Historical Trends in Niagara's Agribusiness Sector, 2001 to 2022

Definitions & Research Method

For this working paper, we define the agribusiness sector as a composite of industries consisting of agricultural produce; the processing, storage, and distribution of such farm produce; the manufacturing and distribution of farm equipment and supplies, and the provision of requisite services in support of farming operations. As the name "agribusiness" implies, we see the sector as a collection of activities that connect agriculture and business with an emphasis on the interdependence of the various industries and activities within the production and distribution chain.

These industries consist of the following, as defined by Statistic Canada's North American Industry Classification System (NAICS):
• Agricultural supplies merchant wholesalers
• Agricultural, construction and mining machinery manufacturing
• Beverage manufacturing
• Beverage merchant wholesalers
• Farm product merchant wholesalers
• Farm, lawn and garden machinery and equipment merchant wholesalers
• Farms
• Food merchant wholesalers
• Fruit and vegetable preserving and specialty food manufacturing
• Meat product manufacturing
• Other food manufacturing
• Pesticide, fertilizer and other agricultural chemical manufacturing
• Support activities for farms

For purposes of data analysis, we focus on a set of industries and occupations listed under the four-digit NAICS and National Occupation Classification (NOC) codes, respectively. The data was sourced from Lightcast's Labor Market Analytics and consists of two distinct sets of data that serve as prisms for analyzing trends in agribusiness, namely, jobs by industry and jobs by occupation. While the distribution of jobs by industry (represented in NAICS codes) gives us a good picture of current trends across Niagara's tourism sector, another lens through which we can view such trends is the distribution of jobs by occupation (represented in NOC codes).

The importance of this "occupation" lens is that it sheds light on the human and talent dimensions of the agribusiness sector, providing insights into the nature of skillsets or expertise in the sector. NOC codes can help track changes in the types of jobs required within a sector or industry that NAICS cannot. They supply a framework to understand the composition, skill requirements, labour market trends, and other characteristics of economic sectors.

The data cover a 20-year period (2001 to 2022) and consist of absolute and percentage changes over time. This paper also includes the national location quotients for each of the industries. We included the location quotients because they indicate an area's level of specialization in each industry, specifically in this case it allows us to compare a region's job concentration in its agribusiness sector relative to total jobs concentration in Ontario and Canada's agribusiness sector. An LQ of 1.5 or higher shows a high degree of specialization.

The data largely focuses on Niagara.[1] However, for comparative reasons, it also includes provincial and national figures and trends for the same period as well as data from a select number of CMAs within Ontario that have sizeable agribusiness sectors. We chose midsized regions as comparators because in addition to their demographic characteristic as midsized CMAs, they have identified the sector in their economic development strategies as one of their lead economic drivers, have natural endowments favorable to the sector, have built facilities to leverage the potentials of the sector, and have undertaken active promotional activities as part of their economic development strategies.

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[1] It is important to note that for this study, we used the geographical area of the St. Catharines-Niagara CMA, which does not include Grimsby and West Lincoln. This was necessary to be able to compare the local sector to other CMAs (the geographic unit of economic analysis) in Ontario.

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In this section, we examine changes in Niagara's agribusiness sector, comparing job trends in the region with those of the province of Ontario and Canada as a whole. The analysis covers both NAICS and NOC data, examining changes in jobs by industry (number of jobs overall) and occupation (types of jobs). The discussion begins with NAICS data on industry trends and then proceeds to the NOC data on changes in occupation.
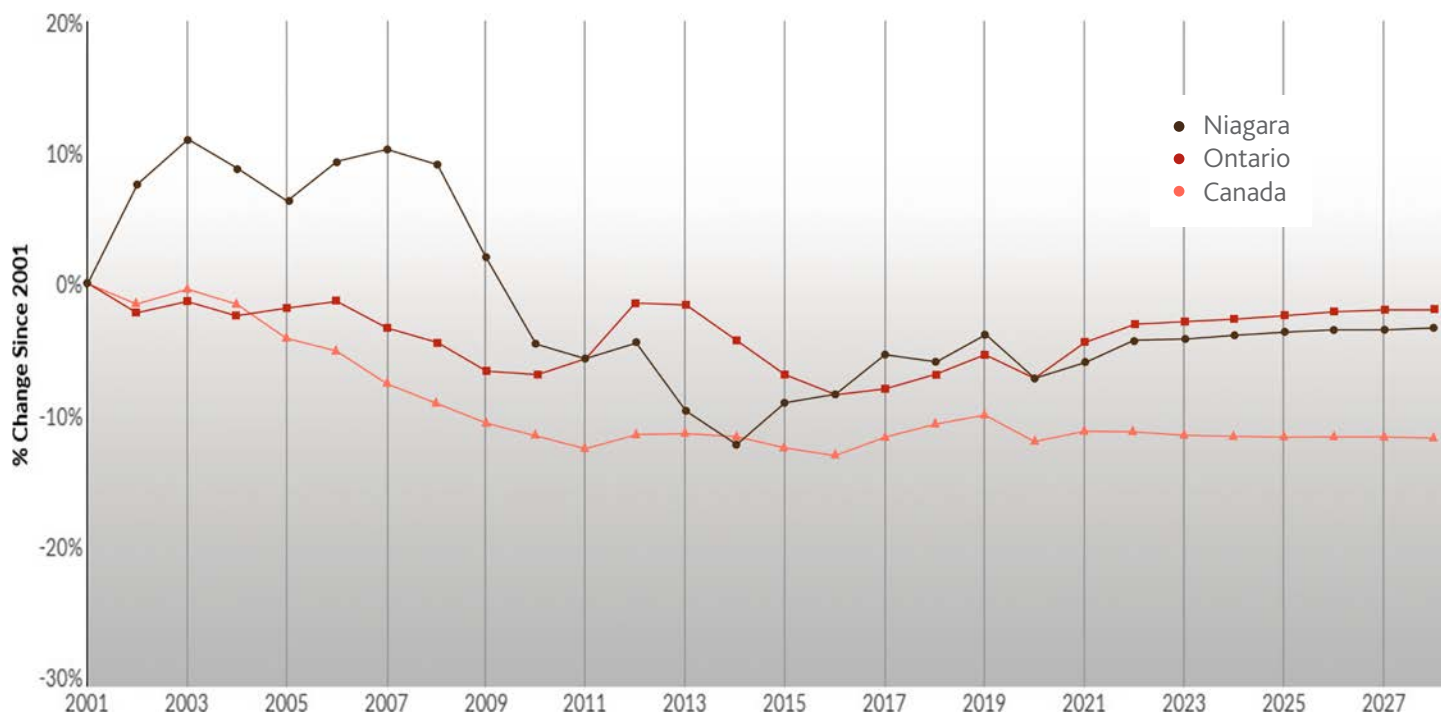
Table 1 presents a summary of changes in agribusiness jobs by industry between 2001 and 2022, comparing Niagara with provincial (Ontario) and national trends. As the table and Figure 1a both indicate, Niagara has seen an overall decline of four per cent in sector jobs over the past two decades, worse than the provincial average decline of three per cent but better than the dismal national average decline of 11 per cent.

