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#### **Special Note**

Beginning with the third and fourth survey periods of year 2021 (July and October), the publication of quarterly and annual average base hours and base wage rate items is discontinued. Previously published quarterly and annual average base hours and base wage rate items, including those for year 2020 through April 2021, are accessible via the USDA-NASS Quick Stats searchable database.

Also, publication of United States/Regional annual average gross wage rates by Standard Occupational Classification (SOC) System is discontinued. Previously published United States/Regional annual average gross wage rates by SOC System are accessible via the USDA-NASS Quick Stats searchable database.

This program contraction led to a reduction in the sample size utilized for this and future survey periods. See the Survey Methodology section for more information.

#### October Hired Workers Up 2 Percent; Gross Wage Rate Increased 5 Percent from Previous Year

There were 772,000 workers hired directly by farm operators on the Nation's farms and ranches during the week of October 10-16, 2021, up 2 percent from the October 2020 reference week. Workers hired directly by farm operators numbered 797,000 during the week of July 11-17, 2021, up 3 percent from the July 2020 reference week.

Farm operators paid their hired workers an average gross wage of \$16.59 per hour during the October 2021 reference week, up 5 percent from the October 2020 reference week. Field workers received an average of \$16.08 per hour, up 5 percent. Livestock workers earned \$15.45 per hour, up 6 percent. The field and livestock worker combined gross wage rate, at \$15.92 per hour, was up 5 percent from the 2020 reference week. Hired laborers worked an average of 42.0 hours during the October 2021 reference week, down slightly from the hours worked during the October 2020 reference week.

Farm operators paid their hired workers an average gross wage of \$16.59 per hour during the July 2021 reference week, up 6 percent from the July 2020 reference week. Field workers received an average of \$16.10 per hour, up 7 percent, while livestock workers earned \$15.19 per hour, up 5 percent from a year earlier. The field and livestock worker combined gross wage rate, at \$15.85 per hour, was up 7 percent from the July 2020 reference week. Hired laborers worked an average of 41.0 hours during the July 2021 reference week, down 1 percent from the hours worked during the July 2020 reference week.

The 2021 all hired worker annual average gross wage rate was \$16.38 per hour, up 6 percent from the 2020 annual average gross wage rate. The 2021 field worker annual average gross wage rate was \$15.77 per hour, up 7 percent from the 2020 annual average. The 2021 livestock worker annual average gross wage rate was \$15.08 per hour. The 2021 annual average combined gross wage for field and livestock workers was \$15.56, up 6 percent from the 2020 annual average of \$14.62 per hour.

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## Hired Workers, Gross Hours Worked by Hired Workers, and Gross Wage Rates - United States

Farm employment	July 12-18, 2020	October 11-17, 2020	January 10-16, 2021	April 11-17, 2021	July 11-17, 2021	October 10-16, 2021
	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
Hired workers						
150 days or more	575	577	442	506	575	578
149 days or less		181	64	107	222	194
Total	777	758	506	613	797	772
	(hours per week)	(hours per week)	(hours per week)	(hours per week)	(hours per week)	(hours per week)
Gross hours worked by hired workers $\dots$	41.4	42.1	40.2	40.9	41.0	42.0
	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)
Gross wage rates <sup>1</sup>						
Field and livestock combined	14.85	15.10	15.08	15.06	15.85	15.92
Field workers	14.98	15.28	15.23	15.19	16.10	16.08
Livestock workers		14.62	14.87	14.81	15.19	15.45
All hired workers	15.62	15.87	16.21	15.97	16.59	16.59

<sup>&</sup>lt;sup>1</sup> Benefits, such as housing and meals, are provided to some workers but the values are not included in the gross wage rates.

# Number of Workers and Gross Hours Worked – Regions and United States: October 10-16, 2021

		Hired wo	orkers		
Regions <sup>1</sup> and United States	Number of	Expected to be	Expected to be employed		
Officed States	workers	150 days or more	149 days or less	hours worked	
	(1,000)	(1,000)	(1,000)	(hours per week)	
Northeast I	38 40	26 27	12 13	42.3 37.4	
Appalachian IAppalachian II	35 27	25 19	10 8	40.5 40.4	
Southeast	26 28	21 24	5 4	40.8 44.0	
Lake	64	48	16	41.3	
Cornbelt I	43 25	31 19	12 6	42.2 41.0	
Delta	36	27	9	45.7	
Northern Plains	45	31	14	48.8	
Southern Plains	42	34	8	41.2	
Mountain I Mountain II Mountain III	23 17 14	19 14 13	4 3 1	45.2 44.4 48.1	
Pacific California	104 160	52 144	52 16	38.0 42.7	
Hawaii	5	4	1	37.6	
United States	772	578	194	42.0	

<sup>&</sup>lt;sup>1</sup> Region map on page 26.

## Gross Wage Rates by Type of Worker - Regions and United States: October 10-16, 2021

Regions <sup>1</sup> and				
United States	Field workers	Livestock workers	Field and livestock combined <sup>2</sup>	Gross wage rates for all hired workers
	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)
Northeast I	16.03 16.17	15.46 14.96	15.85 15.96	16.48 16.77
Appalachian I	14.43 13.72	14.17 13.62	14.38 13.68	14.94 14.26
Southeast	11.43 12.55	12.91 12.50	11.75 12.54	12.40 13.30
Lake	16.71	15.01	15.88	16.57
Cornbelt I	16.24 17.11	15.89 16.09	16.16 16.77	16.77 17.26
Delta	12.45	12.83	12.53	12.91
Northern Plains	17.21	16.45	16.91	17.25
Southern Plains	14.20	13.82	14.01	14.37
Mountain I	15.13 15.93 14.92	15.24 15.78 15.79	15.18 15.87 15.28	15.74 16.55 16.01
Pacific California	17.48 17.90	17.18 18.45	17.45 17.98	18.14 18.84
Hawaii	17.40	17.70	17.44	18.82
United States	16.08	15.45	15.92	16.59

<sup>&</sup>lt;sup>1</sup> Region map on page 26. <sup>2</sup> Unrounded estimates published beginning with July and October 2021 survey periods.

# Number of Workers and Gross Hours Worked – Regions and United States: July 11-17, 2021

		Hired wo	orkers	
Regions <sup>1</sup> and United States	Number of	Expected to be	e employed	Gross
Officed States	workers	150 days or more	149 days or less	hours worked
	(1,000)	(1,000)	(1,000)	(hours per week)
Northeast II	35 42	28 28	7 14	39.5 35.4
Appalachian IAppalachian II	34 28	25 20	9 8	43.1 38.7
Southeast	32 25	23 23	9 2	40.8 42.0
Lake	61	45	16	40.4
Cornbelt I	41 22	28 18	13 4	38.0 35.5
Delta	35	27	8	43.4
Northern Plains	41	33	8	47.1
Southern Plains	43	35	8	39.2
Mountain I	26 20 14	20 13 13	6 7 1	43.7 41.0 45.0
Pacific	126 167	50 142	76 25	40.5 42.8
Hawaii	5	4	1	36.4
United States	797	575	222	41.0

<sup>&</sup>lt;sup>1</sup> Region map on page 26.

