# NIAGARA AGRICULTURE ECONOMIC IMPACT

# ECONOMIC IMPACT IN NIAGARA, GOLDEN HORSESHOE AND ONTARIO

Agriculture is an economically significant sector in Niagara, the Golden Horseshoe and Ontario. Although numbers of farms and farmland area has decreased, the economic value of the agriculture sector has increased.

In 2016, Niagara was home to 1,827 farms generating \$838.1 million in total gross far receipts, \$3.1 billion in gross output impact, \$1.4 billion in gross domestic product impact, and 19,892 jobs. From 2011 to 2016, agricultural gross domestic product increased by 15.5%.

During the same year, the Golden Horseshoe was home to 5,531 farms generating \$2 billion in total gross farm receipts, \$7.2 billion in gross output impact, \$3.3 billion in gross domestic product impact, and 46,500 jobs. From 2011 to 2016, agricultural gross domestic product increased by 14.2%.

Lastly, during 2016, Ontario was home to 49,600 farms, generating \$15.1 billion in gross farm receipts, \$25.4 billion in GDP impact, \$55.3 billion in gross output impact and 359,025 jobs. From 2011 to 2016, Ontario agricultural gross domestic product increased by 27.2%.

Below you will find key information on the economic impact of agriculture in Niagara, the Golden Horseshoe, and Ontario.

### TOTAL FARMS, NIAGARA REGION, GOLDEN HORSESHOE AND ONTARIO, 2011 AND 2016

GEOGRAPHY	2011	2016	Change	% Change
Ontario	51,950	49,600	-2,350	-4.5%
Golden Horseshoe	6,090	5,531	-559	-9.2%
Niagara Region	2,014	1,827	-187	-9.3%
Durham Region	1,454	1,323	-131	-9.0%
Hamilton	885	810	-75	-8.5%
York Region	828	712	-116	-14.0%
Halton Region	469	451	-18	-3.8%
Peel Region	440	408	-32	-7.3%

- From 2011 to 2016, the number of farms across Ontario, the Golden Horseshoe, Niagara, Durham, Hamilton, York, Halton, and Peel all decreased.
- Niagara and York had percentage decreases greater than that of the Golden Horseshoe, while Durham, Hamilton, Peel, and Halton had decreases less than the Golden Horseshoe.
- Halton had the smallest percentage decrease of the Golden Horseshoe regions.

# GROSS FARM RECEIPTS, CURRENT DOLLARS, NIAGARA REGION, GOLDEN HORSESHOE AND ONTARIO. 2011 AND 2016

GEOGRAPHY	2011 (\$)	2016 (\$)	Change	% Change
Ontario	11,890,835,395	15,126,845,283	3,236,009,888	27.2%
Golden Horseshoe	1,716,206,729	1,959,172,301	242,965,572	14.2%
Niagara Region	725,831,453	838,113,788	112,282,335	15.5%
Durham Region	273,237,098	321,749,341	48,512,243	17.8%
York Region	260,121,662	301,462,398	41,340,736	15.9%
Hamilton	244,217,255	259,909,162	15,691,907	6.4%
Halton Region	123,942,913	143,802,693	19,859,780	16.0%
Peel Region	88,856,378	94,134,919	5,278,541	5.9%

- From 2011 to 2016, gross farm receipts increased across Ontario and the Golden Horseshoe area. Ontario had an increase of 27.2% while the Golden Horseshoe had an increase of 14.2%.
- Of all the regions within the Golden Horseshoe, Niagara had the highest gross farm receipt value followed by Durham, York, Hamilton, Halton, and Peel.
- From 2011 to 2016, Niagara had the largest increase in value of gross farm receipts at \$112.28 million or 15.5%, while Durham had the largest relative increase of 17.8% or \$48.51 million.