Table 1: Change in agribusiness jobs, 2001–2022; Niagara, Ontario and Canada compared

Regions	2001 Jobs	2022 Jobs	Change	Percentage Change
Niagara	8,742	8,360	(382)	(4%)
Ontario	220,967	214,252	(6,715)	(3%)
Canada	798,786	709,219	(89,567)	(11%)

Figure 1a indicates that the decline in the sector was far worse in the earlier years of the past two decades, with the decline stabilizing around 2017 and gradually increasing since then. However, the recent upswing was not large enough to counter the overall depth of decline. Nevertheless, the sector is projected to continue its upward trend over the next five years.

Figure 1a: Industry job growth in agribusiness, 2001–2022; Niagara, Ontario and Canada compared

² *Based on NAICS codes*

To shed light on more current trends in the sector, Figure 1b presents a broad portrait of changes in agribusiness jobs over the past decade (between 2011 and 2022), comparing Niagara with provincial (Ontario) and national trends. Niagara, along with the province and the country, report positive growth, with Niagara's growth of two per cent outpacing the national rate but lagging Ontario.

Table 2 and Figure 2 provide pictures of percentage growth between 2001 and 2022 in agribusiness jobs. While the overall picture reveals a broad pattern of decline in a relatively large number of agribusiness industries, a few industries point to significant and promising trajectories in knowledge-intensive food manufacturing activities. Industries reporting positive growth over the past two decades are: "Other food manufacturing" (107 per cent); "Beverage manufacturing" (95 per cent); "Dairy product manufacturing" (92 per cent); and "Bakeries and tortilla manufacturing" (39 per cent). This could indicate innovative, research-intensive and value-added activities in these areas of the region's agribusiness sector—that is, activities consistent with indicators of higher-than-average innovation, resilience and adaptability. In the 21st century economy, such manufacturing activities are also indicative of computer-enabled food production systems. Equally significant, Niagara's growth trend in these four industries outpaced the provincial and national increases over the same time period.

However, a point worth noting as a cause for concern and further deliberation is the overall decline in industries such as "Farms" (-4 per cent) and "Support activities for farms" (-37 per cent). The decline raises serious concern because these industries are foundational to the agribusiness sector and a central part of Niagara's branding as an agricultural (or green) belt.

Moreover, the strength of farms and their support activities is critical for this sector's advances in innovation systems aimed at precision agriculture, biomechanical plant growth and horticultural practices, explorations into new frontiers in greenhouse operations (especially with the emergence of the cannabis industry), aquaponics and renewable energies. A deeper inquiry could probe further into factors that account for this somewhat peculiar trend in a region notable for its farmgate agricultural activities, including those associated with creativity and innovation.

Figure 1b: Industry job growth in agribusiness, 2011–2022; Niagara, Ontario and Canada compared
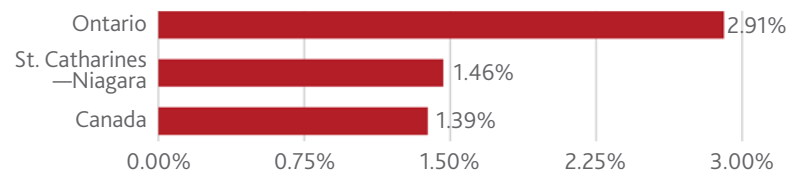

Table 2: Percentage change in agribusiness jobs by industry, 2001–2022; Niagara, Ontario, and Canada compared

Industry	Niagara	Ontario	Canada
Other food manufacturing	107%	52%	81%
Beverage manufacturing	95%	66%	69%
Dairy product manufacturing	92%	43%	32%
Bakeries and tortilla manufacturing	39%	34%	14%
Hunting and trapping	0%	18%	(11%)
Farms	(4%)	(24%)	(24%)
Grain and oilseed milling	(23%)	(26%)	(1%)
Support activities for farms	(37%)	(35%)	(15%)
Agricultural supplies merchant wholesalers	(38%)	8%	10%
Farm product merchant wholesalers	(52%)	15%	14%
Meat product manufacturing	(56%)	32%	6%
Sugar and confectionery product manufacturing	(83%)	(31%)	(6%)
Animal food manufacturing	(84%)	14%	(5%)
Fruit and vegetable preserving and specialty food manufacturing	(89%)	(48%)	(11%)

Figure 2: Niagara's percentage growth of agribusiness jobs, 2001–2022
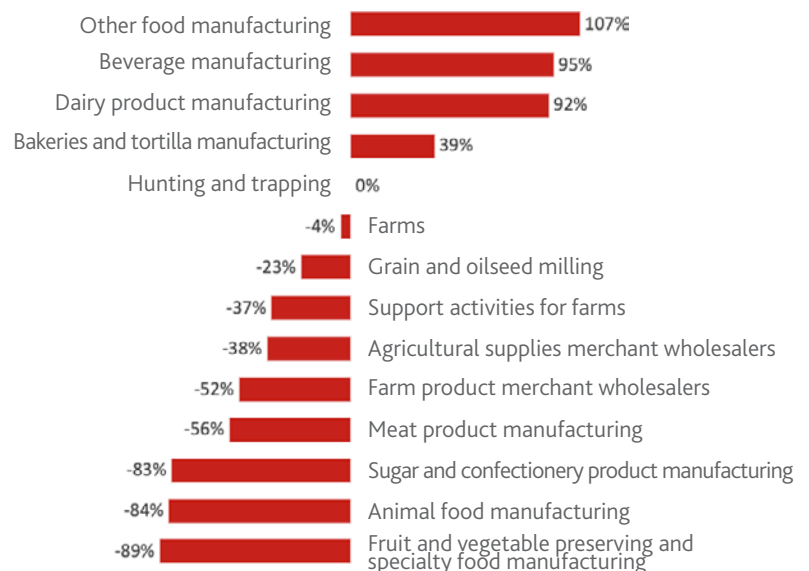
Competitiveness (Location Quotient Scores)

Another lens through which we can understand changes in Niagara agribusiness is the location quotients (LQs) of jobs in the respective industries that make up the sector. The LQ scores indicate an area's level of specialization in industries, with a score above 1.5 indicating a significant degree of specialization compared to other regions in the province.