# Gross Wage Rates by Type of Worker – Regions and United States: July 11-17, 2021

Regions <sup>1</sup> and		Type of worker		0
United States	Field workers	Livestock workers	Field and livestock combined <sup>2</sup>	Gross wage rates for all hired workers
	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)
Northeast I	16.50 15.69	15.06 14.65	15.98 15.51	16.74 16.30
Appalachian I	14.13 13.24	13.80 13.34	14.07 13.28	14.56 13.90
SoutheastFlorida	11.52 12.55	13.01 12.75	11.83 12.58	12.34 13.58
Lake	15.93	14.65	15.22	16.02
Cornbelt I	15.80 16.27	15.81 15.94	15.80 16.12	16.57 16.89
Delta	12.38	12.34	12.37	12.76
Northern Plains	17.01	16.36	16.71	17.08
Southern Plains	14.26	13.86	14.07	14.45
Mountain I Mountain II Mountain III	14.48 14.98 14.46	14.69 15.33 15.84	14.58 15.12 15.09	15.10 15.82 15.91
Pacific California	18.33 17.70	16.71 17.85	18.20 17.73	18.63 18.90
Hawaii	16.85	18.05	17.02	18.46
United States	16.10	15.19	15.85	16.59

<sup>&</sup>lt;sup>1</sup> Region map on page 26. <sup>2</sup> Unrounded estimates published beginning with July and October 2021 survey periods.

# Number of Workers and Gross Hours Worked – Regions and United States: April 11-17, 2021

		Hired wo	Hired workers		
Regions <sup>1</sup> and United States	Number of	Expected to be	Expected to be employed		
Officed States	workers	150 days or more	149 days or less	hours worked	
	(1,000)	(1,000)	(1,000)	(hours per week)	
Northeast I	32 25	26 20	6 5	41.0 39.9	
Appalachian IAppalachian II	30 20	25 17	5 3	40.1 41.5	
Southeast	31 28	23 23	8 5	39.6 40.4	
Lake	50	37	13	40.9	
Cornbelt I	32 25	24 18	8 7	39.3 39.9	
Delta	27	21	6	41.2	
Northern Plains	35	29	6	43.0	
Southern Plains	51	45	6	41.8	
Mountain I Mountain II Mountain III	21 15 16	18 13 15	3 2 1	47.8 43.5 46.3	
Pacific California	47 123	40 108	7 15	42.6 38.8	
Hawaii	5	4	1	35.9	
United States	613	506	107	40.9	

<sup>&</sup>lt;sup>1</sup> Region map on page 26.

# Gross Wage Rates by Type of Worker – Regions and United States: April 11-17, 2021 [Excludes agricultural service workers and Alaska]

Regions <sup>1</sup> and				
United States	Field workers	Livestock workers	Field and livestock combined	Gross wage rates for all hired workers
	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)
Northeast I	16.18 15.49	14.62 14.31	15.55 15.05	16.69 16.05
Appalachian I	14.17 14.23	13.68 14.60	14.05 14.40	14.76 14.98
Southeast	12.08 12.30	12.19 12.95	12.10 12.38	12.63 13.37
Lake	15.68	14.36	14.95	15.75
Cornbelt I	15.85 15.61	14.73 16.05	15.55 15.85	16.28 16.69
Delta	12.01	12.64	12.20	12.59
Northern Plains	16.55	15.40	15.95	16.53
Southern Plains	13.32	14.07	13.75	14.38
Mountain I	14.17 15.90 14.10	14.23 15.72 15.01	14.20 15.80 14.50	15.00 16.42 15.26
Pacific California	15.90 17.25	16.28 17.45	15.95 17.29	16.90 18.67
Hawaii	15.50	18.25	15.85	17.58
United States	15.19	14.81	15.06	15.97

<sup>&</sup>lt;sup>1</sup> Region map on page 26.

# Number of Workers and Gross Hours Worked – Regions and United States: January 10-16, 2021

		Hired wo	orkers	
Regions <sup>1</sup> and United States	Number of	Expected to b	Expected to be employed	
Officed States	workers	150 days or more	149 days or less	hours worked
	(1,000)	(1,000)	(1,000)	(hours per week)
Northeast II	21 19	19 16	2 3	41.6 39.1
Appalachian IAppalachian II	21 17	18 15	3 2	38.4 39.8
Southeast	23 28	19 25	4 3	38.6 42.0
Lake	39	32	7	41.0
Cornbelt I	22 20	20 18	2 2	37.9 38.4
Delta	19	16	3	38.2
Northern Plains	27	25	2	42.0
Southern Plains	45	41	4	40.2
Mountain I Mountain II Mountain III	15 12 16	14 11 15	1 1 1	42.6 42.1 46.5
Pacific	35 122	29 105	6 17	38.6 40.1
Hawaii	5	4	1	36.4
United States	506	442	64	40.2

<sup>&</sup>lt;sup>1</sup> Region map on page 26.

# Gross Wage Rates by Type of Worker – Regions and United States: January 10-16, 2021 [Excludes agricultural service workers and Alaska]

Regions <sup>1</sup> and				
United States	Field workers	Livestock workers	Field and livestock combined	Gross wage rates for all hired workers
	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)
Northeast I	16.23 16.41	13.89 14.27	14.90 15.40	16.51 16.60
Appalachian I	14.34 14.24	13.63 14.95	14.10 14.60	14.99 15.25
Southeast	12.38 12.05	12.27 12.90	12.35 12.15	12.89 12.98
Lake	16.53	14.74	15.30	16.12
Cornbelt I	16.68 15.77	14.86 15.97	15.95 15.90	16.83 16.79
Delta	12.97	12.65	12.85	13.33
Northern Plains	16.94	15.14	15.85	16.59
Southern Plains	13.35	13.95	13.70	14.29
Mountain I Mountain II Mountain III	14.96 15.69 14.01	14.74 15.54 14.91	14.80 15.60 14.40	15.75 16.27 15.16
Pacific	16.06 16.60	17.09 17.10	16.25 16.70	17.44 18.54
Hawaii	15.40	18.10	15.66	17.31
United States	15.23	14.87	15.08	16.21

<sup>&</sup>lt;sup>1</sup> Region map on page 26.

