

**Briefing Document on Employment, Wages and Hours in  
New York State's Agriculture Industry**

**Prepared for the  
Farm Laborers Wage Board Hearings**

**February 2020**

by Division of Research and Statistics  
New York State Department of Labor

## Briefing Document on Employment, Wages and Hours in New York State's Agriculture Industry

### **Section I. Statewide and Regional Establishment, Employment and Wages in New York's Agriculture Industry**

This section presents data on the number of establishments, employment levels and wages in New York State's agriculture industry in 2018. Both statewide and regional information are presented. The regions used here correspond to the New York State Department of Labor's 10 labor market regions. (See Appendix I for additional information.)

Data presented here are from New York's Quarterly Census of Employment and Wages (QCEW) program. That data uses the 2017 version of the North American Industry Classification System (NAICS), which classifies agriculture under two NAICS codes: 111 (Crop Production) and 112 (Animal Production and Aquaculture).

The Crop Production subsector (NAICS 111) is comprised of:

- Industries that grow crops mainly for food and fiber.
- Establishments, such as farms, orchards, groves, greenhouses, and nurseries, primarily engaged in growing crops, plants, vines, or trees and their seeds.

The Animal Production and Aquaculture subsector (NAICS 112) is comprised of:

- Industries that raise or fatten animals for the sale of animals or animal products and/or raise aquatic plants and animals in controlled or selected aquatic environments for the sale of aquatic plants, animals, or their products.
- Establishments, such as ranches, farms, and feedlots, primarily engaged in keeping, grazing, breeding, or feeding animals.

See Appendix II for official descriptions of these industry subsectors.

### **Agriculture Industry Analysis**

In 2018, New York's agriculture industry employed just under 24,000 workers with overall wages totaling more than \$842.3 million, according to the QCEW program. Annual wages averaged over \$35,800. However, it is important to note that the QCEW employment data only include workers covered by unemployment insurance. During the time period that these data represent, employers of persons engaged in agricultural labor were exempt from unemployment insurance coverage unless they paid more than \$20,000 in wages in any calendar quarter or employed 10 or more persons. Thus, it is likely that these estimates do not include some small farms. The QCEW data also exclude proprietors, the unincorporated self-employed, unpaid family members, and certain domestic workers.

Within the overall agriculture industry, Crop Production (NAICS 111) accounted for just over half of total employment and wages (54.2% and 50.7%, respectively). However, the annual average wage (\$33,446) in Crop Production was 6.6% lower than the overall industry average. At the same time, the Animal Production and Aquaculture subsector (NAICS 112) comprised 45.6% of total agricultural employment and 49.3% of the total wages. Despite its smaller payroll, the annual average wage in this subsector (\$38,618) was 7.8% greater than the corresponding figure for the overall industry.

Of the 10 labor market regions in the state, the Finger Lakes had the most agricultural establishments (472) and highest employment level (6,343) in 2018. The Finger Lakes also had the third-highest annual average wage (\$36,438) behind New York City (\$62,523) and Long Island (\$41,574). In contrast, New York City had the fewest establishments (9) and lowest employment level (149) in the agriculture industry. The Mohawk Valley paid the lowest average wage (\$28,055).

Table 1. New York State and Regional Employment and Wages for  
 NAICS 111 (Crop Production) and 112 (Animal Production and Aquaculture)  
 2018 Annual Average