As Table 3 indicates, Niagara has registered growth in competitiveness over the past two decades in industries such as "Beverage manufacturing" (from 2.26 to 3.14) and "Farms" (from 1.06 to 1.60). It even gained above-national competencies in "Bakeries and tortilla manufacturing" where it did not exist in 2001 (growing from 0.96 to 1.41). Notably, the non-existent "Cannabis product manufacturing" industry in 2001 now has a strong presence in the region, with an LQ score of 2.84.

Table 3: Niagara's national location quotient for agribusiness jobs by industry, 2001 vs. 2022

Industry	2001	2022
Agricultural supplies merchant wholesalers	1.25	0.84
Animal food manufacturing	0.91	0.18
Bakeries and tortilla manufacturing	0.96	1.41
Beverage manufacturing	2.26	3.14
Cannabis product manufacturing	0.00	2.84
Dairy product manufacturing	0.36	0.63
Farm product merchant wholesalers	3.26	1.67
Farms	1.06	1.60
Fishing	0.03	0.00
Forest nurseries and gathering of forest products	0.27	0.00
Fruit and vegetable preserving and specialty food manufacturing	1.25	0.19
Grain and oilseed milling	3.81	3.51
Hunting and trapping	0.00	0.00
Logging	0.06	0.00
Meat product manufacturing	0.81	0.40
Other food manufacturing	0.29	0.40
Seafood product preparation and packaging	0.06	0.01
Sugar and confectionery product manufacturing	1.40	0.30
Support activities for farms	0.82	0.73
Support activities for forestry	0.00	0.23
Timber tract operations	0.45	0.00
Tobacco manufacturing	0.00	0.00

However, Niagara has lost ground in industries such as "Farm product merchant wholesalers" where it once registered a strong showing of 3.26 in 2001 to a now modest showing of 1.67. While still holding its competitive advantage relative to the rest of the country, the decline is quite a noticeable drop. Similarly, over the past two decades, there are declines in competitiveness in industries such as "Grain and oilseed milling" (from 3.81 to 3.51),

"Agricultural supplies merchant wholesalers" (from 1.25 to 0.84), "Animal food manufacturing" (from 0.91 to 0.18), "Meat product manufacturing" (from 0.81 to 0.40) and "Fruit and vegetable preserving and specialty food manufacturing" (from 1.25 to 0.19). In some of these industries, the drop meant a loss of national competitiveness (below an LQ score of 1) where Niagara once commanded such a presence.

Figure 3: Niagara's national location quotient for agribusiness jobs, 2022 (sorted by highest to lowest)
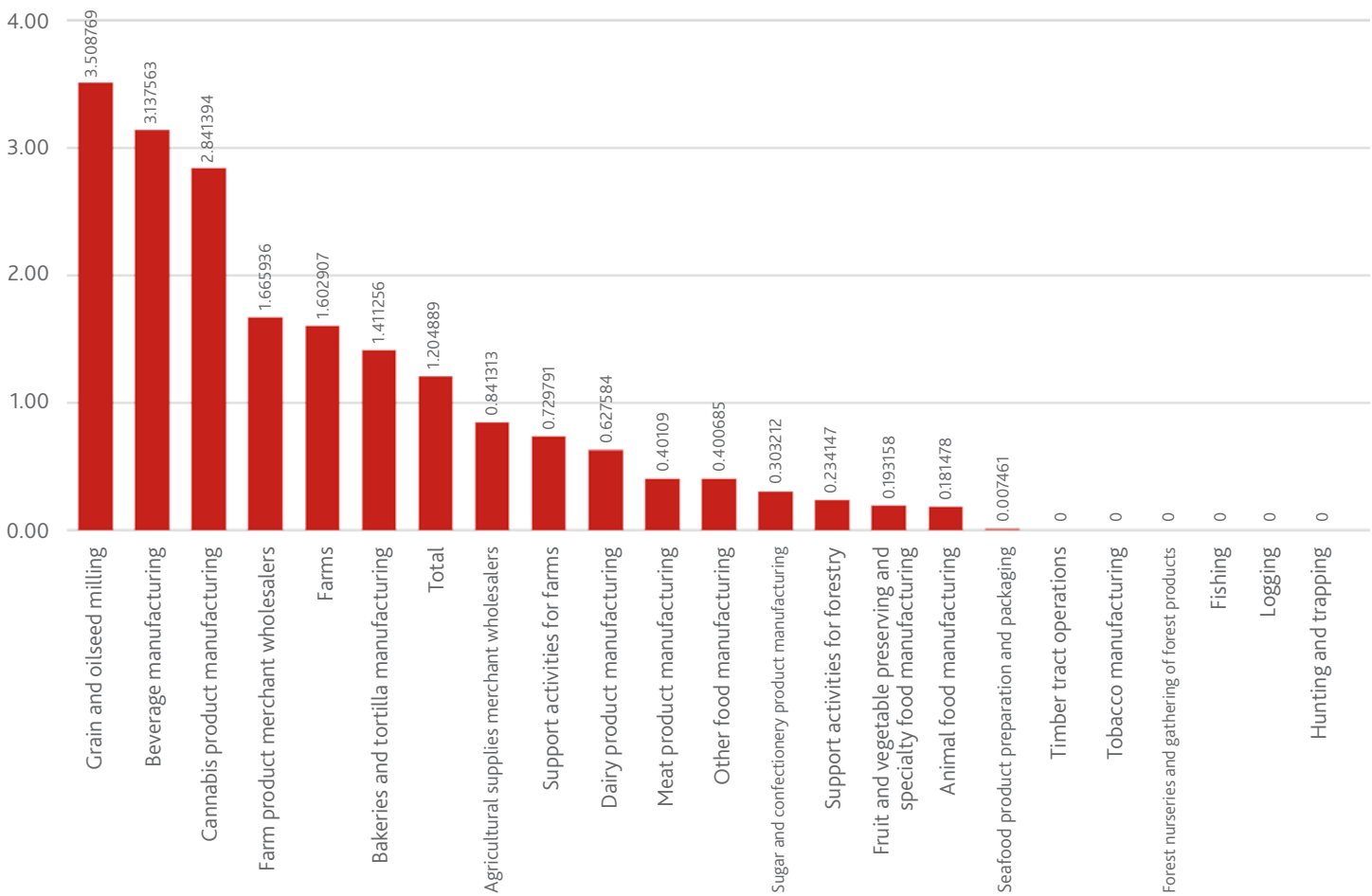
For greater clarity about Niagara's current state of competitiveness in the agribusiness sector, Figure 3 arranges the LQ scores of the respective occupations from highest to lowest. As the graph indicates, relative to other regions across Canada, Niagara boasts a strong showing in several industries such as "Grain and oilseed milling" (3.51); "Beverage manufacturing" (3.14); "Cannabis product manufacturing" (2.84); "Farm product merchant wholesalers" (1.67); and "Farms" (1.60).