## Number of Workers and Gross Hours Worked – Regions and United States: October 11-17, 2020

		Hired wo	orkers	
Regions <sup>1</sup> and United States	Number of Expected to be		e employed	Gross
Officed States	workers	150 days or more	149 days or less	hours worked
	(1,000)	(1,000)	(1,000)	(hours per week)
Northeast I	41 27	31 21	10 6	42.0 40.4
Appalachian I	29 27	23 21	6 6	38.5 40.2
Southeast	31 35	24 32	7 3	39.1 42.5
Lake	57	41	16	41.3
Cornbelt I	42 25	29 17	13 8	40.6 39.8
Delta	35	26	9	45.0
Northern Plains	39	28	11	46.0
Southern Plains	49	40	9	41.1
Mountain I	27 19 17	22 17 15	5 2 2	50.9 41.3 46.0
Pacific California	86 168	46 141	40 27	40.3 42.9
Hawaii	4	3	1	35.6
United States	758	577	181	42.1

<sup>&</sup>lt;sup>1</sup> Region map on page 26.

# Gross Wage Rates by Type of Worker – Regions and United States: October 11-17, 2020 [Excludes agricultural service workers and Alaska]

Danisa 1 and		Type of worker		0
Regions <sup>1</sup> and United States	Field workers	Livestock workers	Field and livestock combined	Gross wage rates for all hired workers
	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)
Northeast I	15.32 14.56	14.92 13.42	15.20 14.25	16.16 15.34
Appalachian I	13.28 13.11	12.94 13.22	13.20 13.15	13.90 13.70
Southeast	12.02 12.35	12.37 13.15	12.10 12.48	12.73 13.82
Lake	15.75	14.28	15.00	15.72
Cornbelt I	15.80 15.86	15.16 14.81	15.65 15.50	16.30 16.10
Delta	11.67	12.05	11.75	12.09
Northern Plains	17.04	15.52	16.45	16.83
Southern Plains	13.47	14.08	13.80	14.30
Mountain I Mountain II Mountain III	14.69 14.80 13.56	15.37 14.70 14.37	15.00 14.75 13.90	15.48 15.42 14.71
Pacific California	17.54 16.50	16.63 16.25	17.45 16.46	17.88 17.64
Hawaii	16.00	17.70	16.27	18.13
United States	15.28	14.62	15.10	15.87

<sup>&</sup>lt;sup>1</sup> Region map on page 26.

# Number of Workers and Gross Hours Worked – Regions and United States: July 12-18, 2020

	Hired workers								
Regions <sup>1</sup> and United States	Number of	Expected to be	e employed	Gross					
Officed States	workers	150 days or more	149 days or less	hours worked					
	(1,000)	(1,000)	(1,000)	(hours per week)					
Northeast II	38 34	29 22	9	40.5 40.7					
Appalachian IAppalachian II	31 27	23 21	8 6	38.7 38.4					
Southeast	32 33	23 31	9 2	39.8 43.2					
Lake	58	44	14	39.8					
Cornbelt I	39 21	28 16	11 5	38.4 37.7					
Delta	32	26	6	41.6					
Northern Plains	36	28	8	44.6					
Southern Plains	50	40	10	40.8					
Mountain I	29 21 16	22 17 14	7 4 2	48.3 41.0 45.2					
Pacific	107 169	51 137	56 32	41.9 42.1					
Hawaii	4	3	1	36.3					
United States	777	575	202	41.4					

<sup>&</sup>lt;sup>1</sup> Region map on page 26.

# Gross Wage Rates by Type of Worker – Regions and United States: July 12-18, 2020 [Excludes agricultural service workers and Alaska]

Davisor of any d		Type of worker		0
Regions <sup>1</sup> and United States	Field workers	Livestock workers	Field and livestock combined	Gross wage rates for all hired workers
	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)
Northeast I	15.23 13.84	14.67 13.19	15.05 13.70	16.08 14.61
Appalachian IAppalachian II	13.38 12.91	12.73 13.01	13.25 12.95	13.88 13.51
Southeast	12.02 12.50	12.66 12.95	12.15 12.58	12.69 13.79
Lake	14.71	14.29	14.50	15.24
Cornbelt I	14.80 15.46	14.97 14.68	14.85 15.15	15.70 15.90
Delta	11.88	12.19	11.95	12.32
Northern Plains	16.83	15.57	16.30	16.68
Southern Plains	13.26	13.84	13.55	13.94
Mountain I Mountain II Mountain III	14.10 14.81 13.74	15.17 14.57 14.30	14.60 14.70 14.00	15.10 15.28 14.85
Pacific California	16.49 16.30	16.00 16.25	16.45 16.29	16.87 17.53
Hawaii	15.25	18.00	15.90	17.74
United States	14.98	14.50	14.85	15.62

<sup>&</sup>lt;sup>1</sup> Region map on page 26.

#### Combined Field and Livestock Worker Gross Wage Rates by Type of Farm - Regions and 48 States: October 10-16, 2021

[Excludes agricultural service workers]

Regions <sup>1</sup>	Field crop farms	Other crop farms	Livestock and poultry farms	All farms
	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)
Northeast <sup>2</sup>	16.73	16.41	14.58	15.90
Appalachian <sup>3</sup>	13.85	14.55	13.71	14.07
Southeast and Florida	11.55	12.16	12.45	12.18
Lake	18.98	16.08	14.82	15.88
Cornbelt 4	17.38	15.27	15.68	16.38
Delta	12.50	12.31	12.98	12.53
Northern Plains	16.93	17.18	16.74	16.91
Southern Plains	14.32	14.03	13.86	14.01
Mountain 5	16.76	14.87	15.64	15.42
Pacific and California	17.00	17.65	18.80	17.79
48 States <sup>6</sup>	15.78	16.17	15.49	15.91

<sup>&</sup>lt;sup>1</sup> Region map on page 26.

#### Combined Field and Livestock Worker Gross Wage Rates by Type of Farm - Regions and 48 States: July 11-17, 2021

Regions <sup>1</sup>	Field crop farms	Other crop farms	Livestock and poultry farms	All farms
	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)
Northeast <sup>2</sup>	15.35	16.32	14.52	15.74
Appalachian <sup>3</sup>	13.71	14.08	13.35	13.74
Southeast and Florida	12.05	12.01	12.79	12.16
Lake	17.56	15.79	14.71	15.22
Cornbelt <sup>4</sup>	16.84	15.27	15.56	15.91
Delta	12.87	11.69	12.26	12.37
Northern Plains	16.86	16.53	16.62	16.71
Southern Plains	14.31	13.94	14.01	14.07
Mountain <sup>5</sup>	16.36	14.41	15.20	14.87
Pacific and California	17.58	18.08	17.07	17.93
48 States <sup>6</sup>	15.30	16.33	15.05	15.85

<sup>&</sup>lt;sup>1</sup> Region map on page 26.

<sup>&</sup>lt;sup>2</sup> Includes Northeast I and Northeast II. <sup>3</sup> Includes Appalachian I and Appalachian II.

