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Agricultural Labor Trends: Considerations for Farm Operators and Managers



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INTRODUCTION

Labor shortages in agriculture in the United States have been documented extensively over the past few years. These labor shortages mostly have been tied to specific agricultural industries and particular areas of the country. Examples include the apple industry in Washington (Turnbull, 2011), the fruit and vegetable industry in Georgia (McKissick & Kane, 2011), the strawberry industry in Florida (Guan et al., 2015; Wu & Guan, 2016) and the strawberry industry in California (Hill, 2018). The production cycles and production conditions in agriculture dictate the periods when labor demand is at its peak, hence making labor shortages more prominent. This is particularly important in industries where the product is perishable (Wu & Guan, 2016) or in the presence of adverse weather events that can be catastrophic for the crop and, in turn, for the financial viability of the agricultural operation.

The introduction of technology in production practices and technological innovations assisted agricultural industries, for example row crops, to substitute away from labor into capital by investing in tractors, combines, harvesters, etc. The need for manual field labor in these industries was replaced by the need for agricultural equipment operator labor, requiring a different set of skills. Nevertheless, complete substitutability of capital for labor is unlikely in agriculture. Many agricultural production sectors, such as the vegetables, berries, livestock, and crawfish to name a few, are heavily dependent on labor and are not significantly mechanized. Unavailability of labor can lead to delayed harvesting, which can adversely affect crop product quality and resulting farm business revenue (Wu & Guan, 2016). In addition, labor shortages can affect regional crop production sectors by shortening their marketing window (e.g., tomato production in Florida and tomato production in California) as well as competition with industries outside the United States (e.g., tomato production in Mexico).¹

Agricultural tasks, though they may not require extensive training, are labor-intensive and can be skill-dependent (Martin, 2016). In addition, many farm and ranch tasks are conducted under difficult or extreme working conditions. Moreover, because of the production cycles in agriculture, the majority of these farm labor positions are short-term, seasonal or temporary. These parameters could deter skilled and unskilled domestic workers to

Abstract

Labor shortages have been widely reported in the agricultural sector. This paper documents recent trends in the United States farm labor market, and trends in nonimmigrant seasonal hired labor as reported through the H-2A guest worker program. The challenges that farm operators and farm managers may encounter because of a changing agricultural workforce and when employing guest workers are discussed. Topics include labor market parameters (adverse wage effect rate), labor policy changes (minimum wage), and transaction costs relevant to the H-2A program application process (application time and determination time, provisions to guest workers).

apply to fill these positions, as those individuals may look for other long-term employment opportunities. In the period 2003–2017, there has been a downward trend in the number of farm workers in the United States, with an average decline of 5,200 workers per year over the period. Over the past 10 years, this farm labor decline has slowed somewhat, but still exhibited an annual average decrease of approximately 2,000 farm workers per year (USDA, NASS 2003–2017).

To counter labor supply shocks, farm operators and managers have the choice to offer higher wages to attract domestic workers and/or to consider employing seasonal foreign workers (Ifft & Jodlowski, 2016; Wu & Guan, 2016). Both these actions result in increased costs to the farm business. Higher salaries are reflected directly in financial statements and enterprise budgets as increased labor costs. Employing foreign workers means additional costs related to searching for a willing and able labor force (e.g., advertising, listing agents, immigration lawyers), adapting hiring practices (e.g., contract-based employment, offering prevailing wage rates), and potentially different labor management practices (e.g., employee selection, maintain an audit trail). Agricultural farm business enterprises usually operate on slim profit margins, which make these transitions hard decisions to make. In addition, depending on the scale of the farm business operation, the time required to make such a transition in farm labor acquisition can lead to a temporary reduction in operational efficiency, until the requirements and practices of acquiring foreign labor becomes more familiar and routine to the farm operator or manager.