Another related implication of these scores is the strong showing of several agribusiness manufacturing-related occupations, attesting to an agribusiness innovation ecosystem with a critical mass well above the national average. Worth noting is that despite the relative decline of jobs in farms and its support activities (as noted earlier), this industry still commands a strong competitiveness relative to the rest of Canada.

Furthermore, the strong LQ score of cannabis product manufacturing should come as no surprise given the massive scale of investment and uptake of activities in this industry over the past five years. Finally, for policy purposes, the high LQ scores point to industries where Niagara demonstrably boasts critical specialization and is thus worthy of greater attention. Equally important in terms of economic development strategy is that the modest LQ scores in industries like "Support activities for farms" (0.73); "Dairy product manufacturing" (0.63); "Meat product manufacturing" (0.40); and "Other food manufacturing" (0.40) should draw our attention to the need for some policy deliberation about expanding local innovation capacities across the full spectrum of the agribusiness sector. While some of these industries have seen positive growth trends over the past two decades, their competitiveness in Niagara relative to other regions in Canada is still lacklustre.

A final point worth highlighting, as Table 4 reveals, is that Niagara outpaces the provincial scores in all of its five most competitive industries in the agribusiness sector.

Table 4: Niagara's national location quotient for agribusiness jobs, 2022, compared with Ontario

Industry	Niagara	Ontario
Grain and oilseed milling	3.51	1.01
Beverage manufacturing	3.14	1.09
Cannabis product manufacturing	2.84	1.03
Farm product merchant wholesalers	1.67	0.87
Farms	1.60	0.67
Bakeries and tortilla manufacturing	1.41	1.34
Agricultural supplies merchant wholesalers	0.84	0.88
Support activities for farms	0.73	0.66
Dairy product manufacturing	0.63	0.98
Meat product manufacturing	0.40	0.96
Other food manufacturing	0.40	0.91
Sugar and confectionery product manufacturing	0.30	1.15
Support activities for forestry	0.23	0.26
Fruit and vegetable preserving and specialty food manufacturing	0.19	0.77
Animal food manufacturing	0.18	1.09
Seafood product preparation and packaging	0.01	0.08
Timber tract operations	0.00	0.76
Fishing	0.00	0.08
Logging	0.00	0.28
Forest nurseries and gathering of forest products	0.00	0.37
Hunting and trapping	0.00	0.75
Tobacco manufacturing	0.00	0.75

Occupations in Agribusiness

As noted earlier, while the distribution of jobs by industry gives us a good picture of current trends in Niagara's agribusiness sector, another lens through which we can view such trends is the distribution of jobs by occupation. The importance of this lens is that it shows us the *types* of jobs people hold in the sector, shedding light on the human and talent dimensions of the agribusiness sector, providing insights into the nature of skillsets or expertise required. This information leads to effective policy responses as it allows us to make inferences about the region's existing talent pool and its implications for innovation, adaptability and resilience.

When viewed through the lens of jobs by occupation, we see changes in Niagara's agribusiness sector through a slightly different lens.

Table 5 shows the change in Niagara's top agribusiness occupations, comparing those in 2001 with those in 2022.

In 2001, "Nursery and greenhouse workers" (1,218 jobs) reigned as the top occupation but has been dethroned by "Managers in agriculture" (1,046 jobs).

Table 6 compares the percentage changes in top occupations in agribusiness between 2001 and 2022. "Process control and machine operators, food and beverage processing" has seen the largest growth with 94 per cent, outpacing provincial growth of 33 per cent and national growth of 30 per cent. This growth is followed in distant second by "Managers in agriculture" which reports an increase of 11 per cent. While a modest growth, it is worth noting that it happened while the provincial and national numbers for this industry declined by 37 per cent and 39 per cent, respectively. The same observation holds for "General farm workers" with an increase of seven per cent in Niagara in the face of provincial and national declines. While "Labourers in food and beverage processing" and "Nursery and greenhouse workers" remain top occupations, their numbers have declined over the past two decades.

Table 5: Niagara's top agribusiness occupations by job numbers, 2001 to 2022

Occupations	2001
Nursery and greenhouse workers	1,218
Managers in agriculture	942
General farm workers	908
Process control and machine operators, food and beverage processing	425
Labourers in food and beverage processing	361
Occupations	**2022**
Managers in agriculture	1,046
General farm workers	973
Nursery and greenhouse workers	898
Process control and machine operators, food and beverage processing	825
Labourers in food and beverage processing	314

Table 6: Niagara's top agribusiness occupations, percentage change in jobs, 2001–2022; Niagara, Ontario and Canada compared

Occupations	Niagara	Ontario	Canada
Process control and machine operators, food and beverage processing	94%	33%	30%
Managers in agriculture	11%	(37%)	(39%)
General farm workers	7%	(6%)	(5%)
Labourers in food and beverage processing	(13%)	(8%)	2%
Nursery and greenhouse workers	(26%)	(10%)	(11%)

As Table 7 indicates (and Figure 4 illustrates), Niagara has seen massive spikes in "Supervisors, food and beverage processing" (259 per cent) and "Process control and machine operators, food and beverage processing" (111 per cent) over the past two decades. Over the same period, the region also reported modest but healthy increased growth in "Agricultural representatives, consultants and specialists" (57.93 per cent), "Managers in horticulture" (13 per cent), "Fish and seafood plant workers" (12 per cent), "Managers in agriculture" (11 per cent), and "General farm workers" (nine per cent).