<sup>&</sup>lt;sup>4</sup> Includes Cornbelt I and Cornbelt II. <sup>5</sup> Includes Mountain I, Mountain II, and Mountain III.

<sup>&</sup>lt;sup>6</sup> Excludes Alaska and Hawaii

<sup>&</sup>lt;sup>2</sup> Includes Northeast I and Northeast II. <sup>3</sup> Includes Appalachian I and Appalachian II.

<sup>&</sup>lt;sup>4</sup> Includes Cornbelt I and Cornbelt II.

<sup>&</sup>lt;sup>5</sup> Includes Mountain I, Mountain II, and Mountain III.

<sup>&</sup>lt;sup>6</sup> Excludes Alaska and Hawaii.

#### Combined Field and Livestock Worker Gross Wage Rates by Type of Farm - Regions and 48 States: October 11-17, 2020

[Excludes agricultural service workers]

Regions <sup>1</sup>	Field crop farms	Other crop farms	Livestock and poultry farms	All farms
	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)
Northeast <sup>2</sup>	16.50	15.05	14.05	14.84
Appalachian <sup>3</sup>	13.51	13.07	12.90	13.17
Southeast and Florida	12.54	12.20	12.56	12.30
Lake	17.08	14.93	14.42	15.00
Cornbelt <sup>4</sup>	16.09	15.16	14.99	15.59
Delta	11.45	11.94	12.00	11.75
Northern Plains	16.70	16.75	16.09	16.45
Southern Plains	13.47	13.44	14.05	13.80
Mountain <sup>5</sup>	17.58	13.93	14.87	14.65
Pacific and California	17.12	16.84	16.47	16.79
48 States <sup>6</sup>	15.21	15.24	14.67	15.09

<sup>&</sup>lt;sup>1</sup> Region map on page 26.

#### Combined Field and Livestock Worker Gross Wage Rates by Type of Farm - Regions and 48 States: July 12-18, 2020

Regions <sup>1</sup>	Field crop farms	Other crop farms	Livestock and poultry farms	All farms
	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)
Northeast <sup>2</sup>	16.58	14.48	13.78	14.40
Appalachian <sup>3</sup>	13.40	13.24	12.70	13.11
Southeast and Florida	12.41	12.27	12.66	12.37
Lake	15.84	13.93	14.63	14.50
Cornbelt <sup>4</sup>	16.18	14.08	14.74	14.96
Delta	11.62	12.07	12.34	11.95
Northern Plains	17.15	15.40	15.96	16.30
Southern Plains	13.16	13.33	13.75	13.55
Mountain 5	15.67	13.97	14.70	14.49
Pacific and California	16.82	16.36	16.23	16.35
48 States <sup>6</sup>	14.79	14.99	14.48	14.84

<sup>1</sup> Region map on page 26.

<sup>&</sup>lt;sup>2</sup> Includes Northeast I and Northeast II.

<sup>&</sup>lt;sup>3</sup> Includes Appalachian I and Appalachian II.

<sup>&</sup>lt;sup>4</sup> Includes Cornbelt I and Cornbelt II.

<sup>&</sup>lt;sup>5</sup> Includes Mountain I, Mountain II, and Mountain III.

<sup>&</sup>lt;sup>6</sup> Excludes Alaska and Hawaii.

<sup>&</sup>lt;sup>2</sup> Includes Northeast I and Northeast II. <sup>3</sup> Includes Appalachian I and Appalachian II.

<sup>&</sup>lt;sup>4</sup> Includes Cornbelt I and Cornbelt II.

<sup>&</sup>lt;sup>5</sup> Includes Mountain I, Mountain II, and Mountain III.

<sup>&</sup>lt;sup>6</sup> Excludes Alaska and Hawaii.

#### All Hired Worker Gross Wage Rates by Economic Class of Farm - Regions and 48 States: October 10-16, 2021

[Excludes agricultural service workers]

Dogiona <sup>1</sup>	Gross value sales-\$1,000						
Regions <sup>1</sup>	<50	50-99	100-249	250-499	500-999	1,000+	farms
	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)
Northeast <sup>2</sup>	(S)	(S)	15.41	14.38	15.40	17.04	16.62
Appalachian <sup>3</sup>	14.14	12.81	13.20	14.14	14.11	15.30	14.64
Southeast and Florida	10.09	12.24	11.95	11.78	12.86	13.41	12.88
Lake	(S)	14.22	15.29	14.25	14.76	17.39	16.57
Cornbelt 4	13.30	15.06	15.67	15.61	15.59	17.87	16.95
Delta	13.17	10.82	11.48	14.14	12.80	13.47	12.91
Northern Plains	14.72	(S)	16.45	15.41	17.01	17.01	17.25
Southern Plains	14.37	13.21	14.40	14.15	15.31	14.31	14.37
Mountain 5	(S)	16.74	16.02	13.43	16.24	16.00	16.06
Pacific and California	(S)	18.52	18.16	18.89	(S)	18.60	18.58
48 States <sup>6</sup>	16.27	16.30	14.52	15.12	16.02	17.09	16.57

<sup>(</sup>S) Insufficient number of reports to establish an estimate.

#### All Hired Worker Gross Wage Rates by Economic Class of Farm - Regions and 48 States: July 11-17, 2021

Regions <sup>1</sup>	Gross value sales-\$1,000						
Regions	<50	50-99	100-249	250-499	500-999	1,000+	farms
	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)
Northeast <sup>2</sup>	(S)	(S)	14.93	14.01	15.62	16.82	16.51
Appalachian <sup>3</sup>	13.36	12.64	12.84	14.44	14.00	14.92	14.28
Southeast and Florida	11.01	12.87	11.32	11.98	12.69	13.36	12.89
Lake	(S)	14.42	15.06	14.31	14.89	16.83	16.02
Cornbelt 4	(S)	12.28	15.19	15.76	16.00	17.65	16.68
Delta	11.22	11.07	11.50	14.22	13.41	13.23	12.76
Northern Plains	14.70	(S)	17.12	14.78	17.00	16.65	17.08
Southern Plains	13.39	13.71	15.52	15.16	15.10	14.11	14.45
Mountain <sup>5</sup>	15.74	14.56	15.00	13.78	15.21	16.00	15.53
Pacific and California	(S)	17.95	18.12	18.55	(S)	18.81	18.79
48 States <sup>6</sup>	15.98	15.52	14.57	15.24	16.42	17.08	16.58

<sup>(</sup>S) Insufficient number of reports to establish an estimate.

Region map on page 26.
Includes Northeast I and Northeast II.

<sup>&</sup>lt;sup>3</sup> Includes Appalachian I and Appalachian II.

<sup>&</sup>lt;sup>4</sup> Includes Cornbelt I and Cornbelt II.

<sup>&</sup>lt;sup>5</sup> Includes Mountain I, Mountain II, and Mountain III.