Area	NAICS	Establishments	Annual Average Employment	Total Wages	Annual Average Wage
<b>New York State</b>	111	1,125	12,761	\$426,803,549	\$33,446
	112	871	10,761	\$415,563,477	\$38,618
	<b>Agriculture Industry</b>	<b>1,996</b>	<b>23,523</b>	<b>\$842,367,026</b>	<b>\$35,810</b>
<b>Capital Region</b>	111	90	936	\$26,383,644	\$28,188
	112	107	1,398	\$58,129,456	\$41,580
	<b>Agriculture Industry</b>	<b>197</b>	<b>2,334</b>	<b>\$84,513,100</b>	<b>\$36,210</b>
<b>Central NY</b>	111	90	940	\$28,069,792	\$29,861
	112	105	1,496	\$56,343,345	\$37,663
	<b>Agriculture Industry</b>	<b>195</b>	<b>2,436</b>	<b>\$84,413,137</b>	<b>\$34,652</b>
<b>Finger Lakes</b>	111	289	3,619	\$120,333,565	\$33,251
	112	183	2,724	\$110,792,688	\$40,673
	<b>Agriculture Industry</b>	<b>472</b>	<b>6,343</b>	<b>\$231,126,253</b>	<b>\$36,438</b>
<b>Hudson Valley</b>	111	192	2,376	\$75,537,085	\$31,792
	112	71	732	\$30,565,751	\$41,756
	<b>Agriculture Industry</b>	<b>263</b>	<b>3,108</b>	<b>\$106,102,836</b>	<b>\$34,139</b>
<b>Long Island</b>	111	160	2,310	\$95,213,171	\$41,218
	112	28	156	\$7,307,500	\$46,843
	<b>Agriculture Industry</b>	<b>188</b>	<b>2,466</b>	<b>\$102,520,671</b>	<b>\$41,574</b>
<b>Mohawk Valley</b>	111	45	217	\$4,714,185	\$21,724
	112	68	481	\$14,868,136	\$30,911
	<b>Agriculture Industry</b>	<b>113</b>	<b>698</b>	<b>\$19,582,321</b>	<b>\$28,055</b>
<b>New York City</b>	111	NA	NA	NA	NA
	112	NA	NA	NA	NA
	<b>Agriculture Industry</b>	<b>9</b>	<b>149</b>	<b>\$9,315,946</b>	<b>\$62,523</b>
<b>North Country</b>	111	41	558	\$17,360,869	\$31,113
	112	118	1,749	\$66,275,198	\$37,893
	<b>Agriculture Industry</b>	<b>159</b>	<b>2,307</b>	<b>\$83,636,067</b>	<b>\$36,253</b>
<b>Southern Tier</b>	111	68	405	\$11,860,208	\$29,284
	112	95	936	\$32,915,908	\$35,167
	<b>Agriculture Industry</b>	<b>163</b>	<b>1,341</b>	<b>\$44,776,116</b>	<b>\$33,390</b>
<b>Western NY</b>	111	134	1,228	\$37,092,688	\$30,206
	112	83	1,045	\$36,919,548	\$35,330
	<b>Agriculture Industry</b>	<b>217</b>	<b>2,273</b>	<b>\$74,012,236</b>	<b>\$32,561</b>

Source: Quarterly Census of Employment and Wages

Note: Detail will not add to total due to missing address information

NA: Data were suppressed due to comply with confidentiality rules

Agriculture Industry = NAICS 111 plus NAICS 112

Table 2 below shows the size distribution of employment and wages by farm size, based on the number of workers, for both the Crop Production (NAICS 111) and Animal Production and Aquaculture (NAICS 112) subsectors as well as both subsectors combined. All data all come from New York’s Quarterly Census of Employment and Wages program.

The distribution of farm industry employment is markedly skewed, with agricultural establishments employing fewer than 10 workers (1,290) far outnumbering the count of establishments in any other size class. These smallest establishments also paid the lowest annual average wage (\$29,662). Establishments that employ between 50 and 99 workers paid the highest wages in the agriculture industry (\$41,867).

Table 2. New York State Size of Establishment Data for  
 NAICS 111 (Crop Production) and 112 (Animal Production and Aquaculture)  
*Based on Year 2018 Annual Average Employment*

NAICS	Size Class (Number of Workers)	Establishments	Annual Average Employment	Total Wages	Annual Average Wage
111	<b>Total</b>	<b>1,125</b>	<b>12,761</b>	<b>\$426,803,549</b>	<b>\$33,446</b>
	1-9	766	2,814	\$80,380,897	\$28,565
	10-19	176	2,420	\$74,425,851	\$30,754
	20-49	147	4,344	\$153,511,488	\$35,339
	50-99	29	1,997	\$81,293,439	\$40,708
	100 +	7	1,186	\$37,191,874	\$31,359
112	<b>Total</b>	<b>871</b>	<b>10,761</b>	<b>\$415,563,477</b>	<b>\$38,618</b>
	1-9	524	2,179	\$67,721,798	\$31,079
	10-19	189	2,484	\$88,968,150	\$35,816
	20-49	134	3,780	\$151,326,809	\$40,034
	50-99	18	1,159	\$50,837,953	\$43,864
	100 +	6	1,159	\$56,708,767	\$48,929
Total	<b>Total</b>	<b>1,996</b>	<b>23,523</b>	<b>\$842,367,026</b>	<b>\$35,810</b>
	1-9	1,290	4,993	\$148,102,695	\$29,662
	10-19	365	4,904	\$163,394,001	\$33,319
	20-49	281	8,125	\$304,838,297	\$37,519
	50-99	47	3,156	\$132,131,392	\$41,867
	100 +	13	2,345	\$93,900,641	\$40,043