Moreover, when farm operators and managers decide to hire foreign workers, they also need to take into consideration changes in immigration policies. The stricter enforcement of United States immigration laws (Ifft & Jodlowski, 2016; Wu & Wang, 2016; Devadoss & Luckstead, 2017; Martin, 2017; Charlton & Konstandini, 2018) and an increase in anti-immigrant sentiment (Ifft & Jodlowski, 2016) were related to the reduction of immigrants coming to the United States to fill seasonal agricultural labor positions, hence restricting the available farm labor pool. Farm operators and managers turn to guest worker programs to meet their need for seasonal and temporary labor. The H-2A program is commonly used by farm and ranch operators in the United States to hire agricultural workers on a seasonal basis. This program has been in operation since 1986. However, several factors have deterred many farm operators and managers from using the program extensively, including the completed and time-sensitive worker application process, changes that have occurred over time in the program provisions, costs associated with the livelihood of the

workers, and incomplete information regarding the program and United States government regulations (Guan, Wu, & Whidden, 2013; Guan et al., 2015; Martin, 2016; Escalante & Luo, 2017).

In this paper, we comment on current trends in the United States farm workforce. In particular, we report trends in the United States farm labor and trends in the H-2A program utilization. We discuss the adverse effect wage rate and comment on the implementation of a higher minimum wage; two wage rates that are frequently used in determining agricultural labor costs. Focusing on the H-2A guest worker program, we address challenges regarding filling application time and transaction costs relevant to the program. Hence, we stress the importance of revisiting labor management practices as farm operators and managers prepare to cope with continued labor shortages and policies that could affect future farm labor supply.

TRENDS IN U.S. FARM LABOR

Over the past 10 years, farm worker numbers in the United States, although varying from one year to the next, have remained relatively stable between 700,000 and 760,000 workers (Figure 1). A significant decline in the agricultural labor force occurred in the prior period, when total United States farm worker numbers decreased from 885,700 in 2002 to 731,500 in 2008. Farm wages have adjusted to this declining workforce. Real average farm wages in the United States, adjusted for inflation, remained relatively constant between 2003 and 2011, averaging \$12.11 per hour (Figure 1). However, after 2011 real farm wages increased, reacting in part to the decline in farmworker numbers. The real average farm wage, adjusted for inflation, was \$12.05 per hour in 2011 and has increased steadily since, reaching \$13.32 per hour in 2017.

Changes in farmworker numbers and farm wages across states and regions exhibited similar trends to what has been observed nationally, although some differences exist across the regions. Many of the states or regions have observed decreasing trends in farm labor and increasing trends in real farm wages. California, the largest employer of agricultural labor in the United States, has seen the largest decline in farmworker numbers, dropping 32 percent from 2003 to 2017 (Table 1). Florida, another major employer of agricultural workers, also has seen its farm workforce decline by 32 percent. Some areas however, the Appalachian and Mountain regions for example, have seen slight increases in farmworker numbers. Across the entire United States, farmworker numbers have declined by an average of 5,200 workers per year

between 2003 and 2017. Over the past 10 years, the farm workforce has declined by an average of 1,950 workers per year.

Although all but one region of the country has seen increasing trends in average real farm wages, the magnitude and level of these wages vary from region to region (Table 2). Over the 2011 to 2017 period, the Pacific States and California had the largest increases in farm wages, with average annual trend increases of \$0.30 and \$0.42 per hour per year, well above the national average trend increase of \$0.22 per hour per year. Regions with the highest farm wage level in 2017 were the Northern Plains, Pacific States, and California, with real average farm wages of \$14.18, \$14.64, and \$14.46 per hour, respectively. Regions with the lowest average farm wages in 2017 included the Southeast, the Delta States, and the Mountain regions, all with average farm wages below \$12.00 per hour.

TRENDS IN H-2A PROGRAM UTILIZATION

Guest worker programs were launched in the United States in 1943. The sugarcane industry was the first to employ seasonal agricultural workers from the Caribbean (DOL n.d). The program in its current form was introduced under the Immigration Reform Act of 1986. Since then, the program has expanded its focus and now caters to the majority of the agricultural industries in the country and employs people from 83 countries (DOL, n.d.).

Under the H-2A program, farm operators and managers can employ nonimmigrant labor (other terms used include seasonal and temporary labor, and guest worker labor) for agricultural activities where a shortage of domestic labor is anticipated. The program emphasizes the seasonal and temporary nature of the positions to be filled under the program. Each application is evaluated by the United States Department of Labor (DOL) Employment and Training Administration (ETA) and needs to document the unavailability and insufficiency of local domestic workers to perform the agricultural activities pertaining to the respective operation. In addition, the application must also document that the employment of workers under the H-2A program will not negatively affect the wages and working conditions of local domestic workers capable and willing to be employed for the agricultural tasks mentioned in the application (DOL, n.d.).