<sup>&</sup>lt;sup>6</sup> Excludes Alaska and Hawaii.

Region map on page 26.

<sup>&</sup>lt;sup>2</sup> Includes Northeast I and Northeast II.

<sup>&</sup>lt;sup>3</sup> Includes Appalachian I and Appalachian II.

<sup>&</sup>lt;sup>4</sup> Includes Cornbelt I and Cornbelt II.

<sup>&</sup>lt;sup>5</sup> Includes Mountain I, Mountain II, and Mountain III.

<sup>&</sup>lt;sup>6</sup> Excludes Alaska and Hawaii.

#### All Hired Worker Gross Wage Rates by Economic Class of Farm - Regions and 48 States: October 11-17, 2020

[Excludes agricultural service workers]

Regions <sup>1</sup>	Gross value sales-\$1,000						
Regions	<50	50-99	100-249	250-499	500-999	1,000+	farms
	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)
Northeast <sup>2</sup>	17.36	(S)	14.70	13.03	15.32	16.07	15.84
Appalachian <sup>3</sup>	13.71	11.75	13.32	12.73	13.65	14.47	13.80
Southeast and Florida	12.94	11.75	12.17	13.23	12.93	13.63	13.33
Lake	15.75	13.73	12.80	13.41	14.86	16.39	15.72
Cornbelt 4	12.98	14.62	14.64	15.57	15.82	17.16	16.23
Delta	11.83	11.80	11.38	13.22	12.27	11.96	12.09
Northern Plains	(S)	16.46	14.99	(S)	15.61	16.97	16.83
Southern Plains	15.13	14.91	15.08	14.64	13.47	13.91	14.30
Mountain <sup>5</sup>	13.87	16.42	15.56	14.74	14.97	15.35	15.26
Pacific and California	17.00	17.05	17.40	18.43	17.28	17.77	17.72
48 States <sup>6</sup>	14.68	14.92	14.68	15.71	15.28	16.21	15.86

<sup>(</sup>S) Insufficient number of reports to establish an estimate.

#### All Hired Worker Gross Wage Rates by Economic Class of Farm - Regions and 48 States: July 12-18, 2020

Regions <sup>1</sup>	Gross value sales-\$1,000						
Regions	<50	50-99	100-249	250-499	500-999	1,000+	farms
	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)
Northeast <sup>2</sup>	16.71	(S)	14.29	13.42	15.16	15.48	15.38
Appalachian <sup>3</sup>	13.30	11.87	13.00	12.38	13.38	14.70	13.71
Southeast and Florida	13.63	12.73	11.88	12.76	12.65	13.72	13.27
Lake	15.00	11.32	12.90	13.72	14.61	15.99	15.24
Cornbelt 4	11.36	13.76	13.99	13.75	15.98	16.75	15.77
Delta	11.93	12.27	11.70	13.43	12.31	12.17	12.32
Northern Plains	(S)	13.58	17.47	(S)	15.60	16.73	16.68
Southern Plains	12.84	14.59	14.77	14.50	13.62	14.17	13.94
Mountain <sup>5</sup>	14.15	15.20	15.49	14.08	14.52	15.32	15.09
Pacific and California	15.73	15.90	16.86	17.01	16.84	17.43	17.27
48 States <sup>6</sup>	13.62	14.09	14.50	14.98	15.01	16.13	15.61

<sup>(</sup>S) Insufficient number of reports to establish an estimate.

Region map on page 26.
 Includes Northeast I and Northeast II.
 Includes Appalachian I and Appalachian II.

<sup>&</sup>lt;sup>4</sup> Includes Cornbelt I and Cornbelt II.

<sup>&</sup>lt;sup>5</sup> Includes Mountain I, Mountain II, and Mountain III.

<sup>&</sup>lt;sup>6</sup> Excludes Alaska and Hawaii.

Region map on page 26.

<sup>&</sup>lt;sup>2</sup> Includes Northeast I and Northeast II.

<sup>&</sup>lt;sup>3</sup> Includes Appalachian I and Appalachian II.

<sup>&</sup>lt;sup>4</sup> Includes Cornbelt I and Cornbelt II.

<sup>&</sup>lt;sup>5</sup> Includes Mountain I, Mountain II, and Mountain III.

<sup>&</sup>lt;sup>6</sup> Excludes Alaska and Hawaii.

### Field and Livestock Workers by Type of Farm

[Excludes agricultural service workers, Alaska, and Hawaii]

Type of farm	July 12-18,	October 11-17,	January 10-16,	April 11-17,	July 11-17,	October 10-16,
	2020	2020	2021	2021	2021	2021
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Field crop farms Other crop farms Livestock, dairy, and poultry farms	12	16	12	13	14	16
	57	53	48	52	59	56
	31	31	40	35	27	28

## **Hired Workers by Economic Class of Farm**

[Excludes agricultural service workers, Alaska, and Hawaii]

Gross value of sales	July 12-18, 2020	October 11-17, 2020	January 10-16, 2021	April 11-17, 2021	July 11-17, 2021	October 10-16, 2021
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Less than \$50,000	8 9	6 4 8 9 12 61	4 3 7 8 11 67	4 4 8 8 11 65	7 4 7 9 11 62	5 4 7 9 11 64

## Hired Workers by Number of Workers on Farm

Number of workers on farm	July 12-18, 2020	October 11-17, 2020	January 10-16, 2021	April 11-17, 2021	July 11-17, 2021	October 10-16, 2021
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
1 worker	8	7	9	8	8	6
2 workers	7	7	9	7	7	7
3-6 workers	17	18	17	18	16	17
7-10 workers	8	8	7	8	7	8
11-20 workers	11	11	11	12	11	12
21-50 workers	13	13	14	13	13	12
51 or more workers	36	36	33	34	38	38

## Hired Workers by Standard Occupational Classification (SOC) System

[Excludes agricultural service workers and Alaska]

Title	SOC Code	July 12-18, 2020	October 11-17, 2020	July 11-17, 2021	October 10-16, 2021
		(1,000)	(1,000)	(1,000)	(1,000)
Graders and sorters, agricultural products Agricultural equipment operators Farmworkers, crop, nursery, and greenhouse Farmworkers, farm, ranch, and aquacultural animals Agricultural workers, all other Packers and packagers, hand	(45-2091) (45-2092) (45-2093) (45-2099)	17 140 346 152 13 20	15 154 320 153 11 16	9 136 383 156 11 17	13 136 373 150 8 13
Farmers, ranchers, and other agricultural managers		25 20	25 20	25 21	23 20

