

# California Farm Workers in 2016

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## Farm workers, farm jobs, migrants, labor contractors

### Abstract

Almost a million workers, over five percent of California’s workers, were employed for wages in agriculture, forestry, and fishing in 2016. The number of hired farm workers rose almost 20 percent between 2015 and 2016, as more unique workers were reported by farm employers. Most farm workers do not work year-round, and the gap between the earnings of a full-time equivalent worker and the earnings received by workers is widest for the largest sector of employment, farm labor contractors (FLCs). Over half of the workers whose maximum earnings from all jobs in 2016 were in agriculture had only one farm job, and almost 20 percent received unemployment insurance benefits in 2016, including half of those whose maximum earnings were in logging and cotton ginning.

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## **Introduction**

Some 16,150 California agricultural establishments (NAICS 11), including farming, forestry, fishing and hunting, hired an average 425,400 workers and paid them \$13.7 billion in 2016, so that a full-time equivalent (FTE) worker employed in the broad agricultural industry would have earned \$32,300. Over the past decade, the number of agricultural establishments fell over 10 percent, average employment rose over 10 percent, and total wages rose 50 percent.

Over 99 percent of agricultural establishments are farms or firms supporting farms such as FLCs. We use farm worker to mean all workers employed in agriculture, although 0.8 percent of workers had their maximum earnings in foresting, fishing, and hunting.

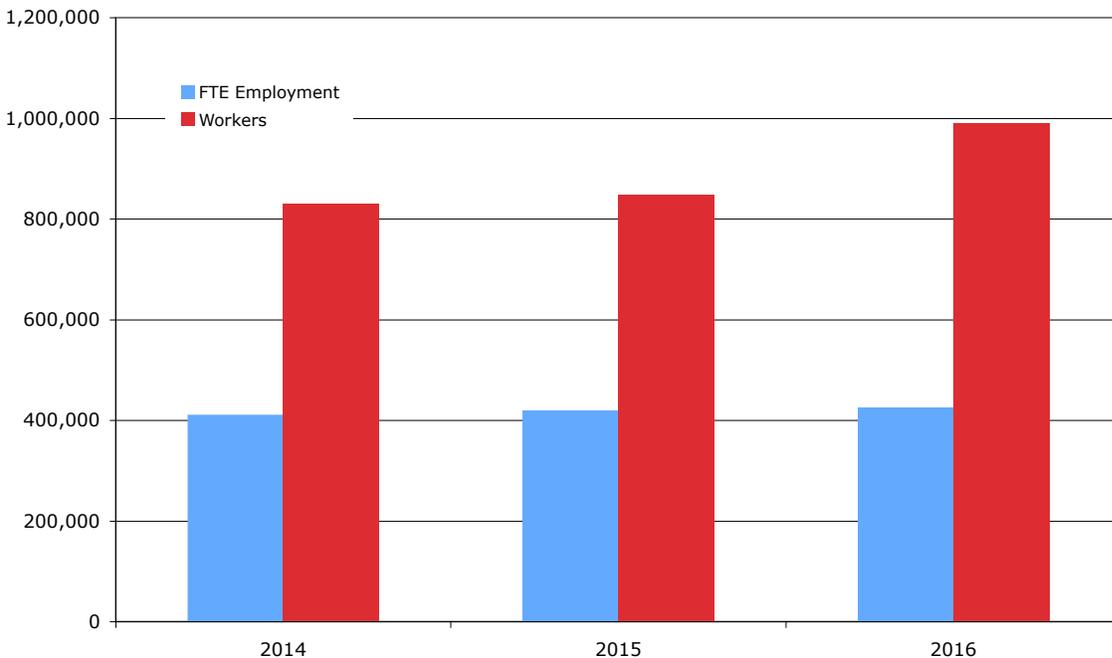
Average employment of 425,400 represents 12 monthly snapshots of persons on the payroll during the payroll period that includes the 12<sup>th</sup> of the month and is a measure of the number of full-time equivalent (FTE) jobs. Employers do not report hours of work, so some of the workers on the payroll may have worked full time and others part time.

