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The H-2A Temporary Agricultural Worker Program in 2020

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The H-2A Temporary Agricultural Worker Program in 2020

Marcelo Castillo, Philip Martin, and Zachariah Rutledge

Abstract

The H-2A program allows U.S. agricultural employers who anticipate labor shortages to be certified by the U.S. Department of Labor (DOL) to employ guest workers. Over the last decade, the number of jobs certified to be filled by H-2A workers increased from 75,000 in 2010 to 275,000 in 2020. By 2020, H-2A workers accounted for an estimated 10 percent of the average employment on U.S. crop farms. This report uses all H-2A employer applications that DOL certified in fiscal year (FY) 2020 to show how H-2A employment varies by State (and by counties within the top sponsor States), industry, employer size, type of farm employer requesting the workers (labor contractor, individual farmer, or growers association), and type of the third party filing the application on behalf of employers (H-2A agent, lawyer, growers association, or farmers themselves). The report estimates that employers paid \$3.5 billion in wages to H-2A workers in FY 2020. The Farm Workforce Modernization Act approved by the U.S. House of Representatives in March 2021 proposed to freeze the Adverse Effect Wage Rate (AEWR), which is a minimum wage for H-2A workers, for 1 year. We find that an AEWR freeze might have saved employers of H-2A workers an estimated \$169 million a year. Because freezing the wages of H-2A workers could affect the wages of U.S. domestic workers, the wage savings due to AEWR freezes are of interest for H-2A employers as well as for agricultural employers that only hire non-H-2A workers.

Keywords: COVID-19, H-2A guest workers, farm wages, farm labor, immigration, agriculture, foreign worker, seasonal labor, labor market, legal status, farm labor contractor, USDA, ERS, Economic Research Service, U.S. Department of Agriculture

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Contents

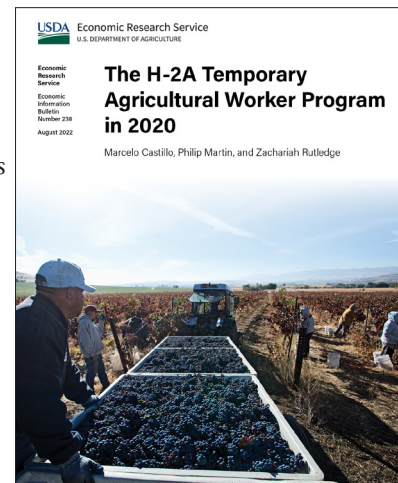
Summary	iii
Abbreviations	v
Introduction	1
Data	4
H-2A Employers, Jobs, and Contract Values in FY 2020	6
H-2A Applications, Jobs, and Employers.	6
H-2A Contract Values.	8
Employer Size	9
Top Employers	10
H-2A Employment Across U.S. States	12
Leading States for H-2A Jobs: Florida, Georgia, Washington, California, North Carolina . . .	15
Florida.	15
Georgia	17
Washington.	19
California	20
North Carolina	23
Farm Labor Contractors in the H-2A Program	25
Out-of-State Jobs.	26
The Adverse Effect Wage Rate Freeze	29
H-2A Wage Savings	30
U.S. Domestic Worker Wages	31
Conclusion	32
References	33

The H-2A Temporary Agricultural Worker Program in 2020

Marcelo Castillo, Philip Martin, and Zachariah Rutledge

What Is the Issue?

The H-2A agricultural worker program allows U.S. agricultural employers who anticipate too few workers to fill seasonal farm jobs by employing guest workers. The program has grown partly in response to a drop in newly arrived immigrants who seek U.S. farm jobs and current U.S. domestic workers finding jobs outside of U.S. agriculture. The H-2A program continued to expand in fiscal year (FY) 2020 despite the jump in U.S. unemployment due to lockdowns associated with the Coronavirus (COVID-19) pandemic. This report analyzes—by State, industry, and type of employer—the job offers of U.S. agricultural employers who sought U.S. Department of Labor certification in FY 2020. The authors calculate the value of job offers to estimate the H-2A wage bill and examine how proposals to freeze the Adverse Effect Wage Rate (AEWR), which is a minimum wage for H-2A workers, could affect the wages of both H-2A and U.S. domestic workers.



What Did the Study Find?

- The number of jobs certified to be filled with H-2A workers increased from around 75,000 in FY 2010 to around 275,000 in FY 2020. Six States accounted for 55 percent of H-2A jobs certified: Florida (14 percent), Georgia (10 percent), Washington (10 percent), California (9 percent), North Carolina (8 percent), and Louisiana (4 percent).
- Nationally, the average H-2A contract offered 24 weeks and 39.3 hours per week at an average hourly wage of \$13. The average contract was worth \$12,500, with a total H-2A wage bill of \$3.5 billion in FY 2020. Nationally, the average value of H-2A contracts ranged from \$8,000 to \$24,000.
- The top 1 percent of H-2A applicants (about 90 employers) received 40 percent of all H-2A certifications in FY 2020. Most applicants request relatively few workers; about two-thirds request between one and nine H-2A certifications and account for less than 8 percent of the national total. The top 10 employers of H-2A workers included 2 growers associations, 2 farms, and 6 farm labor contractors (FLCs).
- FLCs accounted for 44 percent of H-2A jobs certified in FY 2020, with most jobs certified to FLCs in Florida and California, although some FLCs based in one State may employ H-2A workers in other States.

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Many employers rely on specialized third parties such as agents, lawyers, and associations to file H-2A applications on their behalf. H-2A agents filed applications for 45 percent of all H-2A jobs in FY 2020, growers associations for 21 percent, lawyers for 19 percent, and farmers or their employees for only 15 percent.

- The Farm Workforce Modernization Act that the House approved in March 2021 proposed to freeze the AEW for 1 year. We estimate that an AEW freeze would save \$140 million a year in wage costs for H-2A workers and \$29 million a year in wage costs for the more than 50,000 U.S. domestic workers in “corresponding employment” on farms with H-2A workers who must be paid the same AEW.
- Freezing the AEW could encourage a faster expansion of the H-2A program and may affect the wages of the U.S. domestic workers who fill 90 percent of average employment on U.S. crop farms. The 2017 Census of Agriculture reported that U.S. crop farmers paid \$27 billion in wages for directly hired and contracted workers. If changes in the AEW affect the wages of U.S. crop workers, the effects of freezing the AEW would be greater than the \$169 million estimated in this report.

How Was the Study Conducted?

Employers seeking certification to employ H-2A workers are required to complete DOL Forms 9142A and 790A, describing the work to be performed, the commodity and location of the work, and the hours of work and wages, as well as housing and transportation arrangements. We analyzed the DOL’s case disclosure files, which are publicly available and contain administrative data from Forms 9142A and 790A, while focusing on the States, commodities, and employers with the most jobs certified.

We calculated the value of the job offers certified by DOL by assuming that all the hours offered were worked at the offered hourly wage. Actual worker earnings could be lower if employers satisfy only the three-fourths guarantee, meaning that they pay for that amount of the days and hours of work promised in the H-2A job offer. On the other hand, H-2A worker earnings could exceed our estimated contract values if employers offer and workers accept more hours of work, workers employed under piece-rate wage systems earn more than the AEW, or workers receive overtime wages and bonuses.

Abbreviations

AEWR	Adverse Effect Wage Rate
CAW	Certified agricultural worker
CBA	Collective bargaining agreement
COA	Census of Agriculture
COFS	COVID-19 Farmworker Study
DOL	Department of Labor
DOS	Department of State
ECI	Employment Cost Index
ETA 9142A	H-2A Application for Temporary Employment Certification
ETA-790A	H-2A agricultural clearance order form
FLC	Farm labor contractor
FLS	Farm (Agricultural) Labor Survey
FTE	Full-time equivalent
FWMA	Farm Workforce Modernization Act (HR 1603)
NAICS	North America Industry Classification System
NASS	National Agricultural Statistics Service
NCGA	North Carolina Growers Association
OES	Occupational Employment Statistics
PAW	Portable agricultural worker
QCEW	Quarterly Census of Employment and Wages
UI	Unemployment insurance
USCIS	U.S. Citizenship and Immigration Services

The H-2A Temporary Agricultural Worker Program in 2020

Introduction

The H-2A program allows farm employers who anticipate too few workers to fill seasonal farm jobs by employing foreign guest workers. The H-2 program was enacted in 1952 and modified and renamed H-2A in 1986. Since then, bills have been introduced to further change the program by allowing farm employers who offer year-round jobs to be certified to employ H-2A workers and to revise employer recruitment, housing, and wage payment obligations.

The COVID-19 pandemic disrupted agricultural labor markets in 2020, prompting fears of labor shortages and adding urgency to the debate over H-2A program reforms. Farm workers often have limited access to social safety net programs and sometimes live in crowded housing, which could encourage some to go to work while sick and spread COVID to co-workers and family members (Beatty et al., 2020). U.S. borders were closed to nonessential travel and, despite exceptions for H-2A guest workers, there were fears that some labor-intensive commodities would not be harvested in 2020 due to farm labor shortages (USCIS, 2020; Escalante et al., 2020).