Source: Quarterly Census of Employment and Wages

## Section II. Characteristics of Agricultural Workers

Table 3 compares worker characteristics in all private industries and the Crop Production (NAICS 111) and Animal Production and Aquaculture (NAICS 112) subsectors, based on 2014-18 data from the American Community Survey. Table 4 shows the top 10 industries in the state by share of employment working 60 hours or more per week.

### Workforce Characteristics Analysis

- Agricultural workers tend to be slightly younger than the average worker in all private industries.
- Within the agricultural workforce, the number of males far outweigh the number of females, comprising nearly three out of four workers.
- Agricultural employees tend to work longer hours compared to the average worker in all private industries. The share of agricultural employees working more than 41 hours per week (41.9%) is much greater than that of the average private sector worker (25.6%).
- Breaking it down even further, we see that the share of usual hours worked per week by agricultural employees is greater for each cohort except 40 hours per week (28.4% compared to 44.7% of private sector workers) and less than 40 hours per week (29.6% compared to 29.7% of private sector workers).
  - The share of agricultural employees working 41-50 hours per week (17.6%) is slightly greater than that of all private sector workers (17.3%).
  - The share of agricultural employees working 51-60 hours per week (13.1%) is more than double that of all private sector workers (6.1%).
  - The share of agricultural employees working more than 60 hours per week (11.2%) is more than five times that of all private sector workers (2.2%).
- Both Crop Production (NAICS 111) and Animal Production and Aquaculture (NAICS 112) rank among New York's top 10 industries usually working 60 hours or more per week in 2014-18. Animal Production and Aquaculture ranks first, with 18.1% of employees working 60+ hours per week, while Crop Production ranks seventh with a share of 5.5%.

Table 3. Selected Characteristics of Workers in  
NAICS 111 (Crop Production) and 112 (Animal Production and Aquaculture)  
*New York State, 2014-2018*

	All Private Industries		Crop Production		Animal Production and Aquaculture	
	Workers	% of Workers	Workers	% of Workers	Workers	% of Workers
<b>Total (Aged 16 +)</b>	<b>6,098,756</b>	<b>100.0%</b>	<b>12,063</b>	<b>100.0%</b>	<b>10,012</b>	<b>100.0%</b>
<b>Age Group</b>						
16-24	853,623	14.0%	2,552	21.2%	2,874	28.7%
25-34	1,590,046	26.1%	2,680	22.2%	2,294	22.9%
35-54	2,472,051	40.5%	4,181	34.7%	3,391	33.9%
55 +	1,183,036	19.4%	2,650	22.0%	1,453	14.5%
<b>Gender</b>						
Male	3,270,349	53.6%	8,812	73.0%	7,517	75.1%
Female	2,828,407	46.4%	3,251	27.0%	2,495	24.9%
<b>Race (includes Hispanic or Latino)</b>						
White alone	3,912,233	64.1%	9,422	78.1%	8,590	85.8%
Black or African American alone	854,294	14.0%	229	1.9%	109	1.1%
All other	1,332,229	21.8%	2,412	20.0%	1,313	13.1%
<b>Ethnicity</b>						
Not Hispanic or Latino	4,905,162	80.4%	9,318	77.2%	8,135	81.3%
Hispanic or Latino	1,193,594	19.6%	2,745	22.8%	1,877	18.7%
<b>Citizenship</b>						
Citizen	5,230,893	85.8%	9,518	78.9%	8,604	85.9%
Not a Citizen	867,863	14.2%	2,545	21.1%	1,408	14.1%
<b>Educational Attainment (Aged 25 +)</b>						
Less Than High school	543,975	10.4%	2,067	21.7%	1,951	27.3%
High School Diploma or GED	1,318,307	25.1%	3,752	39.4%	2,600	36.4%
Associate's Degree/Some College	1,382,512	26.4%	1,843	19.4%	1,615	22.6%
Bachelor's Degree or Higher	2,000,339	38.1%	1,849	19.4%	972	13.6%
<b>Usual Hours Worked per Week</b>						
Less than 40	1,813,546	29.7%	3,607	29.9%	2,934	29.3%
40 hours	2,725,040	44.7%	4,249	35.2%	2,030	20.3%
41-50 hours	1,052,586	17.3%	2,390	19.8%	1,502	15.0%
51-60 hours	374,761	6.1%	1,155	9.6%	1,736	17.3%
60 + hours	132,823	2.2%	662	5.5%	1,810	18.1%