## Gross Wage Rates by Standard Occupational Classification (SOC) System

Title		July 12-18, 2020	October 11-17, 2020	July 11-17, 2021	October 10-16, 2021
		(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)
Graders and sorters, agricultural products Agricultural equipment operators Farmworkers, crop, nursery, and greenhouse Farmworkers, farm, ranch, and aquacultural animals Agricultural workers, all other Packers and packagers, hand	(45-2091) (45-2092) (45-2093) (45-2099)	14.00 15.65 14.80 14.45 14.60 14.40	14.60 15.70 15.25 14.65 14.55 14.85	15.80 16.50 15.85 15.00 16.20 15.75	16.50 17.00 15.80 15.20 15.90 15.40
Farmers, ranchers, and other agricultural managersFirst-line supervisors of farming, fishing workers		25.95 22.65	26.35 22.05	25.00 22.80	25.05 22.00

#### Annual Average Number of Hired Workers and Gross Hours Worked - Regions and United States: 2020 and 2021

[Excludes agricultural service workers and Alaska]

Regions <sup>1</sup> and	Hired work	ers	Gross hours worked			
United States	2020	2021 <sup>2</sup>	2020	2021 <sup>2</sup>		
	(1,000)	(1,000)	(hours per week)	(hours per week)		
Northeast I	32.0	31.5	41.2	41.1		
Northeast II	26.5	31.5	40.0	37.5		
Appalachian I	28.8	30.0	38.6	40.8		
Appalachian II	23.5	23.0	39.2	40.0		
Southeast	29.0	28.0	38.8	40.0		
Florida	36.3	27.3	41.8	42.1		
Lake	53.0	53.5	40.9	40.9		
Cornbelt I	36.3	34.5	39.1	39.6		
Cornbelt II	25.0	23.0	38.2	38.8		
Delta	28.8	29.3	42.0	42.8		
Northern Plains	38.0	37.0	43.3	45.7		
Southern Plains	53.8	45.3	40.0	40.6		
Mountain I	24.8	21.3	47.0	44.9		
Mountain II	18.3	16.0	42.1	42.7		
Mountain III	17.0	15.0	46.6	46.5		
Pacific	72.5	78.0	40.7	39.8		
California	150.3	143.0	41.5	41.3		
Hawaii	4.3	5.0	34.7	36.6		
United States	697.8	672.0	41.1	41.1		

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Region map on page 26.
 The July and October components of the year 2021 annual average estimates are based on a reduced sample size. See the Survey Methodology section for more information.

#### Annual Average Gross Wage Rates by Type of Worker - Regions and United States: 2020 and 2021

[Excludes agricultural service workers and Alaska. Annual rates are averages of the published wage rates for each survey week weighted by the number of hours worked during the week]

number of flours worked during the v	Type of worker							Gross wage	
Regions <sup>1</sup> and United States	Field workers		Livestock workers		Field and livestock combined		rates for all hired workers		
	2020	2021 <sup>2</sup>	2020	2021 <sup>2</sup>	2020	2021 <sup>2</sup>	2020	2021 <sup>2</sup>	
	(dollars per hour)	(dollars per hour)	(dollars per hour)	(dollars per hour)					
Northeast I	15.29 14.35	16.22 15.90	14.54 13.37	14.79 14.51	14.99 14.05	15.66 15.54	16.09 15.10	16.61 16.44	
Appalachian I	13.22 12.89	14.26 13.75	12.91 13.05	13.82 14.08	13.15 12.96	14.16 13.89	13.80 13.55	14.79 14.50	
Southeast	11.86 12.01	11.81 12.36	11.69 12.45	12.58 12.76	11.81 12.08	11.99 12.41	12.34 13.12	12.54 13.30	
Lake	15.07	16.22	14.47	14.70	14.72	15.37	15.44	16.14	
Cornbelt I	15.61 15.54	16.08 16.36	14.57 15.20	15.38 16.01	15.31 15.37	15.89 16.19	15.99 15.94	16.61 16.92	
Delta	11.84	12.40	12.03	12.61	11.88	12.45	12.26	12.85	
Northern Plains	16.68	16.99	15.12	15.90	15.89	16.47	16.46	16.93	
Southern Plains	12.69	13.80	13.34	13.94	13.03	13.88	13.50	14.37	
Mountain I Mountain II Mountain III	14.25 14.68 13.31	14.65 15.56 14.36	14.81 14.92 14.13	14.71 15.59 15.35	14.55 14.82 13.67	14.68 15.58 14.79	15.20 15.41 14.43	15.36 16.25 15.56	
Pacific	16.41 16.01	17.47 17.46	15.78 16.22	16.84 17.74	16.34 16.05	17.41 17.51	16.93 17.51	18.07 18.76	
Hawaii	15.15	16.33	17.83	18.01	15.56	16.54	17.25	18.05	
United States	14.76	15.77	14.35	15.08	14.62	15.56	15.49	16.38	

<sup>&</sup>lt;sup>1</sup> Region map on page 26.
<sup>2</sup> The July and October components of the year 2021 annual average estimates are based on a reduced sample size. See the Survey Methodology section for more information.



### Region States

Northeast I Connecticut, Maine, Massachusetts, New Hampshire,

New York, Rhode Island, Vermont.

Northeast II Delaware, Maryland, New Jersey, Pennsylvania.

Appalachian I North Carolina, Virginia.

Appalachian II Kentucky, Tennessee, West Virginia.
Southeast Alabama, Georgia, South Carolina.
Lake Michigan, Minnesota, Wisconsin.

Cornbelt I Illinois, Indiana, Ohio.
Cornbelt II Iowa, Missouri.

Delta Arkansas, Louisiana, Mississippi.

Northern Plains Kansas, Nebraska, North Dakota, South Dakota.

Southern Plains Oklahoma, Texas.

Mountain IIdaho, Montana, Wyoming.Mountain IIColorado, Nevada, Utah.Mountain IIIArizona, New Mexico.PacificOregon, Washington.

#### **Farm Labor Definitions**

The following definitions are provided to assist in interpreting statistics published in Farm Labor reports. To ensure consistency in data collection, the questionnaires and instruction manual used by the interviewers provide more in-depth explanations of these terms.

Farm or Ranch: The target population unit for the Agricultural (Farm) Labor Survey, which is any place with \$1,000 or more in annual agricultural sales (or potential sales).

Agricultural Work: Work done on a farm or ranch in connection with the production of agricultural products, including nursery and greenhouse products and animal specialties such as fur farms or apiaries. Also included is work done off the farm to handle farm related business, such as trips to buy feed or deliver products to local market.

**Hired Worker:** Anyone, other than an agricultural service worker, who was paid for at least one hour of agricultural work on a farm or ranch. Beginning with years 2020-2021, worker type is primarily determined by assessing worker tasks performed during the survey reference week. Previously, worker type was determined by what each employee was primarily hired to do, not necessarily what work was done during the survey reference week. Types of workers include:

Field Workers: Employees engaged in planting, tending and harvesting crops including operation of farm machinery on crop farms. The Standard Occupation Classification (SOC) codes and titles associated with field workers are 45-2041: Graders and Sorters, Agricultural Products; 45-2091: Agricultural Equipment Operators; 45-2092: Farmworkers and Laborers, Crop, Nursery and Greenhouse; 45-2099: Agricultural Workers, All Other; 53-7064: Packers and Packagers, Hand.