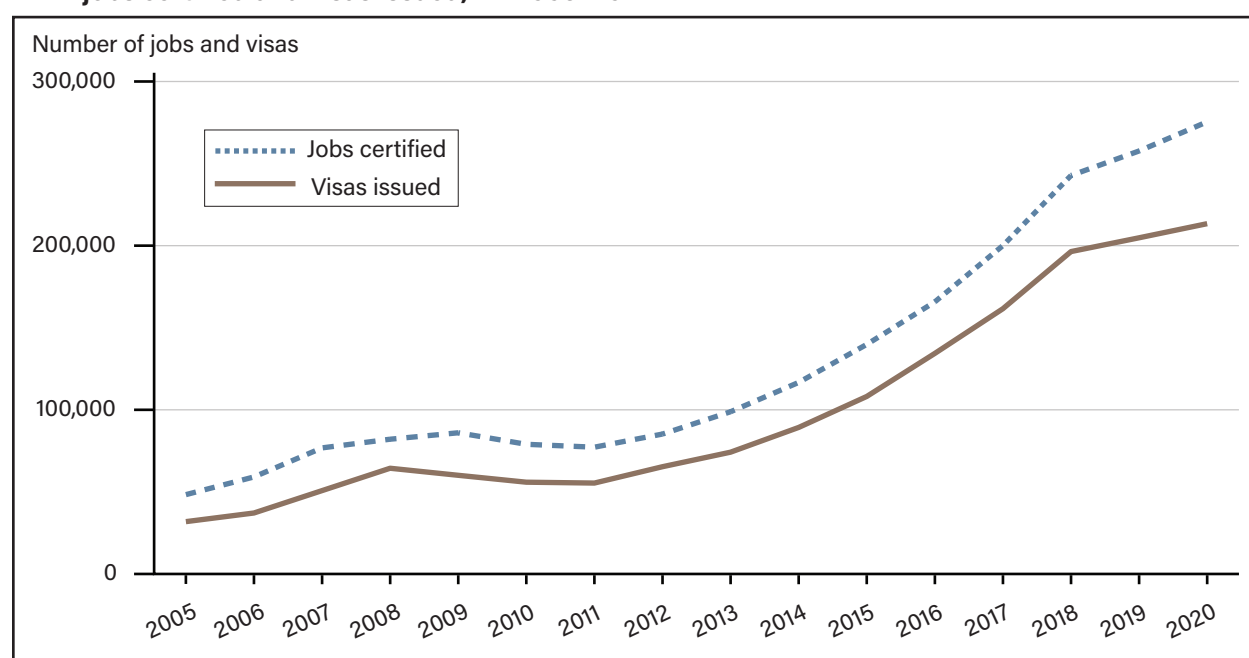
However, fears of COVID-19-induced farm labor shortages in the summer and fall of 2020 appear to have been unfounded. There were no widespread reports of shortages, and U.S. Department of Agriculture (USDA) data on fresh fruit and vegetable show that 2020 total shipments were similar to 2019, although up for some commodities and down for others (U.S. Department of Agriculture, 2021; Rural Migration News, 2020a). Instead, there were some reports of farm workers having lower earnings in 2020 because of fewer hours offered due to reduced demand for fresh produce from restaurants and foodservice firms (COFS, 2020).

To help farmers cope with labor uncertainty in 2020, the U.S. agencies tasked with administering the H-2A program temporarily modified some H-2A regulations to increase access to the visas. For example, the U.S. Citizenship and Immigration Services (USCIS) made it easier for H-2A workers to change employers and permitted some to stay in the United States beyond the usual maximum period, and the U.S. Department of State (DOS) waived the in-person interview requirement for eligible new and returning applicants (Escalante et al., 2020; Charlton and Castillo, 2021). Increased accessibility to H-2A visas may have contributed to the H-2A program's expansion in 2020 and helped avert farm labor shortages.

The U.S. Department of Labor (DOL) certified employers to fill around 275,500 jobs with H-2A workers in FY 2020, up 7 percent from around 257,700 in FY 2019. About 80 percent of job certifications result in visas being issued to H-2A workers—some employers do not follow through to hire H-2A workers and some workers fill two certified jobs. The number of H-2A certifications has increased fivefold since 2005 (including doubling since 2014), with significant differences between States. By 2019, H-2A workers filled about 10 percent of U.S. full-time equivalent jobs in crop agriculture (Costa and Martin, 2020).¹

¹ Costa and Martin (2020) estimate there were roughly 1 million full-time equivalent jobs in U.S. crop agriculture in 2019. They approximate that H-2As filled around 100,000 of these jobs since the U.S. Department of State issued around 200,000 H-2A visas in 2019, and the average length of H-2A employment was 6 months.

Figure 1

H-2A jobs certified and visas issued, FY 2005–20

Notes: Around 80 percent of H-2A certified jobs result in visas issued to H-2A workers. Some employers do not follow through to hire the workers, and some H-2A workers fill two or more certified jobs. H-2A certified jobs and visas issued in 2021 were 317,000 and 258,000, respectively.

Source: USDA, Economic Research Service using data from the U.S. Department of Labor and the U.S. Department of State.

In this report, we use DOL FY 2020 data on H-2A certifications to document differences in H-2A employment by State, employer size, industry, type of employer (farm labor contractor, growers association, or fixed-situs employer), and, if relevant, type of firm filing the application on behalf of the employer (e.g., H-2A agent or law firm).² We show that in FY 2020, employers in the 6 States that each had over 10,000 jobs certified—Florida, Georgia, Washington, California, North Carolina, and Louisiana—accounted for 55 percent of H-2A certifications. The top 1 percent of H-2A applicants with the most certifications, some 90 employers, obtained 40 percent of all H-2A certifications in 2020. However, most H-2A applicants request relatively few workers, with two-thirds of H-2A employers requesting less than 10 H-2A jobs. We also show that over the last decade the farm labor contractor (FLC) share of H-2A employment has been increasing. By FY 2020, FLCs accounted for 44 percent of H-2A jobs certified, including most of those certified to employers in Florida and California. Many FLCs based in one State employ H-2A workers in other States; over one-third of all FLC H-2A employment was contracted for out-of-State employers and worksites.

Finally, we use data on offered hours and wages to calculate the value of each H-2A contract and to estimate the national H-2A wage bill. The Farm Workforce Modernization Act (HR 1603), approved by the U.S. House of Representatives in March 2021, includes a 1-year freeze of the Adverse Effect Wage Rate (AEWR) that must be paid to H-2A and U.S. domestic workers in corresponding employment. Combining the historical average growth rate of the AEWRs by State with our approximation of the wage bill of H-2A and U.S. workers in corresponding employment, we estimate that a 1-year AEWR freeze would save H-2A employers \$169 million. If the freeze in the AEWR also dampens wage increases for domestic workers not in corresponding employment, the wage savings for U.S. agricultural producers would be larger.

² A fixed-situs (or fixed-site) farm employer is one “who owns or operates a farm, ranch, processing establishment, cannery, gin, packing shed, nursery, or other similar fixed-site location where agricultural activities are performed and who recruits, solicits, hires, employs, houses, or transports any worker subject to sec. 218 of the INA or these regulations as incident to or in conjunction with the owner’s or operator’s own agricultural operation.” (29 CFR § 502.10).

This report contributes to the literature that examines various aspects of the recent expansion of the H-2A program (Bampasidou and Salassi, 2019; Castillo et al., 2021; Luckstead and Devadoss, 2019; Martin, 2017, 2019; Martin and Rutledge, 2022; Castillo and Charlton Thronson, 2022). In particular, the report complements Castillo et al. (2021) who analyzed DOL H-2A certification data between FY 2010 and FY 2019, finding that the number of jobs certified more than tripled from 70,000 to 258,000 over this period. They noted that H-2A employment increased in all regions and sectors of the country. Most H-2A jobs are in the Southeastern States with the lowest AEWRs, although certifications are rising fastest in States with the most farm workers and highest AEWRs, such as California and Washington.³ By type of commodity, increases in H-2A employment were highest in fruits and vegetables, which accounted for two-thirds of the jobs that were certified in FY 2019. Among industries that are more labor-intensive, growth in H-2A employment in the livestock sector (e.g., dairy cattle and milk production) was lower than in other labor-intensive industries. Many jobs in these industries are year-round and thus do not qualify to participate in the H-2A program, whose jobs must be seasonal or temporary.

³ DOL sets this year's AEWRs based on last year's Farm Labor Survey (FLS), which is administered by USDA's National Agricultural Statistics Service (NASS). The FLS obtains average hourly earnings data for various types of workers who are hired directly by farmers (workers hired by FLCs are not counted). Average earnings obtained from the FLS vary significantly across region and reflect supply and demand conditions in a given area. Thus, regional changes in supply or demand this year will affect the AEWRs next year. The appendix shows AEWR trends for U.S. regions for FY 2011–FY 2020.

Data

We analyzed DOL's Office of Foreign Labor Certification (OFLC) H-2A case disclosure data that contain administrative data from employers' H-2A applications for Temporary Employment Certification (ETA Form 9142A) and H-2A agricultural clearance orders (ETA-790A). Employers must complete these forms to apply to DOL for H-2A certification. Form 9142A records the employer's name, location, and North American Industry Classification System (NAICS) code, and whether the employer is a farm labor contractor or an association filing jointly with multiple producers. The form also gathers information about whether an agent or lawyer filed the application on behalf of the employer, along with many other variables.⁴

Form 790A describes the job, including the start and stop dates, hours per day, hours per week, wages, any job qualifications required, details of the housing and meals or cooking facilities provided, transportation arrangements, and the workplace location, which may differ from the employer location.⁵ In addenda to Form 790A, employers may attach more details about the job, such as piece-rate wages and productivity standards. For FLCs and associations filing jointly with multiple fixed-situs agricultural businesses, the addenda include the names of all agricultural businesses and locations where H-2A workers will be employed.

DOL eligibility rules require that agricultural employers show that hiring H-2As will not have an adverse effect on the wages or working conditions of U.S. domestic workers. To implement this no-adverse-effect rule, employers must pay the highest of four wages: the Adverse Effect Wage Rate (AEWR), the Federal or State minimum wage, or the prevailing wage of U.S. domestic workers.⁶ If there is a collective bargaining agreement (CBA), employers must attach a copy of the CBA to their applications and pay the CBA wage if it is higher than the minimum, AEWR, or prevailing wage.⁷ ⁸ The AEWR is almost always the highest wage, and thus it acts as the minimum wage for the H-2A program. In FY 2020, most employers set wage offers at the AEWR, with less than 2 percent of H-2A jobs offering a wage higher than the AEWR.

We estimated the total value of a certified H-2A contract by multiplying the wage offered in the contract by the number of hours per week offered, the number of weeks of work offered, and the total number of jobs certified in the application. Some employers filed multiple applications. We obtained the average value of the contract by multiplying the hours by the wage and dividing by the total number of jobs that were certified by DOL for that employer. To obtain the total wage bill for an employer, county, State, or industry, we sum the value of the contracts certified for each entity.⁹

⁴ The employer makes 17 attestations in Form 9142A appendix A, including a promise to hire any qualified U.S. domestic worker who applies and offering and paying domestic workers the same wages and benefits as H-2A workers.

⁵ Form 790A also collects information on the commodity to be produced, but the FY 2020 disclosure files only report these data for a fraction of all applications. The disclosure data are also available for FY 2006–FY 2019, and commodity data are available in many of these years.

⁶ The prevailing wage is an hourly or piece-rate wage determined by the local State workforce agency.

⁷ The disclosure data do not include any information on collective CBAs. Some employers with CBAs may use farm labor contractors (FLC) to obtain H-2A workers, and, if their CBAs exclude FLC-provided H-2A workers, these employers may not consider their U.S. workers to be in corresponding employment.