# REGIONAL DISTRIBUTION OF FARMS AND GROSS FARM RECEIPTS, CURRENT DOLLARS, NIAGARA REGION, GOLDEN HORSESHOE AND ONTARIO, 2011

GEOGRAPHY	Farms	% of Total	GFR (\$)	% Total
Ontario	51,950	100.0%	11,890,835,395	100.0%
Golden Horseshoe	6,090	11.7%	1,716,206,729	14.4%
Niagara Region	2,014	3.9%	725,831,453	6.1%
Durham Region	1,454	2.8%	273,237,098	2.3%
York Region	828	1.6%	260,121,662	2.2%
Hamilton	885	1.7%	244,217,255	2.1%
Halton Region	469	0.9%	123,942,913	1.0%
Peel Region	440	0.8%	88,856,378	0.7%

- In 2011, the Golden Horseshoe represented 11.7% of total farms in Ontario, but 14.4% of the value of gross farm receipts.
- In 2011, Niagara represented 3.9% of total Ontario farms, but 6.1% of the value of total Ontario gross farm receipts. On average, Niagara farms are producing higher value goods compared to Ontario.

# REGIONAL DISTRIBUTION OF FARMS AND GROSS FARM RECEIPTS, CURRENT DOLLARS, NIAGARA REGION, GOLDEN HORSESHOE AND ONTARIO, 2016

GEOGRAPHY	Farms	% of Total	GFR (\$)	% of Total
Ontario	49,600	100.0%	15,126,845,283	100.0%
Golden Horseshoe	5,531	11.2%	1,959,172,301	13.0%
Niagara Region	1,827	3.7%	838,113,788	5.5%
Durham Region	1,323	2.7%	321,749,341	2.1%
York Region	712	1.4%	301,462,398	2.0%
Hamilton	810	1.6%	259,909,162	1.7%
Halton Region	451	0.9%	143,802,693	1.0%
Peel Region	408	0.8%	94,134,919	0.6%

- In 2016, the Golden Horseshoe represented 12.7% of total farms in Ontario and 13.0% of the total value of gross farm receipts.
- In 2016, Niagara represented 4.2% of total farms in Ontario, but 5.5% of the total value of gross farms receipts. This was an increase in share of farms, but a decrease in share of the total value of gross farm receipts.

# AGRICULTURE ECONOMIC IMPACT SUMMARY, CURRENT DOLLARS, NIAGARA REGION, GOLDEN HORSESHOE AND ONTARIO. 2011

GEOGRAPHY	Gross Farm Receipts (\$)	Gross Output Impact (\$)	Direct Impact (\$)	Indirect Impact (\$)	Induced Impact (\$)	Employment Impact	GDP Impact (\$)	GDP Impact % of Total
Ontario	11,890,835,395	43,488,732,797	7,786,300,869	21,213,220,674	14,425,914,142	282,221	19,998,900,010	100.0%
Golden Horseshoe	1,716,206,729	6,276,738,390	1,123,798,522	3,061,708,805	2,091,231,062	40,733	2,886,445,673	14.4%
Niagara Region	725,831,453	2,654,606,854	475,285,582	1,294,881,621	884,439,651	17,227	1,220,757,978	6.1%
Durham Region	273,237,098	999,318,878	178,919,848	487,454,346	332,944,684	6,485	459,550,721	2.3%
York Region	260,121,662	951,351,369	170,331,659	464,056,439	316,963,272	6,174	437,492,193	2.2%
Hamilton	244,217,255	893,183,558	159,917,189	435,682,960	297,583,408	5,796	410,742,914	2.1%
Halton Region	123,942,913	453,300,425	81,159,723	221,113,868	151,026,834	2,942	208,456,522	1.0%
Peel Region	88,856,378	324,977,306	58,184,521	158,519,571	108,273,214	2,109	149,445,346	0.7%

- In 2011, the value of total gross farm receipts for Ontario was \$11.89 billion, the employment impact was 282,221 jobs, and the impact on gross domestic product was \$20.0 billion.
- In the Golden Horseshoe, the value of total gross farm receipts was \$1.72 billion, the employment impact was 40,733 jobs, and the impact on gross domestic product was \$2.89 billion or 14.4% of Ontario total.
- In 2011, the value of total gross farm receipts for Niagara was \$725.83 million, the employment impact was 17,227 jobs, and the impact on gross domestic product (GDP) was \$1.22 billion or 6.1% of Ontario total.