Over the past 10 years, we observed a more profound turn to the H-2A program as reported by the Office of Foreign Labor Certification (OFLC). Table 3 presents

information on the number of applications examined (i.e., determined), the number of certified applications, the number of positions requested, and the number of positions certified for the period FY2008–FY2018 (Q3). Annual administrative data from employers' H-2A applications (reported in ETA Form 1942) for the period FY2008–FY2017 showed an increase in the number of determinations and the number of certified applications. The difference in the numbers depicts denied and/or withdrawn applications. On average, the OFLC examined 8,683 applications each year. The lowest number of applications were submitted in 2011 (7,361), and the highest number of applications were submitted in 2015 (10,339). The biggest drop in the number of determinations was observed from 2015–2016, and the highest increase in 2016–2017. Data on FY2018 show that the OFLC has examined more than the average annual number of applications by the third quarter of the year.

The demand for H-2A labor has increased significantly over the period 2008–2017. Since 2011, we observed a continuous increase in the number of people requested through the H-2A program. Farms and ranches in the United States requested 83,844 positions in 2011 (the lowest number in the period 2008–2017), and the highest number of positions requested was in 2017 (206,156 positions requested); a 146 percent increase from 2011. Similarly, the number of certified positions has had an upward trend. Between the period FY2011 and FY2017, we observed an increase in the number of certified positions by 159 percent. Also notable is that the numbers for FY2018 as reported up to quarter 3 have surpassed the numbers for 2016, and are close to the 2017 numbers.

Table 4 presents information by farm region in the United States for the period 2009–2016. As documented by the number of certified positions, we observed the highest concentration in the Northeast I, Appalachian I, Appalachian II, Southeast, Delta States regions, and Florida. These areas employed approximately 50 percent of the H-2A guest workers each year. For the majority of the regions (14 out of 17), we observed a decline in the number of certified positions during the period FY2009–FY2010; for 11 of them, it was the lowest year-to-year decrease in the number of certified positions for the period 2009–2016. This can be explained by the 2009 recession, which may have led domestic workers to turn to the available seasonal employment. In addition, in the period 2009–2010, we observed a 6.1 percent decrease in the number of petitions examined (Table 3), which showed a decrease in the demand for the H-2A program.

CONSIDERATIONS FOR FARM OPERATORS AND MANAGERS

Wage Rates—Adverse Effect Wage Rate and Minimum Wage

Regarding the wage regulations pertaining to the H-2A program, guest workers are paid based on the highest rate of (i) the adverse effect wage rate (AEWR), (ii) the minimum wage at the federal or state level, (iii) the prevailing wage, (iv) the prevailing piece rate or (v) the agreed-upon collective bargaining wage (DOL-ETA, 2018). The AEWR is defined by region, taking into consideration the annual weighted average hourly wage rate for field and livestock workers combined. The AEWR is meant to be a wage rate measure that does not affect the compensation of domestic workers negatively.

The AEWR, though it provides a good measure to capture the compensation of the H-2A workers, is also a wage metric that may not be the best representative of the compensation schedule. The AEWR is based on aggregate information on wage rates by region. These regions are defined geographically by the DOL and can incorporate more than one state. It can be argued that the composition of the regions captures the concentration of the industries in that region, but that may not be true regarding the representation of the socioeconomic characteristics of these regions. For example, the Delta States region includes Arkansas, Louisiana, and Mississippi. These are agriculture-dependent economies and share similar production systems (e.g., rice, broilers, soybeans, cattle), but they also have unique production systems (e.g., Louisiana-crawfish, alligator, and sugarcane). In addition, these states have different economic indicators; for example, GDP measured in 2018 (Q1)—Arkansas \$127.06 billion; Louisiana \$254.06 billion; Mississippi \$114.33 billion³ (BEA, 2018). Taking into consideration that agricultural industries operate in rural areas, the wage rate also needs to account for living standards at the local level, which may not be representative of the state and the specific region for which the AEWR is determined.