Source: 2014-2018 ACS Public Use Microdata (PUMS) 5-Year Estimates

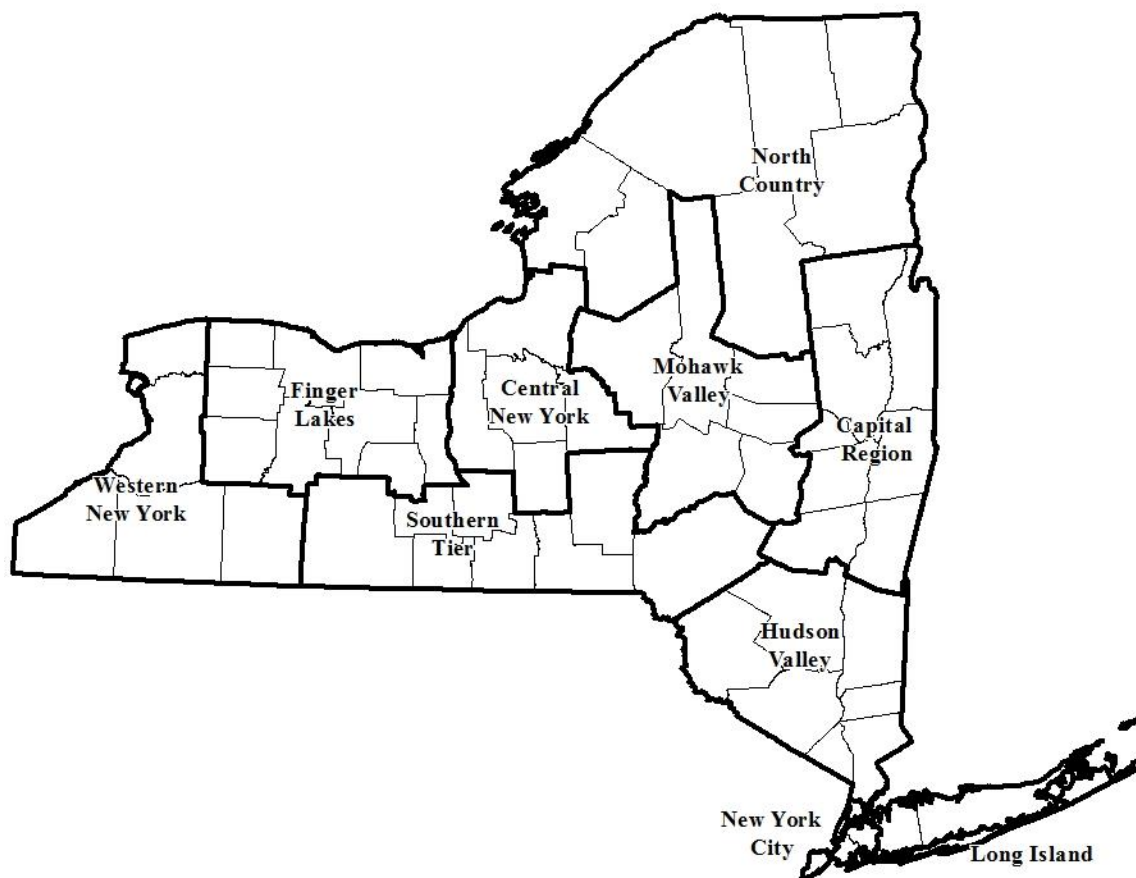
Table 4. Top 10 Industries by Share of Employment  
 Usually Working More than 60 Hours per Week  
*New York State, 2014-2018*