Livestock Workers: Employees tending livestock, milking cows or caring for poultry, including operation of farm machinery on livestock or poultry operations. SOC codes and titles associated with livestock workers are 45-2041: Graders and Sorters, Agricultural Products; 45-2093: Farmworkers, Farm, Ranch, and Aquacultural Animals; 45-2099: Agricultural Workers, All Other; 53-7064: Packers and Packagers, Hand.

**Supervisors**: Hired managers, range foremen, crew leaders, etc. SOC codes and titles associated with supervisors are 11-9013: Farmers, Ranchers, and Other Agricultural Managers; 45-1011: First-Line Supervisors of Farming, Fishing, and Forestry Workers.

Other Workers: Employees engaged in agricultural work not included in the other three categories. Bookkeepers and pilots are examples. SOC codes and titles associated with other workers include but are not limited to 45-2011: Agricultural Inspectors; 45-2021: Animal Breeders; 37-2012: Pesticide Handlers, Sprayers, and Applicators, Vegetation.

For more information on the applicable Standard Occupational Classification codes, see "Crosswalk from National Agricultural Statistics Service Farm Labor Survey to the Standard Occupational Classification System" at the "Surveys and Programs" page for Farm Labor, on the NASS website (http://www.nass.usda.gov).

**Methods of Pay:** All wage rates are calculated based on total wages paid and total hours worked during the survey reference week. Wages paid other than hourly (bi-weekly, monthly, etc.) are converted to an hourly basis prior to summarization. Wages paid by piece rate (per quantity of produce picked, etc.) are also converted to an hourly basis.

**Gross Hours:** Gross hours are the number of hours worked during the survey reference week.

Base Hours: Base hours are the number of hours worked, for which base wages are paid. Base hours were used in the calculation of base wage rates for year 2020. Beginning with July and October 2021, publication of base hours and base wage rates, and collection of associated data, is discontinued.

Gross Wage Rate: Gross wages are the total amount paid to workers before taxes and other deductions; the rate is per hour. The worker's share of social security and unemployment insurance is included, but the employer's share is excluded. Gross wages may include in-kind payments (e.g., agricultural product like a side of beef, bushels of grain, etc.) provided in lieu of wages for work done. The value of perquisites is excluded from gross wages.

**Base Wage Rate:** Base wages are gross wages less regularly paid bonuses, overtime pay, or other incentive pay. For employees receiving incentive pay such as piece rate pay or commissions, the base wages are the minimum amount guaranteed. The rate was per base hour, for year 2020. The rate was per gross hour, for year 2019. Beginning with July and October 2021, publication of base hours and base wage rates, and collection of associated data, is discontinued.

**Perquisites:** Benefits, such as cash bonuses, housing, or meals, provided to an employee in addition to pay are included in perquisites. Wage rates published in this release do not include the value of these benefits.

**Term of Employment:** The length of time during the year the farm operator expects to employ those workers who were on the payroll during the survey week.

**Agricultural Service:** Any farm-related service performed on a farm or ranch on a contract or fee basis. This primarily includes activities performed by contract workers on fruit, vegetable, or berry operations. It also includes custom work, veterinarian work, artificial insemination, sheep shearing, milk testing, or any other farm-related activity performed on a farm or ranch on a "fee per service" basis. The agricultural services component has been discontinued from the Farm Labor Survey.

**Contract Labor:** Contract workers are paid by a crew leader, contractor, buyer, processor, cooperative, or other person who has an oral or written agreement with a farmer/rancher. Pruning, thinning, weeding or harvesting of fruit, vegetable or berry crops are examples. A machine is not a part of the service activity provided by the contractor. The Farm Labor Survey excludes measures of contract labor.

**Custom Work:** Work performed by machines and labor hired as a unit. Hay baling, combining, corn or cotton picking, spraying, fertilizing, and laser leveling are examples of custom work when the equipment is included in the service activity. The Farm Labor Survey excludes measures of custom labor.

**Type of Farm (or Ranch):** An operation is classified in the farm type which accounts for the largest portion of the total gross value of sales for its agricultural production.

#### Types of farms broken out in this publication are:

**Field Crop Farms**: Farms producing wheat, rice, corn, soybeans, barley, dry beans, rye, sorghum, cotton, popcorn, tobacco, or other such crops.

**Other Crop Farms**: Farms producing vegetables, melons, berry crops, grapes, tree nuts, citrus fruits, deciduous tree fruits, avocados, dates, figs, olives, nursery, or greenhouse crops. This category also includes farms producing potatoes, sugar crops, hay, peanuts, hops, mint, and maple syrup.

Livestock, Dairy, and Poultry Farms: Farms producing cattle, hogs, sheep, goats, milk, chickens, eggs, turkeys, or animal specialties such as furs, fish, honey, etc.

**Gross Value of Sales**: This includes all income during a year from the sale of crops, livestock, dairy, poultry, or other related agricultural products, including the landlord's share and the value of products produced under contract. When commodities are placed under CCC loan, they are considered sold.

#### **Survey Methodology**

**Survey Procedures:** The NASS Agricultural (Farm) Labor Survey is conducted semi-annually in April and October, in all surveyed states except California. During the April data collection, data for both January and April reference weeks are collected. During the October data collection, data for both July and October reference weeks are collected. The quarterly reference week is the Sunday to Saturday period which includes the 12th day of the month. For California, collection of these data is currently conducted on a quarterly basis, as part of the California Employment Development Department monthly labor program.

The target population for the Farm Labor Survey program is all operations which meet the definition of a farm or ranch. An optimal sample is selected in each state. The total sample size was temporarily increased to approximately 38,000 operations to accommodate a program expansion implemented for mid-years 2019 through 2021. Beginning with the July and October 2021 survey, an optimal sample size of approximately 18,000 operations was derived both in accordance with a program contraction, and adjustment for declining survey participation rates. The Farm Labor Survey is a multiple frame survey, incorporating samples from both the NASS list and area frames to ensure adequate coverage.

Farms on the list frame are sampled through a hierarchical stratified design, with strata based on measures of size. Those operations with associated control data indicating peak numbers of workers are stratified based on these values, and those expected to employ large numbers of workers (higher peak number values) are selected with the greatest frequency. Farms on the list frame which do not have peak worker control data are stratified and sampled based on farm value of sales. Farms stratified by farm value of sales are selected at a lower frequency.