⁸ DOL relaxes the AEWR rule for some livestock employers. For instance, sheep and goat producers are allowed to pay a monthly wage. The hourly equivalent wage, assuming 40-hour work weeks, is less than the AEWR (U.S. Department of Labor, 2015). For these employers, weekly hours of work are missing in the data. For our analysis, we replace missing weekly hours with a value of 40 hours.

⁹ Given that most H-2A jobs offer the AEWR as the hourly wage, computing contract values by using the worksite State's AEWR instead of the reported offered hourly wage yields very similar results. To implement this exercise, an AEWR of \$13.86 (the simple State average of all available AEWRs) was imputed for Alaska and Puerto Rico because the DOL does not designate an AEWR for either location.

Average contract values and wage bills are approximate for several reasons. First, some certified job orders do not result in H-2A visas being issued, since not all employers follow through and employ H-2A workers. Second, workers could earn less than 100 percent of the job order if employers satisfy only the three-fourths guarantee, meaning that they pay for three-fourths of the days and hours of work promised.¹⁰ Third, workers could earn more than 100 percent of the contract's value because they work more hours than promised in the contract, earn more than the AEW under piece-rate wage systems, or receive overtime wages and bonuses.¹¹ We do not have payroll data to know exactly what workers earn, so our calculation of average contract values is an approximation.

¹⁰ Employers must guarantee wages for three-fourths of the contract period that they specify, so that the minimum value of a contract is three-fourths of a full contract.

¹¹ Piece-rate wages encourage fast work without close supervision. Moretti and Perloff (2002) found that piece-rate agricultural workers earned 26 percent more than time-rate employees.

H-2A Employers, Jobs, and Contract Values in FY 2020

H-2A Applications, Jobs, and Employers

Table 1 summarizes data on the number of H-2A applications, jobs, and employers for California (the largest State by farm sales and employment), Florida (the State with the most H-2A certifications), and the rest of the United States.

DOL's Office of Foreign Labor Certification (OFLC) received over 14,000 H-2A applications in FY 2020 and fully or partially certified the need for H-2A workers in almost all of them (over 13,500 applications, or 96 percent).¹² Over 275,000 H-2A jobs were certified, corresponding to 127,000 full-time equivalent (FTE) jobs, and 96 percent were in crop or crop support industries.^{13 14}

Table 1
H-2A applications, jobs, and employers, fiscal year 2020

	U.S.	CA	FL	Other States
Applications certified	13,549	713	586	12,250
Total jobs certified	275,415	25,453	39,064	210,898
FTE jobs	127,136	12,716	17,630	96,790
Number of H-2A employers	8,934	223	261	8,450
Number of end-user farms	17,840	1,867	1,134	14,839
Number of worksites	87,104	14,220	8,789	64,095
Crop share of H-2A jobs (percent)	96	97	99	96

U.S. = United States. CA = California. FL = Florida. FTE = full-time equivalent.

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Some employers submit several applications; about 9,000 unique H-2A employers submitted applications for H-2A workers in FY 2020. Employers eligible to request H-2A workers fall into three main types: individual (fixed-situs) employers, growers associations, and FLCs. H-2A applications may be submitted by a single employer or by a group that plans to employ the H-2As jointly. Fixed-situs employers and FLCs almost always submit single employment applications, while associations tend to submit joint applications.

FLCs usually provide workers to multiple fixed-situs employers. The DOL allows FLCs to service multiple farms in one H-2A application, with addendum B to Form 790A listing all the fixed-situs employers' names and locations for which FLCs have agreements to provide H-2A workers. H-2A employers filing for joint employment must also list the names and locations of all agricultural businesses that will employ H-2A workers. Counting each end-user farm separately, we estimate that about 18,000 farms participated in the H-2A program directly and indirectly in FY 2020, almost double the number of firms that submitted petitions, and that H-2A workers were employed at about 87,000 worksites in the United States.

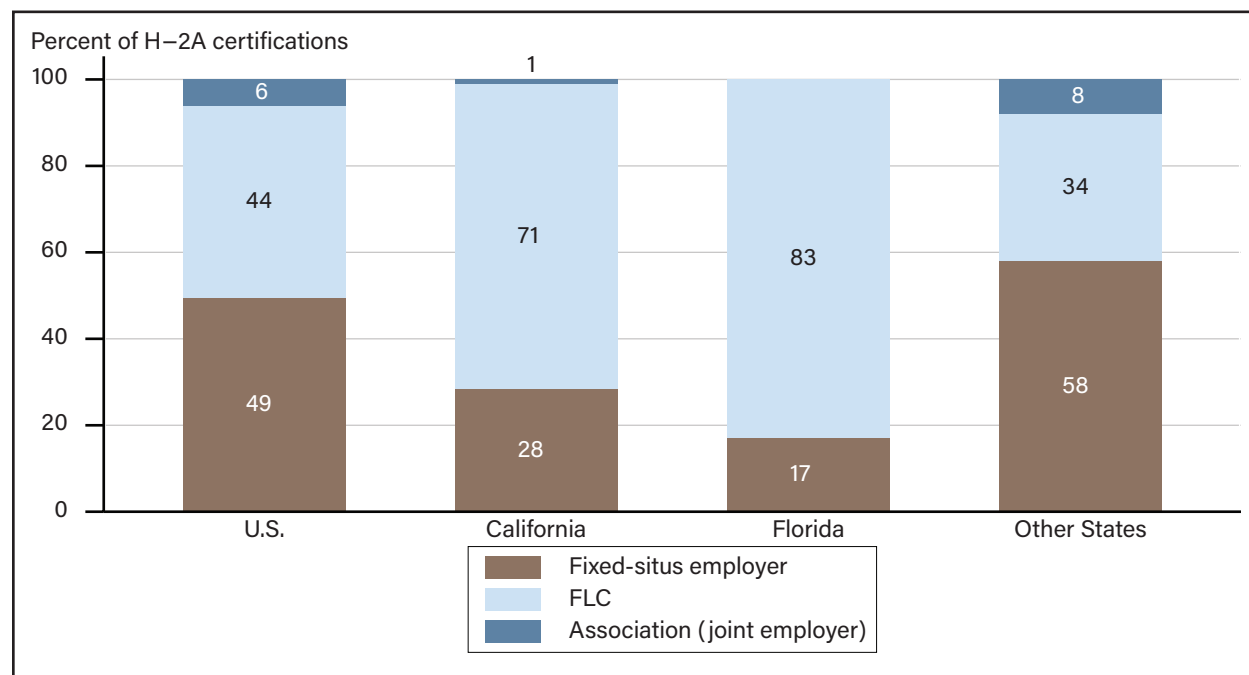
¹² DOL can fully or partially certify an employer's application. The employer may request that multiple jobs be certified in a single application. Full certification means that the employer who applied to fill 100 jobs may recruit 100 H-2A workers; partial certification indicates that the employer has approval for fewer than 100 H-2A jobs. Table A-1 in the appendix shows the number of H-2A applications that DOL certified, partially certified, or denied in FY 2020.

¹³ This study computes H-2A FTEs for a given region by dividing the contract length (in days) for each job certified by 365 and summing all certified H-2A job offers in that group. For example, if there was only one contract in a county and two H-2A jobs were certified for 200 days each, the county would have $2 \times (200/365) = 1.1$ FTEs. Contract lengths were computed as the number of days between the contract start and end dates, which includes weekends.

¹⁴ This study uses the employer's NAICS codes to categorize petitions by subsector.

Figure 2 shows that in FY 2020, slightly under half of all H-2A jobs certified were for employment by fixed-situs employers, followed by FLCs with 44 percent and growers associations (and their associated fixed-situs members acting as joint employers) with 6 percent. The share of certifications for FLCs was much higher in California and Florida than in the rest of the United States, likely reflecting the fact that many farm workers in these States are brought to farms by FLCs. Growers associations acting as joint employers played a minimal role in California and almost no role in Florida.

Figure 2
H-2A jobs by employer type, fiscal year 2020



FLC = farm labor contractor.

Note: Percentages may not add to 100 due to rounding.

A fixed-situs (or fixed-site) farm employer is one “who owns or operates a farm, ranch, processing establishment, cannery, gin, packing shed, nursery, or other similar fixed-site location where agricultural activities are performed and who recruits, solicits, hires, employs, houses, or transports any worker subject to sec. 218 of the INA or these regulations as incident to or in conjunction with the owner’s or operator’s own agricultural operation.” (29 CFR § 502.10).

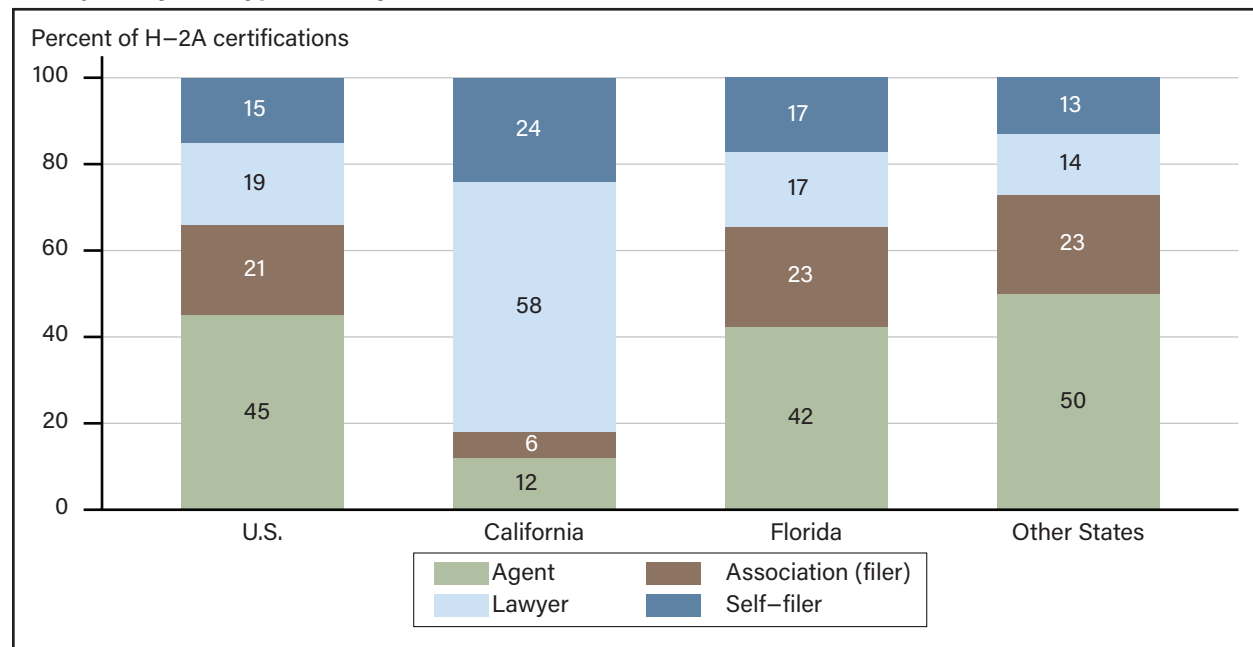
Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Growers associations still play a significant role in the H-2A program despite directly sponsoring only 6 percent of all H-2A jobs because they filed petitions for 21 percent of all jobs requested (figure 3).¹⁵ Many employers complain that they need specialized help to apply for H-2A certification and rely on specialized third parties such as agents, lawyers, and associations to file H-2A applications on their behalf.¹⁶ H-2A agents filed applications for 45 percent of all H-2A jobs in FY 2020, lawyers 19 percent, and farmers or their employees only 15 percent. There are notable differences in the rates at which different types of third-party filers are used across States. For example, lawyers tend to file for most of the jobs in California, while agents and associations account for two-thirds of the job filings in Florida.