However, the \$13.7 billion total wages are payments to all workers, including those who were employed at other times of the month but not during the payroll period that includes the 12<sup>th</sup>. Average annual pay of \$32,300 is what a worker who was employed 52 weeks or 2,080 hours would earn. Since many farm workers are employed less than 2,080 hours a year, they earn less; the average earnings from all jobs of all workers with at least one job in agriculture was \$19,800 in 2016.

Our analysis captures all workers reported by agricultural employers, 989,500 in 2016, and allows us to compare the total number of workers with the average number of jobs. Figure 1 shows that this ratio has been rising from two workers per job in 2014 and 2015 to 2.3 workers per job in 2016, suggesting more workers tried farm work.

**Figure 1. Average FTE Employment and Unique Farm Workers: 2014-16**

**California: Average FTE Employment and Unique Farm Workers: 2014-16**



The analysis is based on Social Security Numbers reported by agricultural employers when paying unemployment insurance taxes. We captured all of the California jobs of the SSNs reported by agricultural employers so that workers could be assigned to the commodity or NAICS code in which they had their highest earnings. This procedure identified 804,200 primary farm workers, including H-2A guest workers, who had their highest earnings from an agricultural employer. Another 185,000 workers had at least one job with an agricultural employer, but their maximum earnings from all jobs was with a nonfarm employer. Note that EDD does not verify SSNs submitted by employers unless the worker applies for unemployment insurance.

### **FTE and Actual Earnings**

Table 1 compares the earnings of an full-time equivalent worker with the actual earnings of primary workers by commodity. For example, an FTE primary farm worker would have earned \$32,300 from all farm and nonfarm jobs in 2016, but the average annual pay of primary farm workers from all jobs was \$16,100, half as much. The implied hourly wage of an FTE worker who was employed 2,080 hours was \$15.54.

**Table 1. FTE and Primary Worker Average Annual Pay, 2016**

		Share of FTE Employ	FTE Pay(\$)	Primary Pay(\$)	Primary Share FTE	Hourly(\$) for 2080 hours
<b>NAICS 11</b>	All ag	100%	32,316	16,142	50%	15.54
<b>NAICS 111</b>	Crops	41%	34,411	20,540	60%	16.54
NAICS1112	Vegetables	8%	39,809	26,092	66%	19.14
NAICS1113	Fruits	23%	31,846	16,900	53%	15.31
NAICS1114	Nursery	6%	35,250	27,124	77%	16.95
<b>NAICS 112</b>	Animals	7%	37,372	30,989	83%	17.97
NAICS 112120	Dairy	4%	36,864	31,433	85%	17.72
<b>NAICS 1151</b>	Crop support	51%	29,956	12,297	41%	14.40
NAICS 115113	Machine harvesting	2%	35,457	17,571	50%	17.05
NAICS 115114	Other postharvest	10%	40,846	23,485	57%	19.64
NAICS 115115	FLCs	34%	24,589	9,026	37%	11.82

Source: EDD analysis of unemployment insurance payroll tax data

California's minimum wage was \$10 an hour in 2016, so the \$16,100 earned by primary farm workers reflects a combination of lower hourly wages and fewer hours or weeks of work (employers do not report hours or weeks worked). A worker employed 2,080 hours in 2016 at the \$10 minimum wage would have earned \$20,800. Farmers reported to USDA that the average earnings of the workers they hired directly were \$13.81 an hour in 2016, so a primary farm worker earning \$16,100 would have worked 1,166 hours at \$13.81 an hour.

Over 40 percent of FTE agricultural workers were hired directly by crop farms, and their FTE annual earnings were \$34,400, equivalent to over \$16.50 an hour. The actual earnings of workers whose maximum earnings were with crop employers were \$20,500, or 60 percent as much. A FTE worker in animal agriculture would have earned \$37,400, while workers whose maximum earnings were from animal agriculture averaged almost \$31,000, 83 percent as much as a full-time worker.