Table 7: Niagara's percentage growth in agribusiness jobs by occupation, 2001 to 2022

Occupations	Total %
Supervisors, food and beverage processing	259.37%
Process control and machine operators, food and beverage processing	111.17%
Agricultural representatives, consultants and specialists	57.93%
Managers in horticulture	12.96%
Fish and seafood plant workers	12.46%
Managers in agriculture	10.61%
General farm workers	8.70%
Labourers in food and beverage processing	4.31%
Aquaculture and marine harvest labourers	1.49%
Agricultural service contractors, farm supervisors and specialized livestock workers	(1.49%)
Testers and graders, food and beverage processing	(11.37%)
Nursery and greenhouse workers	(21.86%)
Harvesting labourers	(38.53%)
Agricultural and fish products inspectors	(50.67%)

Figure 4: Niagara's percentage growth in agribusiness jobs by occupation, 2001–2022 (sorted highest to lowest)
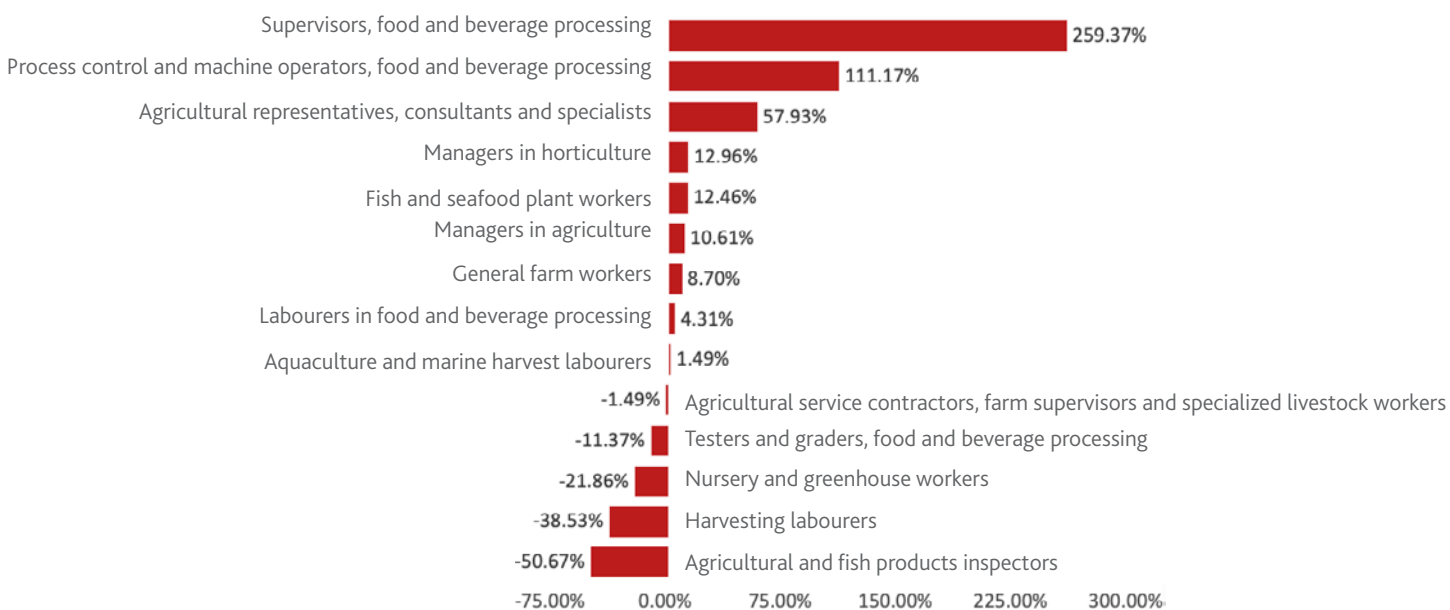
Among the agribusiness occupations in Niagara that have seen declines over the past two decades, two of them are noteworthy: "Nursery and greenhouse workers" (-21.86 per cent) and "Harvesting labourers" (-38.53 per cent).

Given the centrality of these two industries to the region's agribusiness configuration, these numbers call for some close attention to the region's long-term labour force strategy for the sector. [3]

SECTION 2: CHANGES IN AGRIBUSINESS, NIAGARA & OTHER ONTARIO MIDSIZED REGIONS COMPARED

In this section, we examine changes in Niagara's agribusiness sector, comparing trends in the region with those in a select number of comparative midsized regions. These regions were selected due their relative strength in the agribusiness sector as well as their demographic similarity to Niagara. For simplicity, the analysis focuses on NAICS data, examining changes in jobs by industry.

In Table 8, we see a summary of change in the agribusiness sector, comparing job trends in Niagara with those of other Ontario midsize regions: Hamilton, London, and Windsor. Niagara witnessed an overall decline of four per cent, relatively similar to Windsor's decline of three per cent, but better than London which has seen a drop of seven per cent in overall jobs by industry. Only Hamilton reported an overall growth of five per cent. Figure 5a illustrates these broad trends among the four regions.