Industry	Total Workers	Usually Working More than 60 Hours per Week	
		Workers	Percent
Animal Production and Aquaculture	10,012	1,810	18.1%
Support Activities for Mining	1,357	164	12.1%
Water Transportation	2,720	219	8.1%
Truck Transportation	44,839	3,328	7.4%
Mining (except Oil and Gas)	3,860	283	7.3%
Banking and Related Activities and Securities, Commodities, Funds, Trusts, and Other Financial Investments*	286,309	16,168	5.6%
Crop Production	12,063	662	5.5%
Oil and Gas Extraction	538	28	5.2%
Credit Intermediation and Related Activities	62,757	3,147	5.0%
Rail Transportation	7,166	301	4.2%

\*Represents a roll-up of NAICS industries 521, 52211, 52219, 523 and 525  
 Source: 2014-2018 ACS Public Use Microdata (PUMS) 5-Year Estimates



## Appendix I: Labor Market Regions in New York State



### Labor Market Regions

- **Capital Region:** Albany, Columbia, Greene, Rensselaer, Saratoga, Schenectady, Warren, and Washington counties.
- **Central New York:** Cayuga, Cortland, Madison, Onondaga, and Oswego counties.
- **Finger Lakes:** Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Wayne, Wyoming, and Yates counties.
- **Hudson Valley:** Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster and Westchester counties.
- **Long Island:** Nassau and Suffolk counties.
- **Mohawk Valley:** Fulton, Herkimer, Montgomery, Oneida, Otsego, and Schoharie counties.
- **New York City:** Bronx, Kings, New York, Queens and Richmond counties.
- **North Country:** Clinton, Essex, Franklin, Hamilton, Jefferson, Lewis, and St. Lawrence counties.
- **Southern Tier:** Broome, Chemung, Chenango, Delaware, Schuyler, Steuben, Tioga, and Tompkins counties.
- **Western New York:** Allegany, Cattaraugus, Chautauqua, Erie, and Niagara counties.

## **Appendix II: NAICS Industry Definitions**

### **2017 Definition of NAICS 111 – Crop Production**

Industries in the Crop Production subsector grow crops mainly for food and fiber. The subsector comprises establishments, such as farms, orchards, groves, greenhouses, and nurseries, primarily engaged in growing crops, plants, vines, or trees and their seeds.

The industries in this subsector are grouped by similarity of production activity, including biological and physiological characteristics and economic requirements, the length of growing season, degree of crop rotation, extent of input specialization, labor requirements, and capital demands. The production process is typically completed when the raw product or commodity grown reaches the "farm gate" for market, that is, at the point of first sale or price determination.

Establishments are classified in the Crop Production subsector when crop production (i.e., value of crops for market) accounts for one-half or more of the establishment's total agricultural production. Within the subsector, establishments are classified in a specific industry when a product or industry family of products (i.e., oilseed and grain farming, vegetable and melon farming, fruit and tree nut farming) account for one-half or more of the establishment's agricultural production. Establishments with one-half or more crop production with no one product or family of products of an industry accounting for one-half of the establishment's agricultural production are treated as general combination crop farming and are classified in Industry 11199, All Other Crop Farming.

### **2017 Definition of NAICS 112 – Animal Production and Aquaculture**

Industries in the Animal Production and Aquaculture subsector raise or fatten animals for the sale of animals or animal products and/or raise aquatic plants and animals in controlled or selected aquatic environments for the sale of aquatic plants, animals, or their products. The subsector includes establishments, such as ranches, farms, and feedlots, primarily engaged in keeping, grazing, breeding, or feeding animals. These animals are kept for the products they produce or for eventual sale. The animals are generally raised in various environments, from total confinement or captivity to feeding on an open range pasture.

The industries in this subsector are grouped by important factors, such as suitable grazing or pasture land, specialized buildings, type of equipment, and the amount and types of labor required. Establishments are classified in the Animal Production and Aquaculture subsector when animal production (i.e., value of animals for market) accounts for one-half or more of the establishment's total agricultural production. Establishments with one-half or more animal production with no one animal product or family of animal products of an industry accounting for one-half of the establishment's agricultural production are treated as combination animal farming classified in Industry 11299, All Other Animal Production.