 1998 Size and Value)				
Size		21		53.1
Value		18		47.8
10. Size of Ontario Harness Industry Without Slots (as a % of the 1998 Size)		24		55.5
11. Future Plans With Slots (as a % of 2002 Size and Value)				
Size		22		72.4
Value		19		86.7
12. Future Plans Without Slot Revenue (as a % of 2002 Size and Value)				
Size		24		38.5
Value		22		36.8