¹⁵ Associations acting as joint employers tend to file in-house. As a result, associations are involved as filers or joint employers in over a quarter of all H-2A jobs.

¹⁶ In addition to filing the paperwork with the multiple Government agencies involved in the H-2A application process, third parties can aid prospective employers by making sure they are aware of relevant regulations. Some third parties provide a wide range of services such as worker recruitment or referrals to recruiters in the workers’ home countries.

Figure 3

H-2A jobs by filer type, fiscal year 2020

Note: Percentages may not add to 100 due to rounding.

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

H-2A Contract Values

To estimate approximate contract values, we use data on offered wages, the number of hours per week, the number of weeks of work, and the total number of jobs certified in each application. In FY 2020, the average duration of contracts was 24 weeks, with hours per week averaging 39. The average number of jobs per certified application across the United States was 20, and the average H-2A worker was offered a contract worth \$12,500.¹⁷

Table 2

H-2A contract averages, fiscal year 2020

	U.S.	CA	FL	Other States
Total jobs certified	275,415	25,453	39,064	210,898
Jobs per application (avg.)	20	36	67	17
Weeks (avg.)	24	26	23	24
Hours per week (avg.)	39	38	37	40
Contract value (avg. \$)	12,500	14,432	9,940	12,741
AEWR	13.43	14.77	11.71	13.51
H-2A wage bill (millions \$)	3,443	367	388	2,687

U.S. = United States. CA = California. FL = Florida. avg. = average. AEWR = Adverse Effect Wage Rate.

Notes: The approximate value of an H-2A contract is obtained by multiplying the wage offered in the contract by the number of hours per week offered, the number of weeks of work offered, and the total number of jobs certified in the application. The AEWR for the United States is the average of State-by-State AEWRs weighted by each State's share of jobs certified.

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

¹⁷ There is no national Adverse Effect Wage Rate (AEWR), but \$13.43 represents the average of State-by-State AEWRs weighted by each State's share of jobs certified in FY 2020.

In California, the number of jobs per certified application was 36, the average duration of contracts was 26 weeks, and the hours per week averaged 38. The average H-2A worker in California was offered a contract worth about \$14,500 in 2020. The average number of jobs per certified application in Florida was 67, with an average contract length of 23 weeks for an average of 37 hours per week, generating around \$10,000 if all the offered hours were worked. California and Florida had a higher-than-average number of jobs per certified application and longer contract lengths because, as figure 2 shows, they have a higher share of FLCs who tend to employ H-2A workers on multiple farms.

We estimate a nationwide H-2A wage bill of around \$3.5 billion in FY 2020, with 48 percent paid in the top five States of Florida (\$388 million), Washington (\$380 million), California (\$367 million), North Carolina, (\$275 million), and Georgia (\$227 million).¹⁸ While Florida had more H-2A jobs certified for work in the State than California, its H-2A wage bill is similar because the AEW is higher in California.

Employer Size

H-2A employment is concentrated on a relatively small fraction of the Nation's 2.1 million farms. Over 513,000 farms reported expenses for farm labor in the 2017 Census of Agriculture (COA), and 105,000 agricultural establishments were registered with unemployment insurance authorities in the Quarterly Census of Employment and Wages (QCEW) in 2017, including individual farms and crop-support service firms such as FLCs who bring workers to farms.¹⁹ The 18,000 employers who hire H-2A workers (directly or through FLCs) represent 3.5 percent of COA farm employers and 17.1 percent of QCEW agricultural establishments.

Within agriculture, a relatively small number of large employers account for most farm employment. The largest 10,000 farms with labor expenses in the 2017 COA, less than 2 percent of all farms, accounted for 52 percent of all labor expenses reported by farmers for directly hired workers. Similarly, in 2020, some 1,600 agricultural establishments (NAICS 11) that each employed 100 or more workers in March, the month for which size-of-establishment data are available in the QCEW, employed a total of 400,000 workers, meaning that less than 2 percent of the 107,000 March 2020 agricultural establishments accounted for 35 percent of the 1.1 million March 2020 agricultural employment.

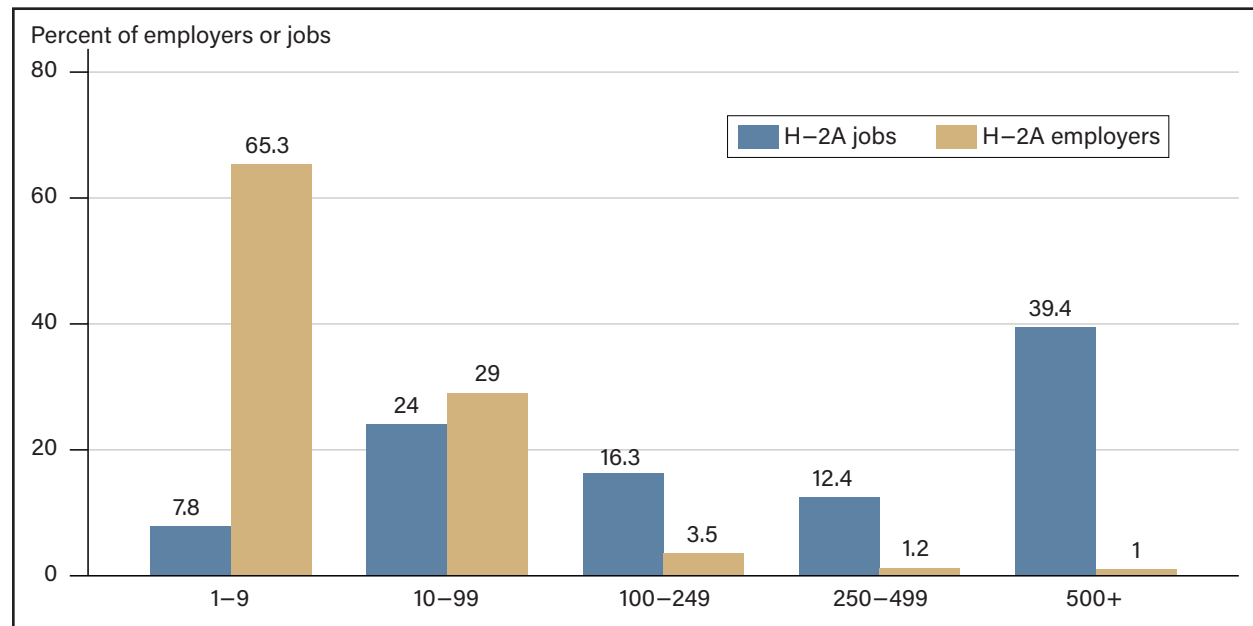
Within the H-2A program, a relatively small number of employers sponsor the majority of H-2A workers. Figure 4 shows the share of H-2A employers and jobs certified by size category, defined by the number of H-2A workers certified. The gold bars (on the right) denote the share of the total number of H-2A employers that belong to that size category, and the blue bars (on the left) show the share of all H-2A workers certified to those employers. The figure shows that the largest 6 percent of H-2A applicants, those in the top three size categories, accounted for 68 percent of certified jobs in FY 2020, and the top 1 percent (the top category, which includes about 90 employers) received around 40 percent of all H-2A certifications.²⁰ Most applicants request relatively few workers; about two-thirds request between one and nine H-2A jobs, accounting for less than 8 percent of the national total.

¹⁸ The \$3.5 billion H-2A wage bill is what would be paid if employers paid 100 percent of the value of H-2A contracts. Employers are required to pay at least 75 percent of the contract's value. If they paid only the so-called three-fourths guarantee, the H-2A wage bill would have been \$2.6 billion in 2020. On the other hand, employers may offer, and H-2A workers may accept, more than the average 39 hours a week, which would mean workers earned more than 100 percent of the value of the contract. If they earned 125 percent of the value of the contracts, the H-2A wage bill would have been \$4.4 billion.

¹⁹ Federal law requires farms that employ at least 10 workers on each of 20 days in 20 different weeks during the current or preceding calendar year, or those that paid cash remuneration of \$20,000 or more in any quarter during the current or preceding calendar year, to enroll in their State's unemployment insurance system. Many States require more or all farm employers to enroll their workers, so unemployment insurance coverage, and thus the farm employers covered in the QCEW, vary by State.

²⁰ It is worth noting that high concentration stems in part from the fact that we consider H-2A applicants, as opposed to H-2A end-user farms, and thus treat FLCs and associations as a single employer. We focus on applicants because for FLCs, the data do not tell us how many of the requested workers will be employed by each end-user farm. We also find high levels of concentration when examining fixed-situs employers separately.

Figure 4

H-2A employers and H-2A jobs by size category, fiscal year 2020

Note: Percentages may not add to 100 due to rounding.