Most workers are employed by nonfarm support service firms that bring workers to farms, such as the farm labor contractors who employed a third of all primary farm workers in 2016. A FTE worker hired by a FLC would have earned \$24,600 in 2016, equivalent to \$12 an hour. However, workers whose maximum earnings were with

FLCs earned an average \$9,000, or 37 percent as much, which is equivalent to 900 hours of work at the minimum wage of \$10 an hour or 750 hours at \$12 an hour.

These comparisons of FTE and average earnings have three major implications. First, except in animal agriculture, FTE pay can be a misleading indicator of what most farm workers actually earn, since most primary farm workers earn less than the \$32,300 or \$15.54 an hour implied by dividing total wages by average employment in various commodities.

Second, the largest categories of workers have the lowest wages and the largest gaps between FTE and actual earnings. FLCs employ a third of all primary farm workers, and their employees have the lowest FTE and average earnings. Fruits and nuts employ almost a quarter of primary farm workers, and they too have low FTE and average earnings.

Third, the ratio of actual to FTE earnings fell between 2015 and 2016. For all workers whose maximum earnings were in agriculture, the ratio of actual to FTE earnings fell from 58 to 50 percent. For workers hired directly by fruit farmers, the ratio fell from 62 to 53 percent, and for workers hired by FLCs from 44 to 37 percent. Such falling ratios of FTE to actual earnings suggest that more workers may be trying farm work but doing relatively little farm work before quitting. At the same time, some experienced workers could be working more hours due to fewer unauthorized newcomers.

### **Farm Workers and Farm Jobs**

Farm workers are often imagined to be migrants who follow the ripening crops from south to north, changing employers as they follow the sun. In fact, follow-the-crop migration is rare: the National Agricultural Worker Survey finds that fewer than five percent of the workers employed on California crop farms have two farm employers at least 75 miles apart.

The farm labor contractors who employ a third of California farm workers may move their crews from farm to farm, sometimes long distances. This means that the picture of migrants painted by John Steinbeck in the *Grapes of Wrath* of the Joad family driving from farm to farm looking for work has been replaced by FLCs taking crews of workers in buses and vans from farm to farm or having the workers transport themselves. A worker may have only one FLC employer during the year, but nonetheless work on many farms.

Table 2 shows that 55 percent of farm workers had only one farm job in 2016, followed by a quarter with two farm jobs and a fifth with three or more farm jobs. There was a

jump in the number of workers with three or more farm jobs between 2014 and 2016 from 13 to 19 percent, almost mirroring the fall in the number of one-employer workers from 60 to 55 percent.

One explanation for more three-job workers is rising worker bargaining power. Fewer unauthorized newcomers means that employers who in the past refused to rehire workers who quit for higher wages elsewhere during the remainder of the season now rehire such workers, encouraging workers to use their cell phones to learn about wages and benefits elsewhere and perhaps increasing worker mobility.

**Table 2. Farm Workers and Farm Jobs, 2014-16**

	Total Workers	One Job	Share	Two Jobs	Share	3 or more	Share
2014	829,300	499,400	60%	220,500	27%	109,400	13%
2015	847,600	481,700	57%	217,200	26%	148,800	18%
2016	989,500	545,200	55%	258,500	26%	185,800	19%

Source: California EDD

Table 3 shows the share of workers who had only one California farm job in 2016 by commodity. The highest percentage of one-job workers was on sheep and hog farms, where 92 percent of workers had only one job in 2016. In most animal agriculture, mushrooms, and nurseries, about three-fourths of workers had only one farm job.

The lowest percentage of one-job workers was in other berries, where 53 percent had only one farm job in 2016. Between 60 and 65 percent of workers whose maximum earnings were in citrus, strawberries, and grapes had only one farm employer, while 70 percent of those employed by FLCs had only one farm employer in 2016.