# AGRICULTURE ECONOMIC IMPACT SUMMARY, CURRENT DOLLARS, NIAGARA REGION, GOLDEN HORSESHOE AND ONTARIO. 2016

GEOGRAPHY	Gross Farm Receipts	Gross Output Impact (\$)	Direct Impact (\$)	Indirect Impact (\$)	Induced Impact (\$)	Employment Impact	GDP Impact (\$)	GDP Impact % of Total
Ontario	15,126,845,283	55,323,895,313	9,905,289,634	26,986,254,240	18,351,828,450	359,025	25,441,464,475	100.0%
Golden Horseshoe	1,959,172,301	7,165,343,550	1,282,895,985	3,495,158,496	2,376,860,033	46,500	3,295,083,116	13.0%
Niagara Region	838,113,788	3,065,260,376	548,809,726	1,495,192,907	1,016,796,310	19,892	1,409,602,714	5.5%
Durham Region	321,749,341	1,176,744,161	210,686,389	574,000,022	390,345,019	7,636	541,142,206	2.1%
York Region	301,462,398	1,102,548,075	197,402,189	537,808,166	365,732,981	7,155	507,022,102	2.0%
Hamilton	259,909,162	950,574,095	170,192,494	463,677,296	315,320,760	6,168	437,134,749	1.7%
Halton Region	143,802,693	525,934,191	94,164,203	256,543,645	174,460,854	3,413	241,858,169	1.0%
Peel Region	94,134,919	344,282,652	61,640,985	167,936,461	114,204,109	2,234	158,323,177	0.6%

- In 2016, the value of total gross farm receipts for Ontario was \$15.13 billion, the employment impact was 359,025 jobs, and the impact on GDP was \$25.44 billion. Compared to 2011, this was a 76,804 increase in jobs, and a \$5.44 billion increase in GDP impact.
- In the Golden Horseshoe, in 2016 the value of total gross farms receipts was \$1.96 billion, the employment impact was 46,500 jobs, and the impact on gross domestic product was \$3.3 billion. Compared to 2011, this was a 5,767 increase in jobs, and a \$408.64 million increase in GDP impact.
- In Niagara, in 2016 the value of total gross farms receipts was \$838.11 million, the employment impact of agriculture was 19,892, and the impact on GDP was \$1.41 billion. Compared to 2011, this was an increase of 2,665 jobs, and a \$188.85 million increase on GDP impact.

# AGRICULTURAL GDP IMPACT, CURRENT DOLLARS, NIAGARA REGION, GOLDEN HORSESHOE AND ONTARIO, 2011 AND 2016

GEOGRAPHY	2011 (\$)	2016 (\$)	Change	% Change
Ontario	19,998,900,010	25,441,464,475	5,442,564,465	27.2%
Golden Horseshoe	2,886,445,673	3,295,083,116	408,637,443	14.2%
Niagara Region	1,220,757,978	1,409,602,714	188,844,736	15.5%
Durham Region	459,550,721	541,142,206	81,591,485	17.8%
York Region	437,492,193	507,022,102	69,529,909	15.9%
Hamilton	410,742,914	437,134,749	26,391,835	6.4%
Halton Region	208,456,522	241,858,169	33,401,647	16.0%
Peel Region	149,445,346	158,323,177	8,877,831	5.9%

- As a basic industry, agriculture contributes a significant amount towards overall GDP. Agricultural impact on GDP has increased across Ontario, the Golden Horseshoe, and Niagara.
- Ontario had the greatest gains of agricultural impact on GDP of 27.2% or \$5.44 billion. This is relatively higher than both the Golden Horseshoe and Niagara, meaning that other areas in Ontario are also producing more value in the agricultural sector.
- The Golden Horseshoe had a 14.2% or \$408.64 increase of agricultural impact on GDP
- Niagara had a 15.5% or \$188.84 million increase of agricultural impact on GDP