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Top Employers

The top 10 H-2A employers accounted for around 39,600 (or 14 percent) of all H-2A jobs certified in FY 2020. Among these employers, the number of jobs certified ranged from about 2,200 for Washington-based Zirkle Fruit Company to over 10,600 for the North Carolina Growers Association (NCGA) (see table 3). Several of the top 10 H-2A employers offered 35-hour work weeks, including California-based Fresh Harvest, while Nevada-based Peri & Sons offered a 44-hour work week. The contract length ranged from a low of 17 weeks for California-based Rancho Nuevo Harvesting to a high of 33 weeks for Florida-based Temp Labor, which could reflect differences in the length of the jobs requested as well as longer contracts that enable H-2A workers to fill more than a single job (since workers can be employed sequentially in multiple farms). The average value of the certified H-2A job orders of the top 10 H-2A employers ranged from \$7,800 for Farm Op Kuzzens to \$15,000 for Foothill Packing.²¹

The top 10 H-2A employers accounted for 3 to 73 percent of all H-2A jobs certified in their home States.²² Peri & Sons was certified to fill 73 percent of the H-2A jobs in Nevada, while Fresh Harvest was certified for a sixth of H-2A jobs in California. Florida had the least concentrated H-2A employment; Temp Labor accounted for 6 percent of H-2A jobs certified in the State, while Overlook Harvesting and Farm Op Kuzzens each accounted for 3–4 percent of the jobs certified in Florida. Except for Peri & Sons and Zirkle Fruit, the top 10 employers were FLCs or associations serving multiple farms. While most H-2A jobs are requested with a third-party filer's help (around 85 percent; see figure 3), 5 of the top 10 employers filed on their own, perhaps because larger employers have better in-house filing capabilities or have gained experience navigating the H-2A application process.

²¹ As noted above, the estimated value of a job order reflects the earnings that each worker would receive if they were employed for all of the hours offered by the contract at the offered wages, which are almost always the AEW. This value does not include other costs associated with H-2A employment such as recruitment, housing, and transportation costs.

²² An employer's "home State" is the State where the employer submitted most of its H-2A petitions. Some employers request workers in multiple States.

Table 3

Characteristics of top 10 H-2A employers, fiscal year 2020

Employer name	Jobs certified	Contract value (avg. \$)	Wage bill (mil. \$)	Primary State	Percent of State H-2A jobs	Employer type	Filer type
NCGA	10,650	13,995	149	NC	48	Association	In-house
Fresh Harvest	5,326	10,590	56	CA	15	FLC	In-house
Wafra	4,358	14,009	61	WA	16	Association	In-house
Foothill Packing	3,199	14,959	48	AZ	19	FLC	Lawyer
Overlook Harvesting	3,159	8,188	26	FL	3	FLC	In-house
Farm Op Kuzzens H2A	2,998	7,839	24	FL	4	FLC	Association
Rancho Nuevo Harvesting	2,864	8,677	25	CA	8	FLC	Lawyer
Peri & Sons Farms	2,623	12,500	33	NV	73	Fixed site	In-house
Temp Labor	2,252	13,270	30	FL	6	FLC	Agent
Zirkle Fruit	2,206	13,225	29	WA	8	Fixed site	In-house

NCGA = North Carolina Growers Association. avg. = average. mil. = million. FLC = farm labor contractor. NC = North Carolina. CA = California. AZ = Arizona. FL = Florida. NV = Nevada. WA = Washington.

Notes: Employers are identified by the employer names listed in the database. Because there are multiple spelling variations for some names, we standardize employer names using the `stnd_compname` command in the statistical software Stata.

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

H-2A Employment Across U.S. States

Figure 5 shows the H-2A employment patterns across U.S. States. Those with large and labor-intensive agricultural sectors tend to employ the most H-2A workers. The top 5 States, each of which had more than 10,000 certified jobs, included Florida with 14 percent of total H-2A jobs certified, Georgia and Washington with 10 percent each, California with 9 percent, and North Carolina with 8 percent. These five States accounted for around 51 percent of all H-2A certifications.

There is a positive relationship between the total hired agricultural labor force in a State and the size of its H-2A labor force, but this relationship is far from perfect. For example, Georgia and North Carolina have fewer farmworkers than Texas but hire many more H-2A workers. There are several potential reasons for this absence of a stronger relationship. First, the number of H-2A jobs certified in a State reflects both employer needs and the capacity of employers and others to navigate the H-2A process. In some States, ex-employees of Federal or State agencies that administer the H-2A program formed associations or became agents, while in others, FLCs who operate in several States were among the first to turn to the H-2A program for workers. Second, H-2A workers may be employed only in temporary or seasonal jobs, which generally cannot last more than 10 months.²³ This puts many of the average 300,000 jobs in animal agriculture off limits to H-2A workers, including the average 100,000 jobs in dairies, and requires most livestock employers to recruit and employ workers who are already in the United States, including unauthorized workers.^{24 25}

Figure 5 also shows estimates of the H-2A share of hired labor expenditures across U.S. States. To compute the shares, we divide the FY 2020 estimated State H-2A wage bill by total labor expenditures from the 2017 Census of Agriculture (COA).²⁶ The map shows that most Southeastern States use H-2A labor more intensively than nearly every other State except for Nevada. Nevada has low agricultural employment, and one of the primary employers in the State relies heavily on the H-2A program. We estimate that H-2A labor expenditures account for more than 20 percent of total farm labor expenditures in Georgia, North and South Carolina, Louisiana, and Nevada.

Figure 6 shows that AEWRs are highest in the Midwestern and Pacific Coast States and lowest in the Southeastern States. The primary reason why the patterns of jobs certified (figure 5) and the estimated H-2A wage bill by State (figure 6) do not coincide perfectly is that AEWRs vary across States. The Southeastern States of Florida, Georgia, North and South Carolina, and Louisiana account for 38 percent of total H-2A jobs (37 percent of total FTEs) certified in the United States but only 32 percent of the estimated national H-2A wage bill. The fact that the Southeast had a lower AEWR than other regions may play a role in shaping the differences in relative H-2A uptake across the United States shown in figure 5, but it may also reflect that access to the H-2A program reduces upward pressure on farmworker wages.

²³ DOL provides exemptions to the 10-month limit for some small industries in animal agriculture (e.g., sheep and goat herders).

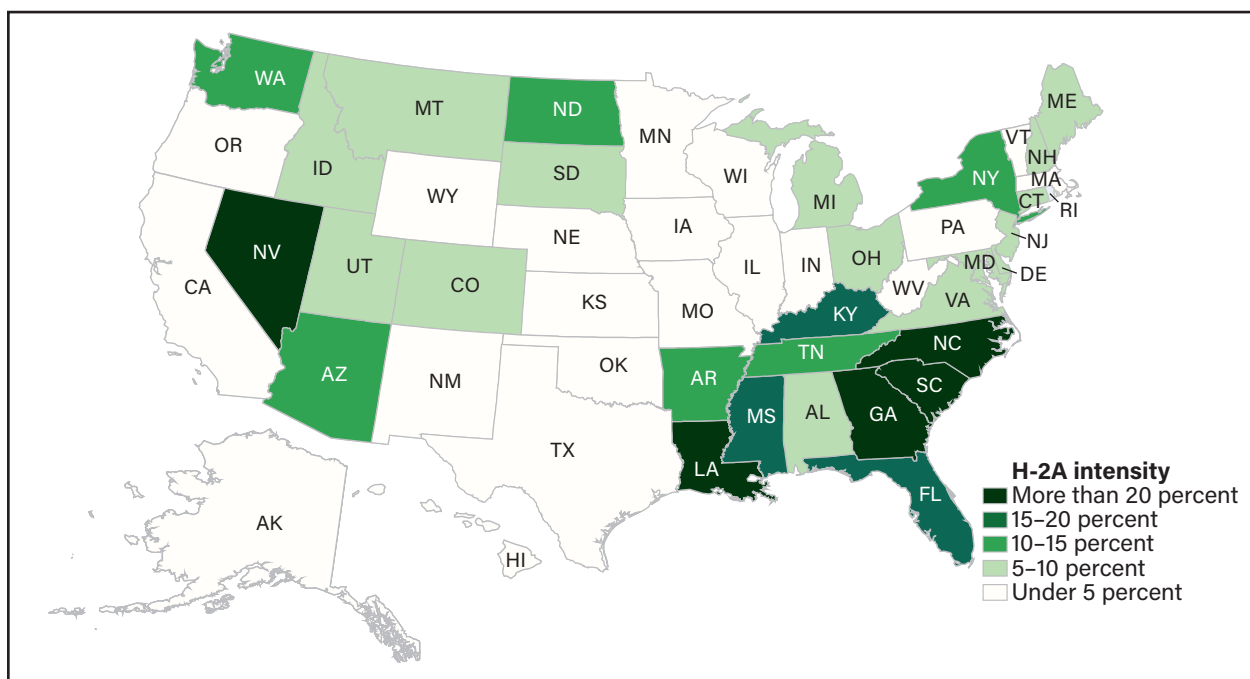
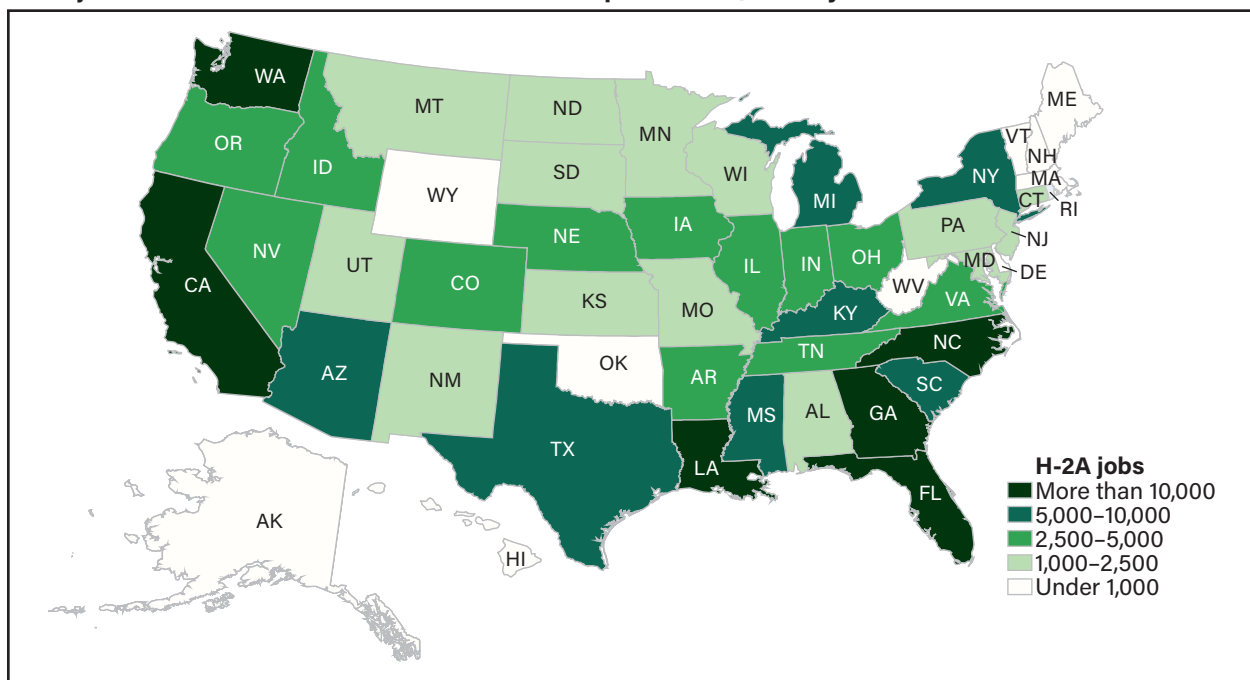
²⁴ Authors' calculations using the 2019 QCEW.