**Table 3. Primary Farm Workers with one Farm Job in 2016**

Sheep Farming	92%
Hog and Pig Farming	92%
All Other Grain Farming	83%
Support activities for animal production	81%
Mushroom Production	80%
Dairy Cattle and Milk Production	75%
Floriculture Production	75%
Nursery and Tree Production	73%
Tree Nut Farming	71%
Farm Labor Contractors	70%

Other Vegetable and Melon	
Farming	67%
Postharvest Crop Activities	64%
Other Food Crops Grown Under	
Cover	64%
Crop Harvesting	64%
Farm Management Services	63%
Grape Vineyards	63%
Strawberry Farming	62%
Orange Groves	62%
Fruit and Tree Nut Combination	
Farming	61%
Citrus Groves	60%
Other Noncitrus Fruit Farming	60%
Vegetable and Melon Farming	59%
Cotton Ginning	56%
Berry (Except Strawberry)	
Farming	53%

### Unemployment Insurance

Agriculture is a seasonal industry, and laid-off workers who are legal US residents may apply for unemployment insurance benefits. In 2016, some 185,410 laid-off farm workers received a total \$446 million in UI benefits, an average \$2,405 each. Almost three-fourths obtained two or three quarters of UI benefits, and almost 85 percent of recipients collected \$500 to \$5,000. Half of those receiving UI benefits had only one farm job in 2016.

**Table 4. Farm Workers Receiving UI Benefits in 2016**

All UI recipients	Amount (\$mil)	Average
185,410	446	2,405
Number of Workers	Amount of Benefits	
18,031	\$20-\$500	
155,449	\$501-\$5,000	
11,743	\$5,001-\$10,000	

Source: EDD analysis of unemployment insurance payroll tax data

About 82 percent of UI recipients, some 156,000 people, were primary farm workers. Table 5 shows that almost half of those whose maximum earnings were in logging, cotton ginning, and fishing received UI benefits, although these sectors employed relatively few workers.

The largest sector with at least a quarter of primary workers obtaining UI benefits was grape vineyards, where a quarter of the 44,000 workers received UI benefits, more than the average 19 percent of all primary workers who received UI benefits. Less than 10 percent of primary workers in most of animal agriculture received UI benefits, e.g. four percent of primary dairy workers. Most of those employed to herd sheep are H-2A guest workers who are not allowed to remain jobless in the US to collect UI benefits.

**Table 5. Share of Workers Receiving UI Benefits in 2016**

Logging	47%
Cotton Ginning	45%
Vegetable and Melon Farming	33%
Crop Harvesting Postharvest Crop Activities	28%
Other Vegetable and Melon Farming	27%
Fruit and Tree Nut Combination Farming	25%
Citrus Groves	24%
Grape Vineyards	24%
Berry (Except Strawberry) Farming	23%
Farm Labor Contractors	19%
Strawberry Farming	15%
Orange Groves	15%
Tree Nut Farming	14%
Nursery and Tree Production	8%

Floriculture	
Production	6%
Dairy Cattle and	
Milk Production	4%
Mushroom	
Production	3%
Sheep Farming	2%

### Counties and Commodities

Kern county had the most workers with at least one farm job in 2016, 150,300, followed by Fresno with 111,800 and Monterey with 101,300: these three counties had almost 37 percent of the state’s million farm workers.

Farm workers can be assigned to the commodity and county in which they had their maximum earnings. In most commodities, the leading five counties include half to three-fourths of workers. For example, 73 percent of the 354,000 workers employed by FLCs (NAICS 115115) were in five counties: Kern, Fresno, Tulare, Monterey, and Madera, including 28 percent in Kern. The second-largest commodity, NAICS 115114 for postharvest crop activities, included 70,000 workers, and 71 percent were in five counties: Monterey, Fresno, Imperial, Tulare, and San Joaquin.