Farm and ranch operators and managers deal with contractual agreements and, particularly in the case of hiring H-2A workers, these contractual agreements, i.e., the ETA form 790, need to be approved prior to filing a petition with the United States Citizenship and Immigration Services (USCIS). As discussed above, the minimum wage will be offered if it is the highest wage of the five rates approved by the United States Department of Labor (DOL). One debate topic is the minimum wage versus a living wage. As of 2018, 29 states offer a higher minimum wage than the federal

wage and consider further increasing the minimum wage rate. In 2018, 18 states raised their minimum wage rate to more closely match living costs or because of previously enacted legislation (NCSL 2018).⁴ As stated before, agricultural farm business operations operate with thin profit margins, and particularly in labor-intensive enterprises. Potential increases in the minimum wage rate can affect the demand for domestic labor and the demand and affordability of the H-2A program. Once again, labor costs need to be scrutinized, and it becomes even more important for farm operators and farm managers to have a good understanding of how AEWR and minimum wages could affect the financial viability of their operation.

H-2A Program Application—Incomplete Information or Regulatory Hurdles?

The H-2A program has been characterized as cumbersome and not easy to navigate, apart from being a costly alternative (Guan, Wu, & Whidden, 2013; Martin, 2016).⁵ Hence, many farm operators and managers, though they are aware of the program, opt not to apply. Even in the case where farm operators and managers apply to the program, we observe a significant difference in the number of petitions and certified applications and in the number of positions requested and positions certified (Table 3).⁶ Several reasons for this difference include the arguments regarding the complexity of the program requirements, including a timely petition of employees; a period of stay requested; proof of seasonal nature of the job; proper worker provisions such as housing, transportation, and health; and job offers to natives while employing H-2A workers.

An employer must submit an application no later than 45 days before the employer's first date of need. The H-2A program does not have a cap (the H-2B program is capped at 66,000 people entering with a guest worker visa), which can add another restriction when applying to the program. Nevertheless, the application needs to match the farm or ranch production activities specified and highlight the seasonal and temporary nature of these activities. This will also determine the period of stay for the H-2A workers, which has a maximum term of 10 months.

Another important aspect of the program is the housing, transportation, daily subsistence, compensation, and health provisions provided to H-2A workers. The first three items do not pertain when you hire domestic workers, but for farm operators and managers employing through the guest worker program, these provisions need to comply with applicable local, state or Federal standards as described in 20 CFR 655.122(d)(ii) (DOL,

n.d.). Transportation fees arise in the form of transportation costs to file and obtain a visa to enter the United States as well as transportation between the worksite and lodging establishment. For the respective items, farm operators and managers also need to consider costs related to daily subsistence.

The contractual agreement when hiring H-2A workers also needs to satisfy that domestic workers who apply for a job in the same period with H-2A workers are to also be considered for employment. This applies for the first half of the employment period for which H-2A workers are contracted. During the first 50 percent of the contract period, employers need to hire eligible and able domestic workers regardless of the number of domestic and H-2A workers already working for them (DOL, n.d.). This creates potential complications when the farm business employs at maximum capacity and the costs of hiring additional workers are substantial.

There are also complications on the administration of the H-2A program itself. Producers' comments include the complexity regarding the application process, the amount of paperwork required, and the time it takes for a decision to be made (e.g., Guan, Wu, & Whidden, 2013). Many applicants decide to use a consulting agent or legal firm to help them with the process. Data for the third quarter of 2018 report that about 70 percent of the applications were filed through such a supporting firm.⁷ This adds to the cost to the farm business of applying to the program. Regarding the time of a decision, the average decision period reported was 29 days, a minimum of two days, and a maximum of 314 days⁸; in both cases, the applications were withdrawn from consideration, and the operators did not employ a legal firm.

DISCUSSION

In this study, we documented the changing profile of the agricultural labor market and presented trends regarding farm labor and H-2A nonimmigrant labor in the United States. If these trends persist, farm managers, farm operators, and farm advisors would need to position themselves and their clientele to better address labor shortages and increasing demand for seasonal foreign hired labor. Several important parameters regarding valuation of labor costs are discussed relevant to the AEWR, and the minimum wage rate. These two measures are used in determining agricultural labor costs and are of particular importance should the usage of H-2A workers continues to increase. Incomplete and asymmetric information regarding the H-2A program, as well as misconceptions or misinterpretations of the program and the contractor's responsibilities,

could increase the hesitation of some farm business operations to utilize the program.