²⁵ Naturally, this is not an exhaustive list. For example, all else equal, we would expect that an area where smaller farms are prevalent to have lower H-2A demand than an area with larger farms. Small farms may find it more difficult to pay for housing, transportation, and filing and recruitment fees than larger ones (Luckstead and Devadoss, 2019; Castillo et al., 2021).

²⁶ To account for the fact that wages have grown rapidly during 2017–20, we use State-specific 2017–20 Adverse Effect Wage Rate growth rates to adjust 2017 Census of Agriculture total labor expenditures. While the estimated H-2A shares of total State labor expenditures are higher when we do not adjust for wage growth, the spatial patterns we find are very similar to those shown in figure 5.

Figure 5

H-2A jobs and H-2A share of total hired labor expenditures, fiscal year 2020

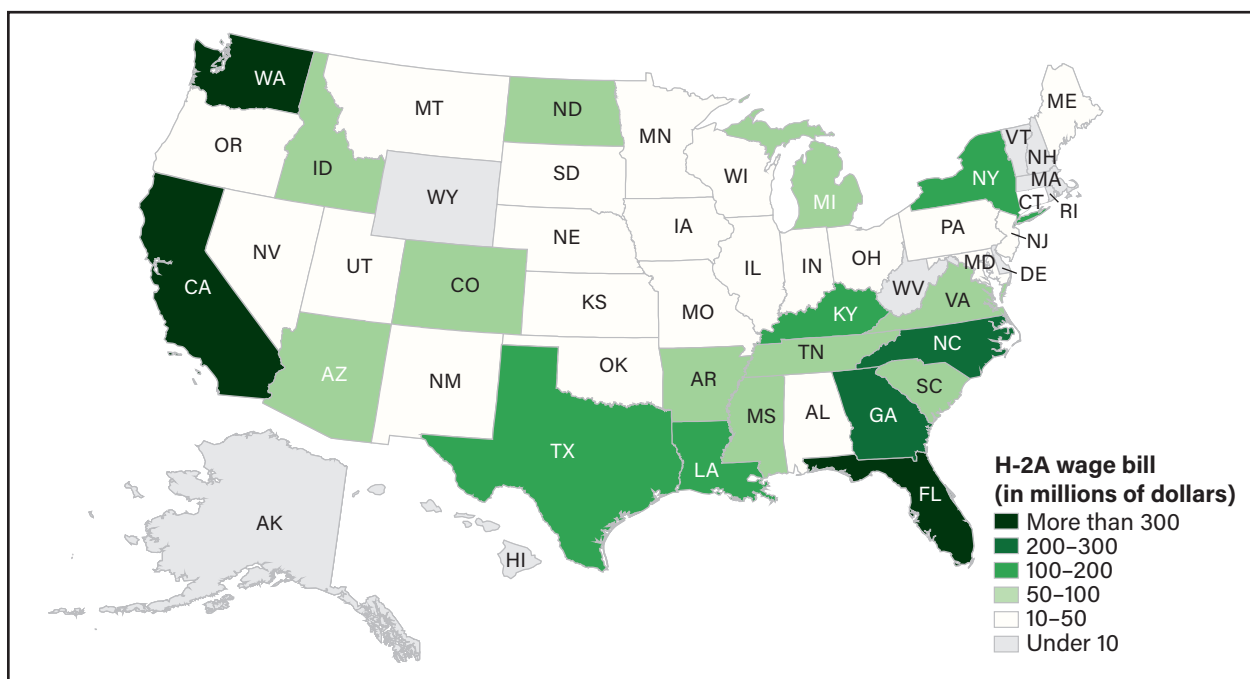
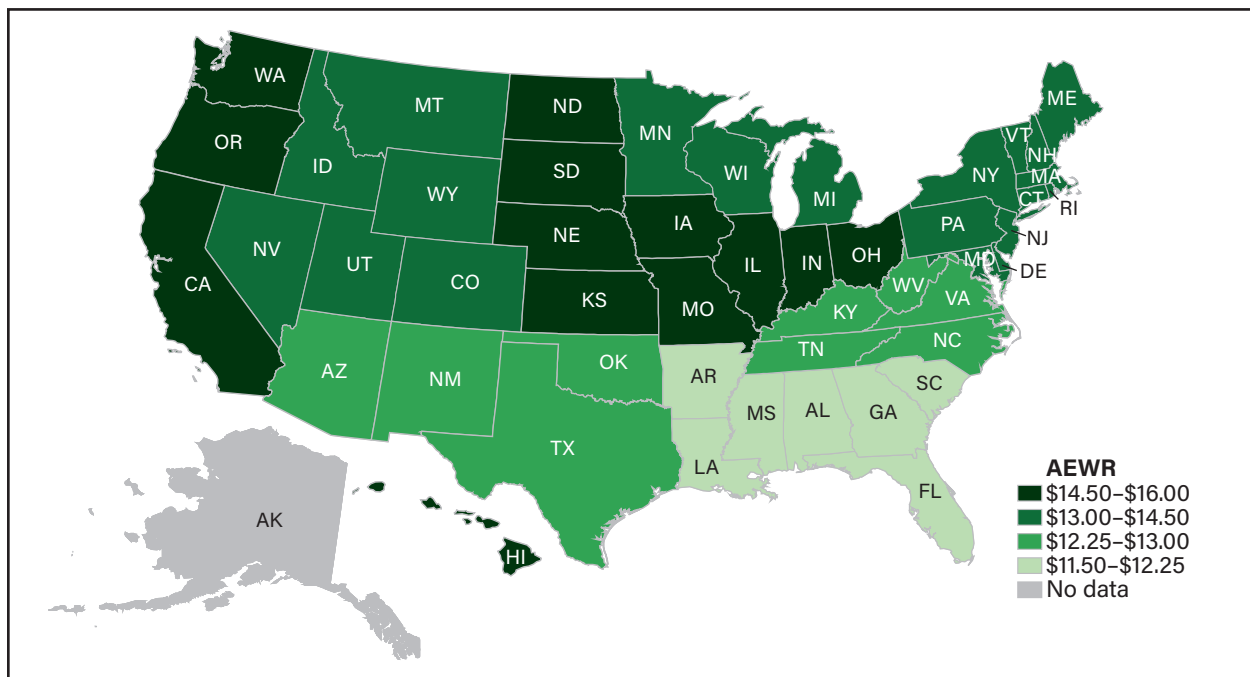


Notes: The shares are constructed by dividing the FY2020 estimated State H-2A wage bill by total labor expenditures from the 2017 Census of Agriculture (COA). The 2017 COA total labor expenditures are adjusted using State-specific 2017–20 Adverse Effect Wage Rate growth rates.

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data, and USDA, National Agricultural Statistics Service, Census of Agriculture.

Figure 6

Adverse Effect Wage Rates and H-2A wage bill, by State, fiscal year 2020



AEWR = Adverse Effect Wage Rate.

Notes: The map on the bottom shows our estimate of the H-2A wage bill by State, which is constructed by summing the value of all H-2A contracts certified in the State. The estimated value of an H-2A contract is generated by multiplying the wage offered in the contract by the number of hours per week offered, the number of weeks of work offered, and the total number of jobs certified in the application.

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

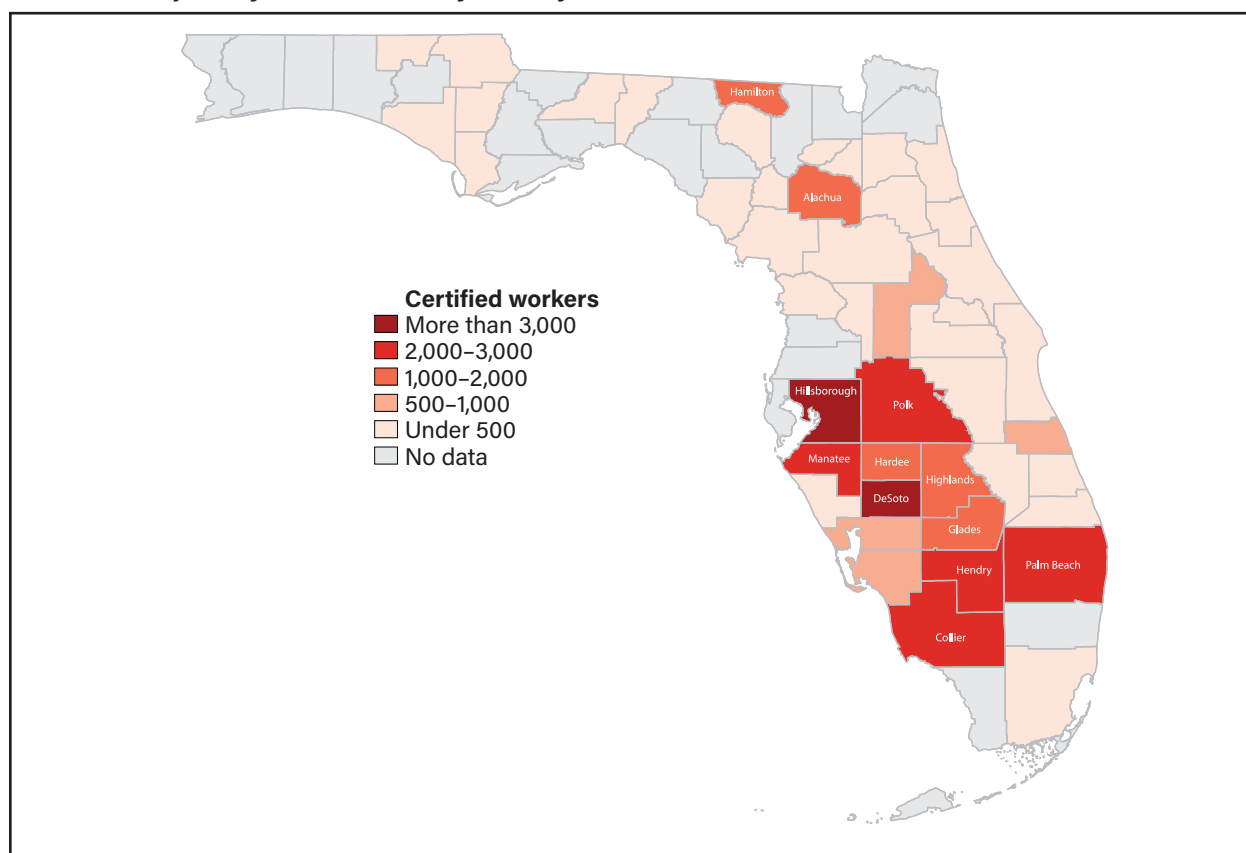
Leading States for H-2A Jobs: Florida, Georgia, Washington, California, North Carolina

This section profiles the H-2A program in the top five requesting States that together account for over half of all H-2A jobs. For each State, we determine the geographic distribution of H-2A jobs within the State, the top H-2A employers, and the value of the contracts that are offered to H-2A workers.