Table 6 shows the leading sectors of farm employment by county. For example, 98,000 of the 150,000 farm workers in Kern county were reported by FLCs, followed by tree nuts with 11,800 workers and grape vineyards with 11,300; these three commodities accounted for over 80 percent of the farm workers employed in Kern county. In Fresno county, 56,400 workers were reported by FLCs, followed by 13,700 in postharvest crop activities and 10,100 in grape vineyards; these three commodities accounted for 79 percent of the workers reported in Fresno county.

In Monterey county, FLCs employed over 40 percent of primary farm workers, followed by postharvest crop activities with 16 percent and strawberries with 13 percent. Over 57 percent of Tulare county workers were employed by FLCs, followed by eight percent in postharvest crop activities and seven percent in dairies. In Ventura county, almost 30 percent of primary workers were employed in strawberries, followed by a quarter employed by FLCs and an eighth in other berries.

**Table 6. Leading Counties and Commodities for Workers, 2016**

County Name	Number of Farm Workers
Kern County	

Farm Labor Contractors and Crew Leaders (FLC)	97,900
Tree Nut Farming	11,800
Grape Vineyards	11,300
Other Vegetable and Melon Farming	3,100
Other Noncitrus Fruit Farming	3,000
<b>Total</b>	<b>150,300</b>
<b>Other sectors account for remaining workers</b>	
<b>Fresno County</b>	
Farm Labor Contractors and Crew Leaders (FLC)	56,400
Postharvest Crop Activities	13,700
Grape Vineyards	10,100
Other Noncitrus Fruit Farming	4,200
Tree Nut Farming	3,900
<b>Total</b>	<b>111,800</b>
<b>Other sectors account for remaining workers</b>	
<b>Monterey County</b>	
Farm Labor Contractors and Crew Leaders (FLC)	40,700
Postharvest Crop Activities	16,300
Strawberry Farming	13,200
Other Vegetable and Melon Farming	11,000
Crop Harvesting, Primarily by Machine	5,200
<b>Total</b>	<b>101,300</b>
<b>Other sectors account for remaining workers</b>	
<b>Tulare County</b>	
Farm Labor Contractors and Crew Leaders (FLC)	49,400
Postharvest Crop Activities	6,700
Dairy Cattle and Milk Production	5,000
Grape Vineyards	3,700
Farm Management Services	2,600
<b>Total</b>	<b>86,100</b>
<b>Other sectors account for remaining workers</b>	
<b>Ventura County</b>	
Strawberry Farming	12,000
Farm Labor Contractors and Crew Leaders (FLC)	9,700
Berry (except Strawberry) Farming	5,400
Other Vegetable and Melon Farming	2,400
Employment Services	2,000
<b>Total</b>	<b>41,600</b>
<b>Other sectors account for remaining workers</b>	

The number of unique farm workers rose from 847,600 in 2015 to 989,500 in 2016, up 17 percent. In Kern county, the number of unique workers rose by 25 percent, in Fresno county by the statewide average of 17 percent, and in Monterey county by seven percent.

### **Conclusions**

California has a complex farm labor market that involves almost a million workers. The number of unique farm workers has been rising faster than average employment. There were 2.3 workers per full-time equivalent job in 2016, suggesting that more workers tried farm work.

Most of the workers in the largest sectors, farm labor contractors and fruits and nuts, have average earnings that are less than half of what a full-time equivalent worker would have earned. For example, farm labor contractors accounted for 34 percent of full-time equivalent employment in California agriculture in 2016, and workers employed full time or 2,080 hours for FLCs would have earned \$24,589. However, the average FLC worker earned \$9,026, or 37 percent as much, likely because FLC employees were employed less than full time. The gap between FTE pay and actual pay was smallest for workers employed in nurseries and in animal agriculture.

The data reported by farm employers when paying unemployment insurance taxes suggest that there are many workers willing to try farm work, but most wind up with annual earnings of less than \$20,000. This may encourage farm workers to seek nonfarm jobs offering higher wages and more hours of work.

## Appendix: Farm Workers by County in 2016