### ECONOMIC IMPACT BY FARM TYPE, CURRENT DOLLARS, NIAGARA REGION, 2011

FARM TYPE	Gross Farm Receipts (\$)	Gross Output Impact (\$)	Direct Impact (\$)	Indirect Impact (\$)	Induced Impact (\$)	Employment Impact	GDP Impact (\$)	GDP Impact % of Total
Greenhouse, nursery, and floriculture	338,430,597	1,237,753,052	221,609,531	603,759,341	410,582,652	8,032	569,197,995	46.6%
Poultry and egg	150,209,715	549,366,797	98,359,619	267,973,757	182,233,828	3,565	252,633,980	20.7%
Fruit and tree nut	132,458,802	484,445,815	86,736,049	236,306,172	160,698,491	3,144	222,779,161	18.2%
Oilseed and grain	53,128,979	194,310,315	34,789,668	94,781,966	64,455,866	1,261	89,356,307	7.3%
Dairy cattle and milk	17,176,952	62,821,816	11,247,731	30,643,640	20,839,010	408	28,889,488	2.4%
Other animal	15,700,892	57,423,375	10,281,184	28,010,352	19,048,260	372	26,406,939	2.2%
Hog and pig	6,795,738	24,854,270	4,449,953	12,123,580	8,244,562	161	11,429,583	0.9%
Vegetable and melon	5,162,702	18,881,715	3,380,616	9,210,247	6,263,370	122	8,683,020	0.7%
Other crop	4,475,443	16,368,181	2,930,589	7,984,179	5,429,590	106	7,527,136	0.6%
Beef cattle and feedlots	1,690,156	6,181,462	1,106,740	3,015,234	2,050,491	40	2,842,631	0.2%
Sheep and goat	601,477	2,199,801	393,856	1,073,033	729,710	14	1,011,609	0.1%

- In 2011, greenhouse, nursery, and floriculture contributed the most jobs and GDP impact of all agricultural in industries in Niagara at 8,032 jobs and GDP impact of \$569.2 million or 46.6% of the total agricultural impact to GDP
- Poultry and egg contributed the second highest number of jobs and GDP impact among the agricultural industries at 3,565 jobs and \$252.63 million or 20.7% of the total agricultural impact on GDP
- Fruit and tree nuts contributed the third highest number of jobs and GDP impact among the agricultural industries at 3,144 jobs and \$222.78 million or 18.2% of the total agricultural impact to GDP
- These three agricultural industries contributed 85.5% of the economic impact of the total agricultural sector in Niagara in 2011

### ECONOMIC IMPACT BY FARM TYPE, CURRENT DOLLARS, NIAGARA REGION, 2016

FARM TYPE	Gross Farm Receipts (\$)	Gross Output Impact (\$)	Direct Impact (\$)	Indirect Impact (\$)	Induced Impact (\$)	Employment Impact	GDP Impact (\$)	GDP Impact % of Total
Greenhouse, nursery, and floriculture	411,275,935	1,504,172,638	269,309,772	733,715,242	498,958,326	9,761	691,714,756	49.1%
Poultry and egg	154,447,372	564,865,316	101,134,501	275,533,726	187,374,937	3,666	259,761,190	18.4%
Fruit and tree nut	139,975,834	511,938,097	91,658,317	249,716,539	169,818,124	3,322	235,421,870	16.7%
Oilseed and grain	57,039,970	208,614,108	37,350,645	101,759,164	69,200,664	1,354	95,934,105	6.8%
Hog and pig	29,606,505	108,280,818	19,386,792	52,817,931	35,918,494	703	49,794,444	3.5%
Dairy cattle and milk	19,601,848	71,690,466	12,835,590	34,969,648	23,780,884	465	32,967,860	2.3%
Other animal	10,834,585	39,625,674	7,094,652	19,328,873	13,144,475	257	18,222,419	1.3%
Other crop	8,978,124	32,835,980	5,879,013	16,016,951	10,892,224	213	15,100,083	1.1%
Vegetable and melon	3,092,587	11,310,617	2,025,073	5,517,167	3,751,914	73	5,201,345	0.4%
Beef cattle and feedlots	2,161,101	7,903,864	1,415,122	3,855,399	2,621,839	51	3,634,702	0.3%
Sheep and goat	1,099,927	4,022,798	720,249	1,962,267	1,334,427	26	1,849,940	0.1%