Florida

Florida is the leading State in terms of H-2A certifications. Figure 7 shows that most of the H-2A jobs certified in Florida are in the State's central and southern parts. Table 4.1 shows that Hillsborough County (Tampa) had around 6,700, or 17 percent, of the 39,064 H-2A jobs certified in Florida, followed by DeSoto County (Arcadia) with about 4,000 H-2A jobs; Hendry with 3,000; Polk with 2,900; and Manatee with around 2,800.²⁷ The top five counties accounted for approximately 50 percent of the jobs in the State and about 53 percent of the State's wage bill of \$388 million.

Figure 7
Florida H-2A jobs by worksite county, fiscal year 2020



Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

²⁷ The average contract length for crop and crop support workers in the top five Florida counties is as follows: Hillsborough 182 days, De Soto 186 days, Hendry 155 days, Polk 167 days, and Manatee 185 days.

Table 4.1

Florida H-2A jobs by county, fiscal year 2020

County	H-2A jobs certified	Percent of State H-2A jobs	Contract value (avg. \$)	Wage bill (millions \$)	Percent of State H-2A wage bill	Percent of county crop emp.
Hillsborough	6,696	17	10,554	71	18	37
Desoto	4,006	10	10,973	44	11	67
Hendry	2,991	8	9,505	28	7	16
Polk	2,895	7	9,881	29	7	38
Manatee	2,838	7	11,378	32	8	30
Total or average	19,426	50	10,499	204	53	

avg. = average. emp. = employment.

Notes: The last column shows the estimated H-2A share of average county employment. We divide H-2A full-time equivalent jobs by 2019 average Quarterly Census of Employment and Wages employment in crop and crop support industries to compute the shares.

Source: USDA, Economic Research Service using data from the U.S. Department of Labor, Office of Foreign Labor Certification and Quarterly Census of Employment and Wages.

Table 4.2 shows that Florida's top five H-2A employers accounted for 20 percent of the H-2A jobs certified for work in the State in FY 2020. The top three employers were FLCs, and they employed workers in Florida and other States. All of Florida's top five H-2A employers used a third party to file their H-2A applications. They offered contracts ranging from 11 weeks for Ag Mart Produce to 33 weeks for Temp Labor, with average hours of work per week ranging from 35 to 36. The average value of these contracts ranged from \$4,700 for Ag Mart Produce to \$13,300 for Temp Labor. Because all jobs within a State have the same AEW, differences in average contract values between employers stem primarily from differences in contract duration and weekly hours worked.

Table 4.2

Florida top five H-2A employers, fiscal year 2020

Employer name	H-2A jobs certified	Percent of State H-2A jobs	Contract value (avg. \$)	Employer type	Filer type
Temp Labor	2,252	6	13,270	FLC	Agent
Ag Labor	1,423	4	12,610	FLC	Agent
Farm Op Kuzzens H2A	1,418	4	10,445	FLC	Association
Ag Mart Produce	1,415	4	4,716	Fixed site	Lawyer
Florida Pacific Farms	1,274	3	9,901	Fixed site	Association
Total or average	7,782	20	10,528		

avg. = average. FLC = farm labor contractor.

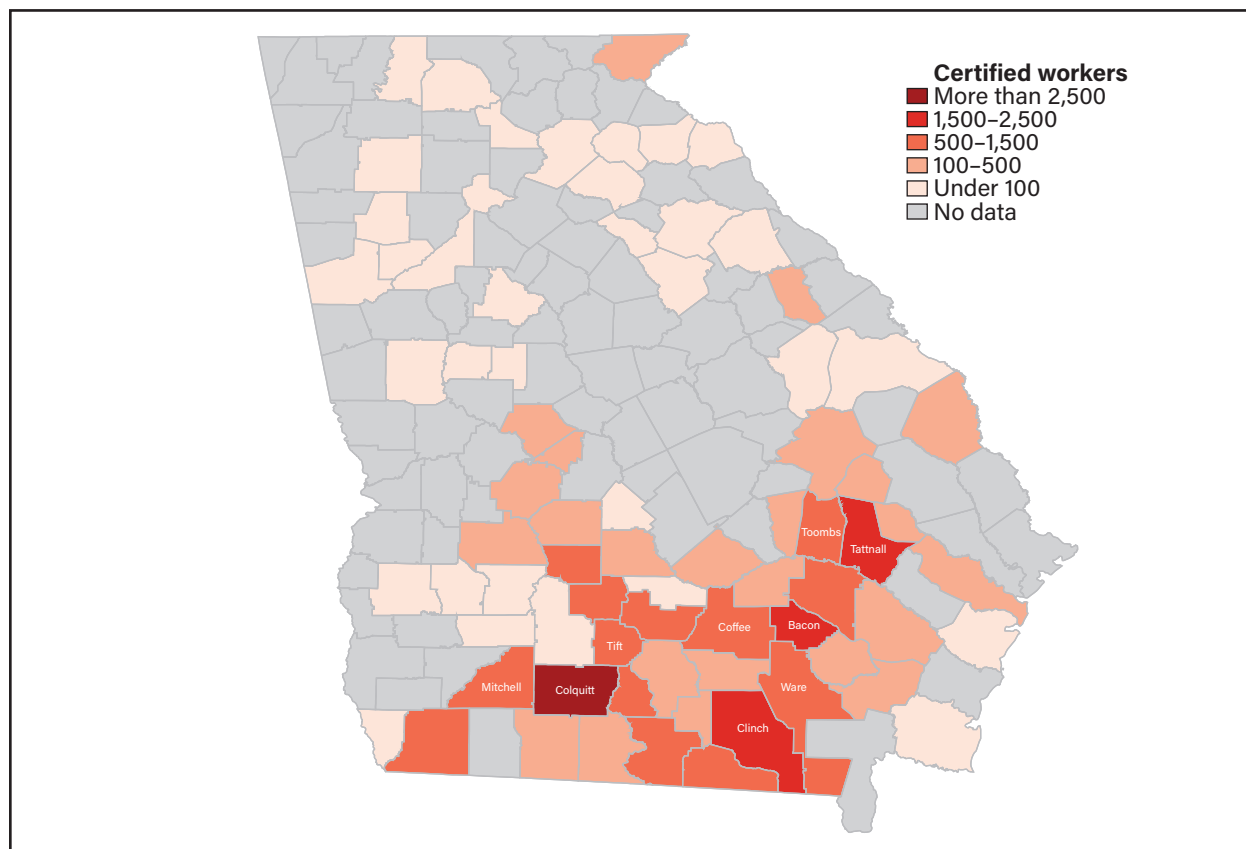
Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Appendix table A-2 shows that most of Florida's H-2A jobs were in crop and crop support. Farm labor contractors and other crop support firms accounted for 63 percent of the H-2A jobs certified, followed by vegetable farmers (19 percent) and fruit farmers (12 percent); many FLCs and crop support employers employ H-2A workers on fruit and vegetable farms (Castillo et al., 2021). The average contract length ranged from 21 weeks for vegetable workers to 39 weeks for animal agriculture jobs. The average value of contracts ranged from \$9,300 for vegetable workers to \$18,900 for animal workers.

Georgia

Georgia is best known for its peaches, peanuts, and Vidalia onions, but the State is also the leading U.S. producer of broilers, pecans, blueberries, and spring onions (Georgia Farm Bureau, 2021). Figure 8 shows that most of Georgia's 27,614 H-2A certifications were in the State's southern counties. Table 5.1 shows that Colquitt County had 2,952 jobs certified, 11 percent of the State total, followed by Tattnall County with 2,489 or 9 percent; Bacon County with 2,451 or 9 percent; Clinch County with 2,189 or 8 percent; and Tift County with 1,323 or 5 percent. The top five counties accounted for around 41 percent of the State's certified H-2A jobs and about 44 percent of the State's estimated wage bill of \$227 million.²⁸

Figure 8
Georgia H-2A jobs by worksite county, fiscal year 2020



Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

²⁸ The average contract length for H-2A workers in crop and crop support jobs was as follows: Colquitt 140 days, Tattnall 84 days, Bacon 123 days, Clinch 144 days, and Tift 177 days.

Table 5.1

Georgia H-2A jobs by county, fiscal year 2020

County	H-2A jobs certified	Percent of State H-2A jobs	Contract value (avg. \$)	Wage bill (millions \$)	Percent of State H-2A wage bill	Percent of county crop emp.
Colquitt	2,952	11	11,369	34	15	60
Tattnall	2,489	9	5,450	14	6	66
Bacon	2,451	9	7,094	17	8	86
Clinch	2,189	8	9,165	20	9	91
Tift	1,323	5	11,140	15	6	64
Total or average	11,404	41	8,709	99	44	

avg. = average. emp. = employment.

Notes: The last column shows the estimated H-2A share of average county employment. We divide H-2A full-time equivalent jobs by 2019 average Quarterly Census of Employment and Wages employment in crop and crop support industries to compute the shares.

Source: USDA, Economic Research Service using data from the U.S. Department of Labor, Office of Foreign Labor Certification and Quarterly Census of Employment and Wages.