In order to provide coverage of farms not currently part of the NASS list frame, a second sample is drawn consisting of segments of land selected from the NASS area frame. The area frame contains all land in the state and, as such, is complete. The land is stratified according to intensity of agriculture using satellite imagery. The land in each stratum is divided into segments of roughly one square mile. Segments are optimally allocated and sampled to effectively measure crops and livestock. The sampled segments are fully enumerated in June. All farms and ranches found operating tracts in these segments are checked to see if they are included in the list frame hired labor population. The farms and ranches that are not included in the list frame labor population, called nonoverlap tracts, are sampled for the Farm Labor Survey so that the target population is completely represented. The area frame component is enumerated during each semi-annual data collection period along with the list sample.

Most respondents are first contacted through self-administered mailed questionnaires, which can be completed either by hand or securely online. Nonresponse to the mail and online request is followed-up by telephone enumeration. All manually completed survey questionnaires are returned to the NASS National Operations Center, where they are visually reviewed and key entered.

Throughout the data collection process, steps are taken to minimize the impact of nonsampling errors such as reporting, recording, and editing errors. These steps include questionnaire testing, comprehensive interviewer training, validation, and verification of processing systems, application of detailed computer edits, and evaluation of the data via the analysis tools.

**Estimating Procedures:** Nonresponse adjustment is necessary to account for producers who refuse to participate in the survey, cannot be located during the data collection period, or who submit incomplete reports. These nonrespondents must be accounted for if accurate estimates of farm labor are to be made. For the Farm Labor Survey, nonrespondents are accounted for by adjusting the weights of the respondents. The adjustment occurs by stratum as all strata represent homogeneous groupings of similar sized farms. The adjustment is performed by individual item on the questionnaire so adjustments for item nonresponse (partial reports) and unit nonresponse (refusals and inaccessibles) are done in a single calculation.

For estimation of data items, point estimates called direct expansions are calculated by multiplying the reported value by the final adjusted weight (initial sampling weight adjusted for nonresponse) and summing to a stratum total. A variance estimate is also computed at the stratum level. The nonoverlap tracts are treated as an additional stratum. Totals and variances are additive across strata to form state level point estimates.

Ratio estimates are also computed for many items. For example, wage rates are calculated as the ratio of total wages to total hours worked. Ratio estimates use the reweighted estimator described above for the numerator and denominator direct expansions. Both the numerator and denominator must be usable in order for that record to be used in the ratio estimator.

The number of hired workers, average hours worked, average wage rate data, and all associated sub-items are summarized from the dataset. Because an identical data collection instrument (questionnaire) and follow-up interview are used for all states, as well as identical editing, analysis, and summarization processes, state data can be summarized and regional and national survey point estimates computed. For estimation purposes, point estimates are adopted as survey indications for all data items. The summary results provide multiple direct and ratio indications for each data series being estimated. The results also provide information used to assess the performance of the current survey and evaluate the quality of the survey indications. NASS Regional Field Offices review the state level indications and submit state level comments documenting state specific concerns to NASS headquarters. NASS headquarters completes the regional and national level summaries, which utilize the same estimators and produce the same indications as the state level summaries.

All estimates are set at NASS headquarters. Starting in 2020, model-based estimates of hired workers, average hours worked, average wage rates, and the associated sub-items are produced to support NASS estimation processes. The model-based estimates are produced after a calibration process in which the effects of significant data outliers are mitigated. Statistical models are mathematical equations that relate quantities of interest (in this case, number of workers, hours, and wage rates) to a set of important input factors. The models used by NASS relate the direct expansions obtained from the current Farm Labor Survey to previous year, same quarter official estimates. This modeling approach improves the precision of the resulting estimates. In particular, estimates in publication cells derived from few reports become more precise than estimates derived from survey alone.

For the final step in the estimation process, NASS assembles a panel of statisticians to serve as the Agricultural Statistics Board (ASB) for the Farm Labor Survey. The Farm Labor ASB reviews both the modeled estimates and survey indications and establishes all final, official estimates for the Farm Labor Survey program. As part of the semi-annual process, the ASB also considers revised estimates and indications and issues revisions of previously published estimates where appropriate. Additionally, the ASB reviews the annual average estimates for the November publication, which are summarized from the final regional and national level estimates for each of the four quarters.

**Revision Policy:** Farm labor statistics are subject to revision semi-annually and annually. Revisions must be supported by additional data that directly affect the level of the estimate. Worker numbers, hours and wage rates for July and October 2020, and April 2021, were subject to revision with this report.

#### **For More Information**

For more information on the Farm Labor Survey methodology and quality measures, see "Farm Labor Survey Methodology and Quality Measures" on the NASS website (http://www.nass.usda.gov).

#### **Information Contacts**

Listed below are the commodity statisticians in the Environmental, Economics, and Demographics Branch of the National Agricultural Statistics Service to contact for additional information. E-mail inquiries may be sent to nass@nass.usda.gov.

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Bruce Boess, Head, Economics Section	(202) 720-4447
Stephanie Brennan – Farm Production Expenditures	(202) 690-0392
Kuan Chen – Prices, Prices Indexes, Parity Prices	(202) 690-3347
Doug Farmer – Chemical Use, Land Values	(202) 690-3229
Zoe Johnson – Cash Receipts, Farm Production Expenditures	(202) 720-5446
Thomas Laidley – Prices Received Indexes, Parity Prices	(202) 221-9280
Michael Mathison – Cash Rents, Farms, Land in Farms, Grazing Fees	(202) 720-3243
Max Reason – Prices Received Indexes, Parity Prices, Prices Paid Indexes	(202) 720-8844
Theresa Varner – Farm Labor	(202) 690-3231

#### **Access to NASS Reports**

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- All reports are available electronically, at no cost, on the NASS web site: www.nass.usda.gov
- ➤ Both national and state specific reports are available via a free e-mail subscription. To set-up this free subscription, visit <a href="https://www.nass.usda.gov">www.nass.usda.gov</a> and click on "National" or "State" in upper right corner above "search" box to create an account and select the reports you would like to receive.
- Cornell's Mann Library has launched a new website housing NASS's and other agency's archived reports. The new website, <a href="https://usda.library.cornell.edu">https://usda.library.cornell.edu</a>. All email subscriptions containing reports will be sent from the new website, <a href="https://usda.library.cornell.edu">https://usda.library.cornell.edu</a>. To continue receiving the reports via e-mail, you will have to go to the new website, create a new account and re-subscribe to the reports. If you need instructions to set up an account or subscribe, they are located at: <a href="https://usda.library.cornell.edu/help">https://usda.library.cornell.edu/help</a>. You should whitelist <a href="notifications@usda-esmis.library.cornell.edu">notifications@usda-esmis.library.cornell.edu</a> in your email client to avoid the emails going into spam/junk folders.

For more information on NASS surveys and reports, call the NASS Agricultural Statistics Hotline at (800) 727-9540, 7:30 a.m. to 4:00 p.m. ET, or e-mail: <a href="mass@usda.gov">nass@usda.gov</a>.

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