Table 8: Change in agribusiness jobs, 2001–2022; Niagara and other Ontario regions compared

Regions	2001 Jobs	2022 Jobs	Change	Percentage Change
Niagara	8,742	8,360	(382)	(4%)
Hamilton	11,662	12,301	639	5%
London	10,336	9,635	(701)	(7%)
Windsor	3,386	3,291	(96)	(3%)

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[3] Temporary foreign workers are reflected in the data

Figure 5a: Percentage growth in agribusiness jobs by industry, 2001–2022; Niagara and other Ontario regions compared
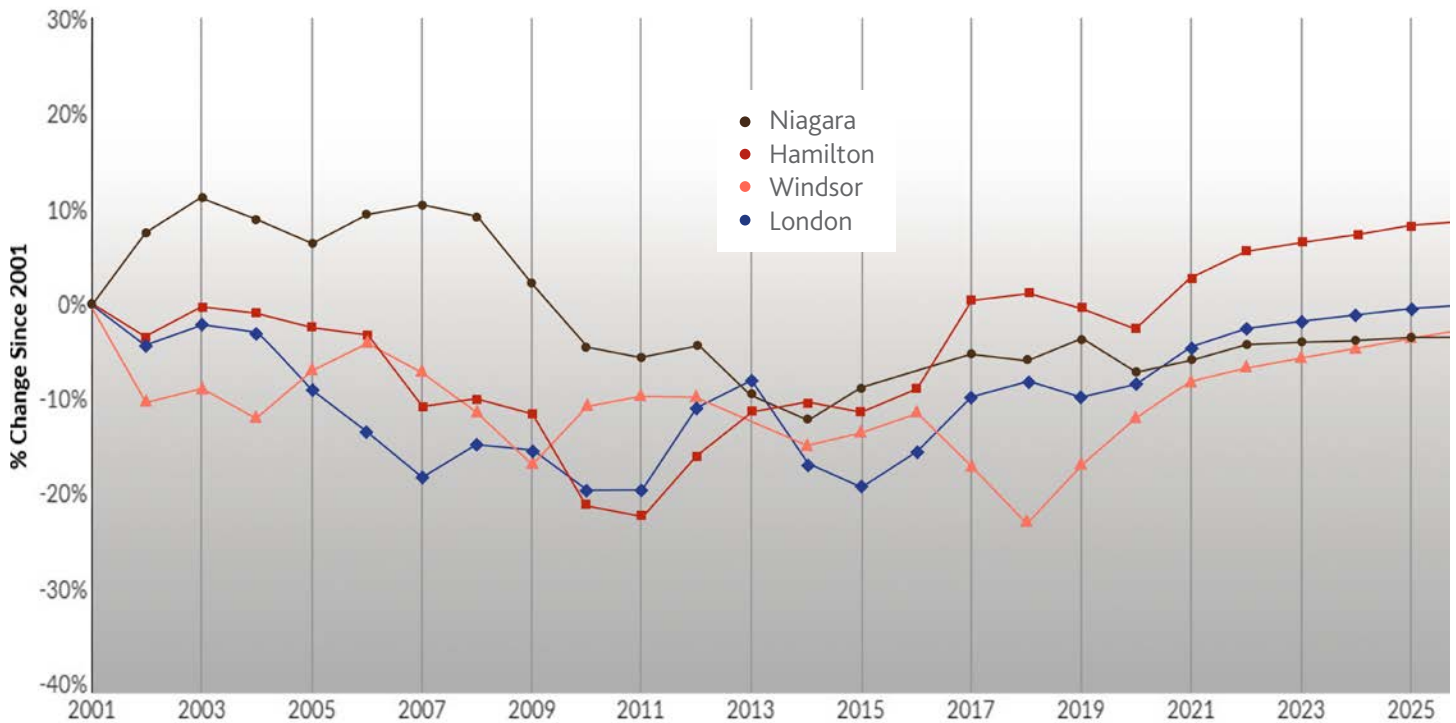

Figure 5a offers a visual portrait of industry job trends over the past two decades, with all regions now recovering from substantial job losses early in the period. However, in Niagara the upswing in jobs over the past decade has not been enough to recover those losses and it now sits at the bottom of the pack.

To focus more closely on this trend, Figure 5b illustrates growth in agribusiness jobs, by industry over the past decade (between 2011 and 2022), comparing Niagara with other midsized regions. Niagara has grown over the past decade, but its growth rate compares unfavourably with peer regions.

Figure 5b: Percentage change in agribusiness jobs by industry, 2011–2022; Niagara and other Ontario regions compared
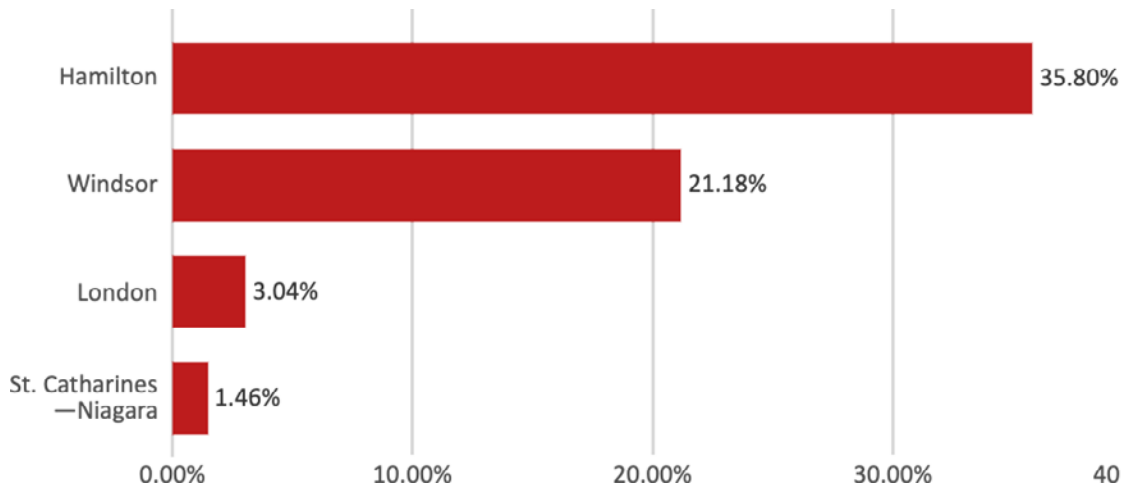
Table 9: Percentage change in agribusiness jobs by industry, 2001–2022; Niagara and other Ontario regions compared

Industry	Niagara	Hamilton	London	Windsor
Other food manufacturing	107%	80%	218%	87%
Beverage manufacturing	95%	(20%)	(18%)	(5%)
Dairy product manufacturing	92%	17%	(16%)	(10%)
Bakeries and tortilla manufacturing	39%	54%	1%	(21%)
Farms	(4%)	(9%)	(16%)	2%
Grain and oilseed milling	(23%)	(12%)	(90%)	(11%)
Support activities for farms	(37%)	(21%)	(23%)	(79%)
Agricultural supplies merchant wholesalers	(38%)	(136%)	(51%)	106%
Farm product merchant wholesalers	(52%)	(11%)	(130%)	(28%)
Meat product manufacturing	(56%)	51%	(24%)	97%
Sugar and confectionery product manufacturing	(83%)	(69%)	(67%)	(26%)
Animal food manufacturing	(84%)	(62%)	58%	(100%)
Fruit and vegetable preserving and specialty food manufacturing	(89%)	(39%)	15%	(5%)