The parameters considered in this study are not an exhaustive list of considerations important to farm decision makers dealing with labor shortages and considering turning to the H-2A program to address labor demand. Still, more examination is needed to determine what deters farm operators and managers from applying to the program. Regulations pertaining to the program can be difficult to understand and to apply, so we expect more applicants to turn to an agent or legal firm to assist them with the process. The changing policy environment (e.g., H-2C program) could also generate additional topics of concern. The farm labor market in the United States is more complicated than it is perceived. Farm and ranch operators and managers not only need to secure sufficient farm labor, but they also need to equip themselves with farm labor management practices that can accommodate the changing profile of the available farm and ranch labor force.

FOOTNOTES

1. Guan et al. (2015) report on the competitiveness of the Florida strawberry industry versus that of Mexico.
2. Table 4 compiles information from OFLC reports for the period 2009–2016. These reports were retrieved August 5, 2018, and the numbers provided are based on authors' calculations.
3. Numbers reported as millions of dollars in current dollars seasonally adjusted at annual rates.
4. Alaska, Florida, Minnesota, Missouri, Montana, New Jersey, Ohio, and South Dakota increased their rates based on cost of living. Arizona, California, Colorado, Hawaii, Maine, Michigan, New York, Rhode Island, Vermont and Washington based increases on legislation and ballot decisions. Source: National Conference of State Legislatures. <http://www.ncsl.org/research/labor-and-employment/state-minimum-wage-chart.aspx>.
5. Reports include the Migration Policy Institute (Chishti & Bolter, 2017); United Press International (Ong, 2015); The Labor Brain (The Labor Brain, n.d.)
6. Here we should note that some of the petitions are withdrawn prior to being determined as eligible. These numbers can explain some of the differences in the number of petitions and the number of certified applications.
7. Author's calculations using DOL-ETA disclosure data for 2018 (Q3).
8. Author's calculations using DOL-ETA disclosure data for 2018 (Q3).

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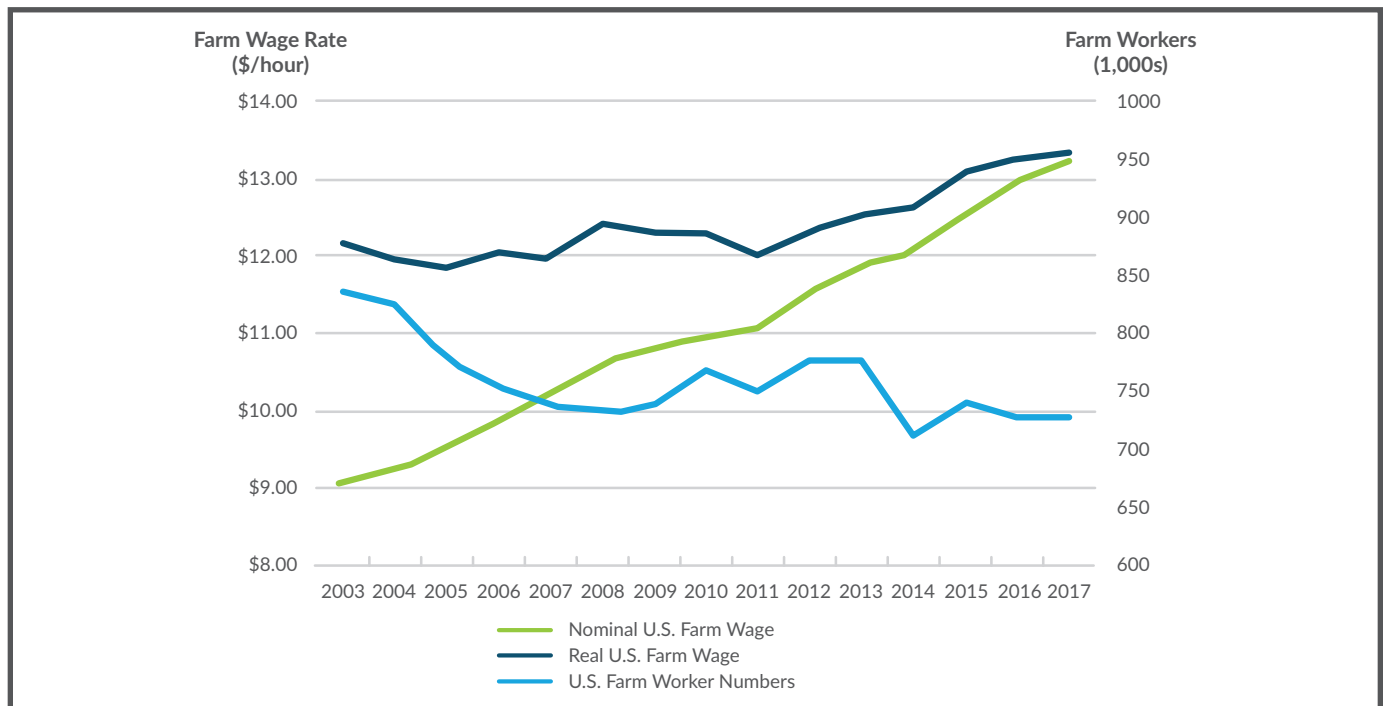