- In 2016, greenhouse, nursery, and floriculture contributed the most jobs and GDP impact of all agricultural industries in Niagara at 9,761 jobs and \$691.71 million or 49.1% of total agricultural impact on agricultural GDP. This was an increase of 1,729 jobs and \$122.51 million over 2011.
- Poultry and egg remained the second highest contributor to jobs and GDP among the agricultural industries at 3,666 jobs and \$259.76 million impact on agricultural GDP. This was an increase of 101 jobs and \$7.13 million over 2011.
- Fruit and tree nut remained the third highest contributor to jobs and GDP impact among the agricultural industries at 3,322 jobs and \$235.42 million impact on agricultural GDP. This was an increase of 178 jobs and \$12.64 million over 2011.

# NUMBER OF AGRICULTURAL PRODUCT EXPORTERS BY EXPORT DESTINATION, NIAGARA REGION, 2011 AND 2016

CONTINENT	2011	2016	% Change
All Countries Total	69	77	11.6%
Europe	5	0	-100.0%
North America	65	76	16.9%
Central and South America and Caribbean	0	×	×
Asia	0	0	×
Oceania and Antarctica	0	×	X

Note: Number of establishments not additive because one exporter can export multiple products to multiple continents.

- In 2016, Niagara had 77 agricultural establishments exporting product. The top export destination was North America, which means the U.S. and/or Mexico.
- There was an increase of 11.6% or 8 exporters over 2011.

### VALUE OF AGRICULTURAL EXPORTS, NIAGARA REGION, CURRENT DOLLARS, 2011 AND 2016

CONTINENT	2011 (\$)	2016 (\$)	% Change
All Countries Total	47,082,200	109,247,600	132.0%
Europe	246,400	137,500	-44.2%
North America	46,070,200	108,761,400	136.1%
Central and South America and Caribbean	137,500	×	X
Asia	337,700	347,600	2.9%
Oceania and Antarctica	290,400	×	X

- In 2016, agricultural exporters in Niagara exported \$109.25 million worth of goods. The top export destination was North America, which means the U.S. and/or Mexico at 99.6% of the value of all agricultural goods exported or \$109.25 million.
- There was an increase of 132.0% or \$62.17 million over 2011.

### **SOURCES**

Statistics Canada Census of Agriculture, 2011 and 2016 including CANSIM tables 004-0201, 004-0204, 004-0005, 004-0200, 004-0202, 004-0233, 004-0235, 004-0234, 004-0239, 004-0238, as well as special data tabulations provided by Statistics Canada.

### **GLOSSARY OF TERMS**

GROSS FARM RECEIPTS: Gross farm receipt refers to the gross farm receipts of the agricultural operation in the year prior to Census or the last complete accounting (fiscal) year. This includes receipts from all agricultural and forest products sold, program payments and custom work receipts. It does not include sales forestry products (firewood, pulpwood, logs, fence posts, pilings, etc.), of capital items (quota, land, machinery, etc.), or receipts from the sale of any goods purchased only for retail sales. It is gross receipts before deducting expenses.

**GROSS OUTPUT IMPACT:** Gross output impact is the impact of the total value of goods and services produced by an industry

**DIRECT IMPACT:** The direct impact refers to the impacts that come from the input requirements of the directly impacted industries themselves.

**INDIRECT IMPACT:** The indirect impacts refer to the input requirements of those industries that respond to the directly impacted industries by providing needed inputs.

**INDUCED IMPACT:** The induced impacts refer to those impacts coming from the personal consumption expenditures stimulated by the wages and salaries paid by all impacted industries (direct and indirect).

### **GROSS DOMESTIC PRODUCT (GDP) IMPACT:**

The GDP impact refers to the impact on the total value of goods produced and services provided within in a region during one year.

GOLDEN HORSESHOE: In the context of this study, Golden Horseshoe refers the geographical area consisting of the municipalities of Niagara Region, City of Hamilton, Halton Region, Peel Region, Durham Region, and York Region.