According to Table 9, the overall picture reveals a broad pattern of decline in a relatively large number of agribusiness industries. However, a few industries point to significant and promising trajectories of knowledge-intensive food manufacturing activities where Niagara seems to have outperformed its peers. These include industries like "Other food manufacturing" (107 per cent); "Beverage manufacturing" (95 per cent); "Dairy product manufacturing" (92 per cent); and "Bakeries and tortilla manufacturing" (39 per cent). Among these top performing industries, Niagara led the overall growth trends in "Beverage manufacturing" and "Dairy product manufacturing". These industries point to Niagara's competitive advantage relative to other regions with agribusiness assets of note. All four regions have done very well in "Other food manufacturing" but only Niagara has performed positively in "Beverage manufacturing".

Competitiveness (Location Quotient Scores)

However, for an even clearer picture of how Niagara is faring in each of these agribusiness industries compared to other regions in Ontario, we juxtapose Niagara's LQ scores with the same midsize regions. Table 10 provides the industry LQ scores of these regions with established reputation in the agribusiness sector. Relative to these other regions, Niagara reported high LQ scores in "Beverage manufacturing" (3.14); "Cannabis product manufacturing" (2.84); "Farm product merchant wholesalers" (1.67); "Farms" (1.60); and "Bakeries and tortilla manufacturing" (1.41).

What the table also offers is a panoramic portrait that highlights potential opportunities to explore collaborations across regions sharing similar agribusiness sector strengths but with variation in industry-specific specialization within the sector. For instance, discussions about a mega-cluster strategy involving Niagara and Hamilton would require a juxtaposition of the respective industry LQ scores in the two regions to identify areas of relative strengths. This means innovation systems supporting the agribusiness sector in the two regions could leverage their respective specializations to build integrated networks of value chains with agglomeration advantages and shared learning between the two regions. The cultivation of an agribusiness "mega-cluster" strategy provides a wider industrial corridor wherein key industries and their respective associations in the sector align their resources and investment priorities with various adjacent regions.

One good (even if still nascent) example is the emergent Golden Horseshoe Food and Farming Alliance formed to strengthen the agri-food cluster in Canada's most densely-populated region. For a region the size of Niagara, mega-clusters provide strategic opportunities for the region to leverage its assets, "gang up" with the bigger players, punch above its weight and carve its own niche in a highly competitive global agribusiness landscape. Building such mega-clusters spanning two or more regions requires appropriate platforms of locally embedded and integrated processes of strategic visioning, planning, and implementation.

Table 10: Agribusiness national location quotient by industry, 2022; Niagara and other Ontario regions compared

| Industry	Niagara	Hamilton	London	Windsor
Grain and oilseed milling	3.51	0.94	0.64	2.54
Beverage manufacturing	3.14	0.77	1.49	2.16
Cannabis product manufacturing	2.84	0.75	1.37	2.14
Farm product merchant wholesalers	1.67	1.08	3.41	0.75
Farms	1.60	0.52	0.80	0.37
Bakeries and tortilla manufacturing	1.41	2.21	0.99	0.58
Agricultural supplies merchant wholesalers	0.84	1.10	0.82	0.35
Support activities for farms	0.73	0.72	0.56	0.30
Dairy product manufacturing	0.63	0.46	1.28	0.14
Meat product manufacturing	0.40	2.62	0.84	0.22
Other food manufacturing	0.40	0.70	2.16	0.30
Sugar and confectionery product manufacturing	0.30	1.71	0.62	0.19
Support activities for forestry	0.23	0.02	0.38	0.04
Fruit and vegetable preserving and specialty food manufacturing	0.19	1.13	1.00	2.69
Animal food manufacturing	0.18	0.14	1.81	0.00

Wages

Another lens for determining the vitality of Niagara's agribusiness sector is comparing the industrial wage distribution of the sector to those of similar regions. As indicated in Figure 6, Niagara reported the lowest median income of only $34,379. Niagara's performance in this wage distribution of the sector across regions is cause for concern since it reflects a general pattern in which industries in the region register lower pay scales for residents compared to their counterparts in other regions. While these wage differences seem somewhat small, they account for some of the talent outmigration that could plague the long-term prospects of the region especially as it seeks to build on agribusiness as one of its areas of specialization and competitive advantage over the next decade.

On the positive side, Niagara's lower median average in the sector could be pitched as a competitive advantage in the race among regions to attract potential investors. In a similar vein, Niagara's lower-median wage within the mosaic of the global technology landscape in a complex network of value chains and trade interdependencies could be leveraged in addition to its industry specializations discussed above.

However, suppressed wages in the region's agribusiness sector has ethical and industrial relations implications for employers and employees. Such issues could adversely affect the social trust and functional integrity of the region's agribusiness ecosystem. Most importantly, issues of wage distribution and industry specialization should form critical components of the region's smart specialization strategy in any potential mega-tech cluster spanning the Golden Horseshoe.

Figure 6: Agribusiness median annual income, Niagara and other Ontario regions compared
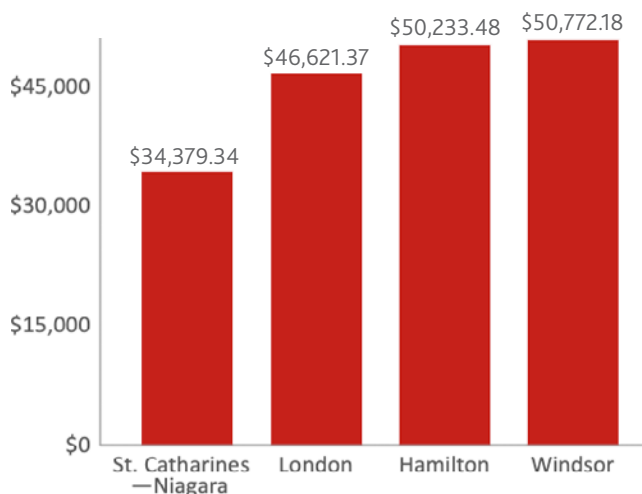
In this section, we examine changes in Niagara's agribusiness sector, comparing trends among the region's local municipalities. For simplicity, the analysis focuses on NAICS data, examining changes in jobs by industry.