Figure 1 – U.S. Farm Wages and Farm Worker Numbers, 2003 – 2017

Table 1 – U.S. Farm Worker Numbers by Region, 2003–2017

Hired Farm Workers (1,000s)	2003	2008	2013	2017		Trend 2003–17	Trend 2008–17
Northeast I	41.0	34.5	41.8	35.3		0.10	0.32
Northeast II	33.0	29.8	38.3	42.0		0.62	1.42
Appalachian I	38.5	30.5	33.8	30.8		-0.07	0.34
Appalachian II	33.7	25.0	24.0	25.3		-0.54	0.06
Southeast	31.0	31.5	30.3	36.5		-0.23	-0.03
Florida	54.2	45.0	44.0	36.8		-0.97	-0.90
Lake	58.7	55.5	62.0	49.8		-0.36	-0.69
Cornbelt I	42.7	38.3	40.5	39.0		-0.39	-0.38
Cornbelt II	23.2	27.0	27.5	21.3		-0.05	-0.44
Delta	26.2	28.8	24.3	29.8		0.00	-0.28
Northern Plains	30.7	30.3	34.0	33.8		0.20	0.31
Southern Plains	53.5	55.3	58.0	49.0		-0.33	-0.83
Mountain I	23.2	23.3	26.3	29.0		0.27	0.49
Mountain II	21.5	19.3	19.5	20.5		-0.27	-0.15
Mountain III	18.5	18.3	21.3	18.3		-0.08	0.08
Pacific	71.5	77.5	82.3	74.8		0.16	-1.28
California	227.5	156.0	163.3	153.8		-3.16	0.00
U.S.	836.0	731.5	777.3	731.3		-5.20	-1.95

Source: *Farm Labor*, NASS, USDA

Table 2 – U.S. Real Farm Wages by Region, 2003–2017

Real Farm Wages	2003	2008	2013	2017		Trend 2003–10	Trend 2011–17
Northeast I	\$13.28	\$12.84	\$12.64	\$13.77		-0.11	0.28
Northeast II	\$12.58	\$12.09	\$12.70	\$12.90		0.04	0.13
Appalachian I	\$11.60	\$11.64	\$11.04	\$12.09		-0.03	0.22
Appalachian II	\$10.70	\$12.07	\$11.54	\$12.00		0.17	0.15
Southeast	\$11.24	\$10.86	\$11.37	\$11.55		-0.05	0.11
Florida	\$12.22	\$11.78	\$12.25	\$12.61		-0.01	0.13
Lake	\$13.10	\$13.18	\$12.83	\$13.79		-0.01	0.22
Cornbelt I	\$12.85	\$13.00	\$13.09	\$13.65		0.01	0.15
Cornbelt II	\$13.04	\$13.17	\$13.80	\$13.85		0.01	0.18
Delta	\$10.39	\$10.99	\$10.72	\$11.15		0.09	0.10
Northern Plains	\$12.31	\$12.73	\$14.83	\$14.18		0.14	0.19
Southern Plains	\$11.10	\$11.55	\$12.04	\$12.53		0.06	0.18
Mountain I	\$10.67	\$11.70	\$11.79	\$12.30		0.15	0.21
Mountain II	\$12.18	\$12.22	\$12.55	\$11.47		0.02	-0.11
Mountain III	\$10.80	\$12.25	\$11.51	\$11.20		0.20	0.07
Pacific	\$12.37	\$12.52	\$13.17	\$14.64		0.09	0.30
California	\$12.37	\$12.92	\$12.51	\$14.46		0.08	0.42
U.S.	\$12.14	\$12.41	\$12.53	\$13.32		0.05	0.22