Table 11 shows the 20-year trend in Niagara's agribusiness sector broken down by local municipalities (Census Subdivisions, CSD). In terms of overall sector jobs in 2022, Lincoln leads the pack with 2,057 jobs, followed by Niagara-on-the-Lake with 2,019 jobs, and St. Catharines with 1,273 jobs.

However, in terms of overall agribusiness job growth rate over the past 20 years, as illustrated in Figure 7,

Fort Erie stands out with a 24 per cent gain. Wainfleet and Niagara-on-the-Lake also register positive growth trends. The rest of the municipalities have seen an overall decline over the past two decades with Pelham trailing last, registering an agribusiness jobs decline of 27 per cent.

Measured by their relative industrial competitiveness as indicated by LQ scores in Figure 8, the municipalities with the strongest competencies relative to all of Canada are Wainfleet (6.74) Lincoln (4.54) and Niagara-on-the-Lake (3.53). The rest of the municipalities report LQ scores below the national baseline of sectoral competitiveness, with Welland reporting the lowest score of 0.23.

Table 11: Agribusiness job growth, 2001–2022, and location quotient by CSD

Census Subdivisions	2001 Jobs	2022 Jobs	2001–2022 Change	2001–2022 % Change	2022 Location Quotient
Lincoln	2,078	2,057	(21)	(1%)	4.54
Niagara-on-the-Lake	1,874	2,019	145	8%	3.53
St. Catharines	1,337	1,273	(64)	(5%)	0.53
Niagara Falls	982	780	(202)	(21%)	0.50
Pelham	710	519	(191)	(27%)	2.67
Port Colborne	546	411	(135)	(25%)	1.60
Wainfleet	397	442	45	11%	6.74
Fort Erie	379	470	91	24%	1.17
Thorold	272	233	(39)	(14%)	0.64
Welland	165	155	(10)	(6%)	0.23

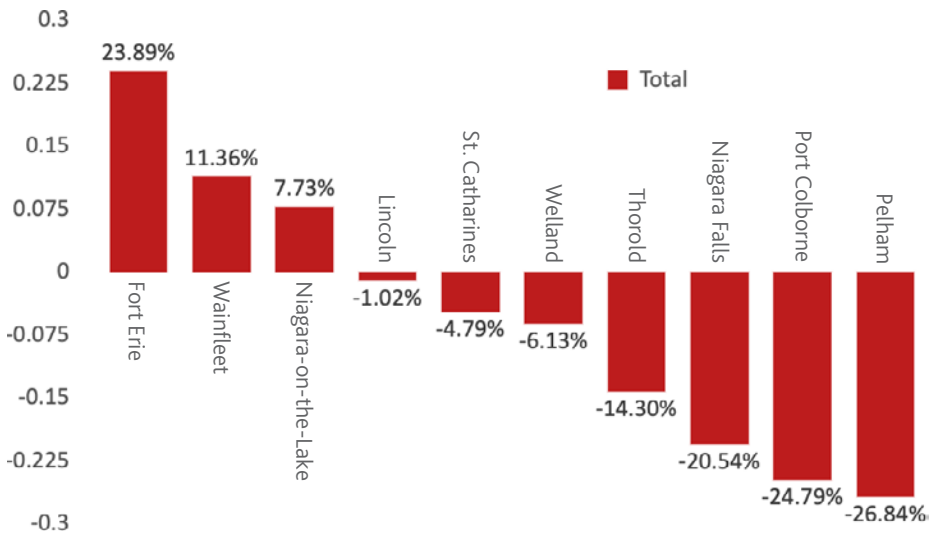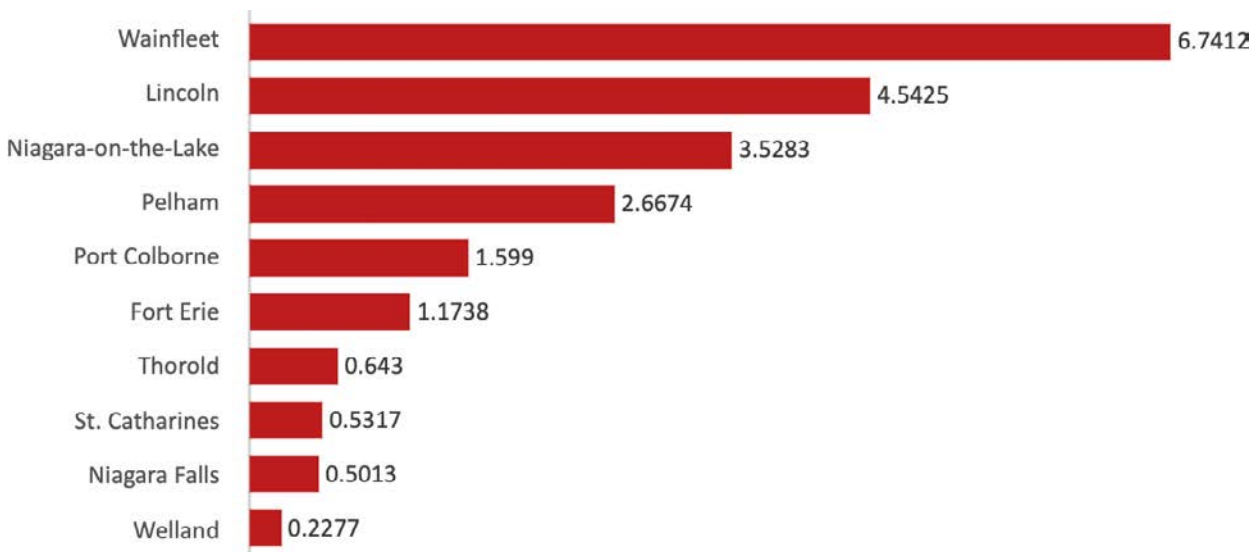**Figure 7:** Niagara's percentage job growth in agribusiness by CSD, 2001–2022

Figure 8: Niagara's national location quotient for agribusiness jobs, by CSD

References

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