Source: *Farm Labor*, NASS, USDA

Table 3 – Summary of H-2A Guestworker Program, 2008–2018 (Q3)

Year	Determinations	Certified Applications	Positions Requested	Positions Certified
2008	8,096	7,944	86,134	82,099
2009	7,857	7,665	91,739	86,014
2010	7,378	6,988	89,177	79,011
2011	7,361	7,000	83,844	77,246
2012	8,047	7,845	90,362	85,248
2013	8,388	8,118	105,735	98,821
2014	9,405	9,152	123,528	116,689
2015	10,339	9,962	145,874	139,832
2016	8,684	8,297	172,654	165,741
2017	10,097	9,797	206,156	200,049
2018 Q3	9,856	9,565	200,363	193,603

Source: *Annual Report Performance Data*, Office of Foreign Labor Certification, DOL, various issues.

Table 4 – Number of H-2A Certified Workers by Region, 2009–2016

US Farm Region	2009	2010	2011	2012	2013	2014	2015	2016
Northeast I (CT, ME, MA, NH, NY, RI, VT)	7,003	5,849	6,083	5,961	7,164	6,823	7,321	7,679
Northeast II (DE, MD, NJ, PA)	2,227	1,748	1,636	1,770	1,851	1,963	2,471	3,104
Appalachian I (NC, VA)	11,352	11,842	11,784	12,659	15,057	18,349	21,043	23,218
Appalachian II (KY, TN, WV)	8,239	7,666	6,650	7,138	8,444	9,633	9,777	10,119
Southeast (AL, GA, SC)	9,469	7,867	10,030	11,832	12,873	14,160	18,722	22,260
Florida	5,820	4,432	5,741	6,945	10,051	13,544	17,942	22,828
Lake States (MI, MN, WI)	1,620	1,134	914	1,276	1,485	2,787	3,851	6,027
Cornbelt I (IL, IN, OH)	1,821	1,569	1,422	2,012	2,559	2,671	3,102	4,541
Cornbelt II (IA, MO)	1,736	1,189	1,409	1,423	1,866	1,738	2,200	3,001
Delta (AR, LA, MS)	11,672	5,436	4,894	5,540	5,769	6,091	6,543	7,394
Northern Plains (KS, NE, ND, SD)	2,527	2,460	2,403	2,591	2,508	2,994	3,567	3,948
Southern Plains (OK, TX)	3,441	2,788	2,614	2,500	2,507	2,988	3,357	3,642
Mountain I (ID, MT, WY)	3,289	3,116	2,499	2,779	2,320	2,964	3,296	3,942
Mountain II (CO, NV, UT)	5,926	5,011	4,856	4,521	3,971	4,123	4,447	5,043
Mountain III (AZ, NM)	3,959	4,857	2,584	2,601	3,102	3,923	4,007	5,772
Pacific (OR, WA)	2,108	3,064	3,261	4,531	6,423	9,263	12,419	14,448
California	3,503	2,629	1,598	2,862	4,199	6,043	8,591	11,106
TOTAL	85,712	72,657	70,378	78,941	92,149	110,057	132,656	158,072
U.S. TOTAL	86,001	79,014	77,290	85,248	98,302	116,689	139,832	165,741
% of U.S. TOTAL	99.66%	91.95%	91.06%	92.60%	93.74%	94.32%	94.87%	95.37%

Source: *Annual Report Performance Data*, Office of Foreign Labor Certification, DOL, various issues.

The U.S. Total is the sum of the breakdown by state. We used that to compute the Region numbers. The numbers may differ from the ones reported in Table 3. This could be attributed to an updated count of the certified positions by regions by the time the final report was compiled.