Table 5.2 shows that Georgia's top five H-2A employers had 15 percent of the jobs certified in the State. The top 3 employers were Ornelas Harvesting, with 1,047 jobs certified or 4 percent, Hamilton Growers with 1,001 jobs, and Bland Farms with 765 jobs. Of the top five employers in Georgia during FY 2020, three were FLCs. All employers used an agent to file their H-2A applications except for Bland Farms. Contract lengths for the top five employers ranged from 8 weeks for Ornelas Harvesting and Bland Farms to 32 weeks for Hamilton Growers. The top five H-2A employers offered an average of 40 hours per week, and average contract values ranged from about \$3,500 for Ornelas Harvesting to about \$15,000 for Hamilton Growers.

Table 5.2

Georgia top five H-2A employers, fiscal year 2020

Employer name	H-2A jobs certified	Percent of State H-2A jobs	Contract value (avg. \$)	Employer type	Filer type
Ornelas Harvesting	1,047	4	3,554	FLC	Agent
Hamilton Growers	1,001	4	14,916	Fixed site	Agent
Bland Farms	765	3	3,778	Fixed site	In-house
J & J Harvesting	711	3	10,171	FLC	Agent
Rodriguez Harvesting	582	2	6,636	FLC	Agent
Total or average	4,106	15	7,948		

avg. = average. FLC = farm labor contractor.

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

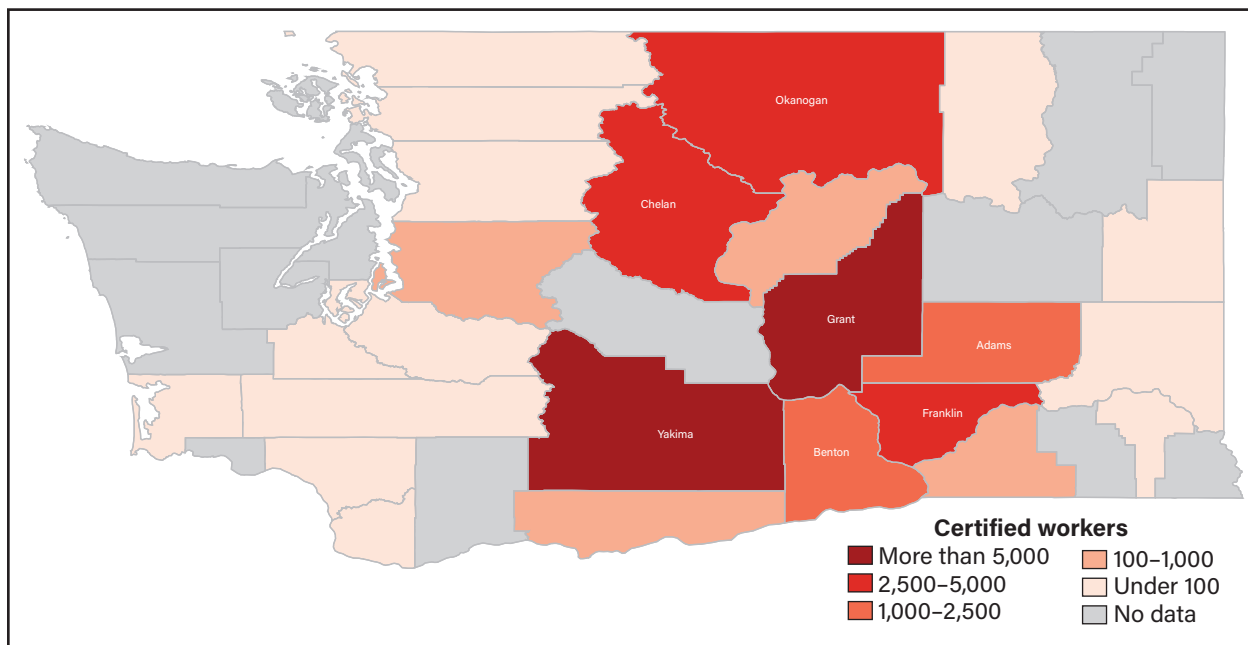
Appendix table A-3 shows that FLCs and other crop support service firms had the most H-2A jobs certified in Georgia. Fruit farmers were second with around 25 percent of the State total, followed by Field and Other Crops with 20 percent. Vegetable farmers had approximately 19 percent of jobs certified. FLCs and other crop support companies had the shortest contract lengths, an average of 15 weeks, while the longest contracts were with nursery and animal farmers at 33 and 34 weeks, respectively.²⁹ The weekly hours ranged between 37 and 42, and contract values ranged from \$6,600 for vegetable farmers to \$16,700 for animal farmers.

²⁹ Average contract length is likely higher for nursery and livestock jobs given that these jobs tend to be less seasonal than those in fruit and vegetable industries.

Washington

Washington employs H-2A workers to harvest tree fruits, especially apples, cherries, and pears. Employers were certified to fill 26,832 jobs with H-2A workers in FY 2020. Figure 9 shows that most H-2A jobs were certified in just 5 of the State's 39 counties that are centers of fruit production. Table 6.1 shows that Yakima County had 25 percent of the H-2A jobs certified, Grant 19 percent, Okanogan 13 percent, Franklin 10 percent, and Chelan 10 percent. The top five counties accounted for roughly 77 percent of the H-2A jobs in the State and about 78 percent of the State's wage bill of \$380 million. The proportion of total FTEs in crop agriculture that H-2A jobs were certified to fill in Washington's major H-2A counties ranged from 10 percent in Yakima County to 41 percent in Okanogan County.

Figure 9
Washington H-2A jobs by worksite county, fiscal year 2020



Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Table 6.1
Washington H-2A jobs by county, fiscal year 2020

County	H-2A jobs certified	Percent of State H-2A jobs	Contract value (avg. \$)	Wage bill (millions \$)	Percent of State H-2A wage bill	Percent of county crop emp.
Yakima	6,654	25	13,858	92	24	10
Grant	5,059	19	15,619	79	21	28
Okanogan	3,540	13	14,486	51	13	41
Franklin	2,714	10	15,910	43	11	36
Chelan	2,634	10	11,982	32	8	20
Total or average	20,601	77	14,429	297	78	

avg. = average. emp. = employment.

Notes: The last column shows the estimated H-2A share of average county employment. We divide H-2A full-time equivalent jobs by 2019 average Quarterly Census of Employment and Wages employment in crop and crop support industries to compute the shares.

Source: USDA, Economic Research Service using data from the U.S. Department of Labor, Office of Foreign Labor Certification and Quarterly Census of Employment and Wages.

Table 6.2 shows that Washington's top five H-2A employers accounted for almost 40 percent of the State's H-2A job certifications in FY 2020. Wafla had around 4,350 jobs, or 16 percent of all the H-2A jobs certified, followed by Zirkle Fruit with around 2,200, or 8 percent, and Stemilt Ag Services, Chiawana Orchards, and McDougall Family Farming each with more than 1,000 jobs. In contrast to Florida and Georgia, only one out of the top five Washington employers was an FLC, and three out of five filed without a third party's help.

Table 6.2
Washington top five H-2A employers, fiscal year 2020

Employer name	H-2A jobs certified	Percent of State H-2A jobs	Contract value (avg. \$)	Employer type	Filer type
Wafla	4,358	16	14,009	Association	In-house
Zirkle Fruit	2,206	8	13,225	Fixed site	In-house
Stemilt Ag Services	1,619	6	8,637	FLC	Association
Chiawana Orchards	1,296	5	7,658	Fixed site	In-house
McDougall Family Farming	1,072	4	19,334	Fixed site	Association
Total or average	10,551	39	12,782		

avg. = average. FLC = farm labor contractor.

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Among the top five employers, the average contract value ranged from a low of about \$7,700 for Chiawana Orchards to a high of \$19,300 for McDougall Family Farming. For these employers, the average number of weeks per contract ranged from 12 for Chiawana Orchards to 32 weeks for McDougall Family Farming. The average hours per week offered by these employers ranged from 35 to 40.

Appendix table A-4 shows that most of Washington's H-2A job certifications (59 percent) were for work on fruit farms, followed by field and other crop farms with 34 percent and crop support workers (including FLCs) with 6 percent.³⁰ The average contract length ranged from 22 weeks for crop support and fruit workers to 38 weeks for animal farms. Contract values ranged from about \$12,800 for crop support to \$20,400 for vegetable workers, with animal production contracts worth about \$19,600.

California

California is the top employer of U.S. hired farmworkers, accounting for about a third of U.S. farm employment and wages. California was the major employer of guest workers through the Bracero Program, a guest worker program that employed between 4 and 5 million workers between 1942 and 1964, but the State is a latecomer to the H-2A program (Congressional Research Service, 1980). Possible explanations for why California's farm employers have just recently started to use the H-2A program include the lack of affordable housing in many of the State's farming areas and fears of lawsuits against H-2A employers by unions and worker advocates or investigations by labor law enforcement agencies (Costa, Martin, and Rutledge, 2020; U.S. Department of Labor, 2021).

Table 7.1 shows that four of the top five California H-2A employers were FLCs who were certified to provide workers to fixed-situs employers. The top employers offered contracts ranging from 35 to 41-hour work weeks.

³⁰ It is worth noting that, for simplicity, we classify as "Other Crops" agricultural employers that report 2 and 3-digit North American Industry Classification System codes (e.g., 111 - Crop Production and 11 - Agriculture, Forestry, Fishing and Hunting). We also classify other miscellaneous nonagricultural employer petitions as "Other Crops," and many of these petitions could be from associations filing jointly with fixed-situs farm employers in the fruit industry.

Strawberry nursery Sierra Cascade in the State's northeastern Lassen County offered the shortest contracts (10 weeks), and Foothill Packing in the central coast region offered the longest ones (43 weeks). The average contract value for the top five California H-2A employers ranged from \$6,000 to \$18,000.

Table 7.1

California top five H-2A employers, fiscal year 2020

Employer name	H-2A jobs certified	Percent of State H-2A jobs	Contract value (avg. \$)	Employer type	Filer type
Fresh Harvest	3,783	15	11,245	FLC	In-house
Rancho Nuevo Harvesting	2,054	8	10,132	FLC	Lawyer
Foothill Packing	1,541	6	18,089	FLC	Lawyer
Sierra Cascade Nursery	1,249	5	5,969	Fixed site	Lawyer
Elkhorn Packing	1,209	5	14,902	FLC	Lawyer
Total or average	9,836	39	11,864		

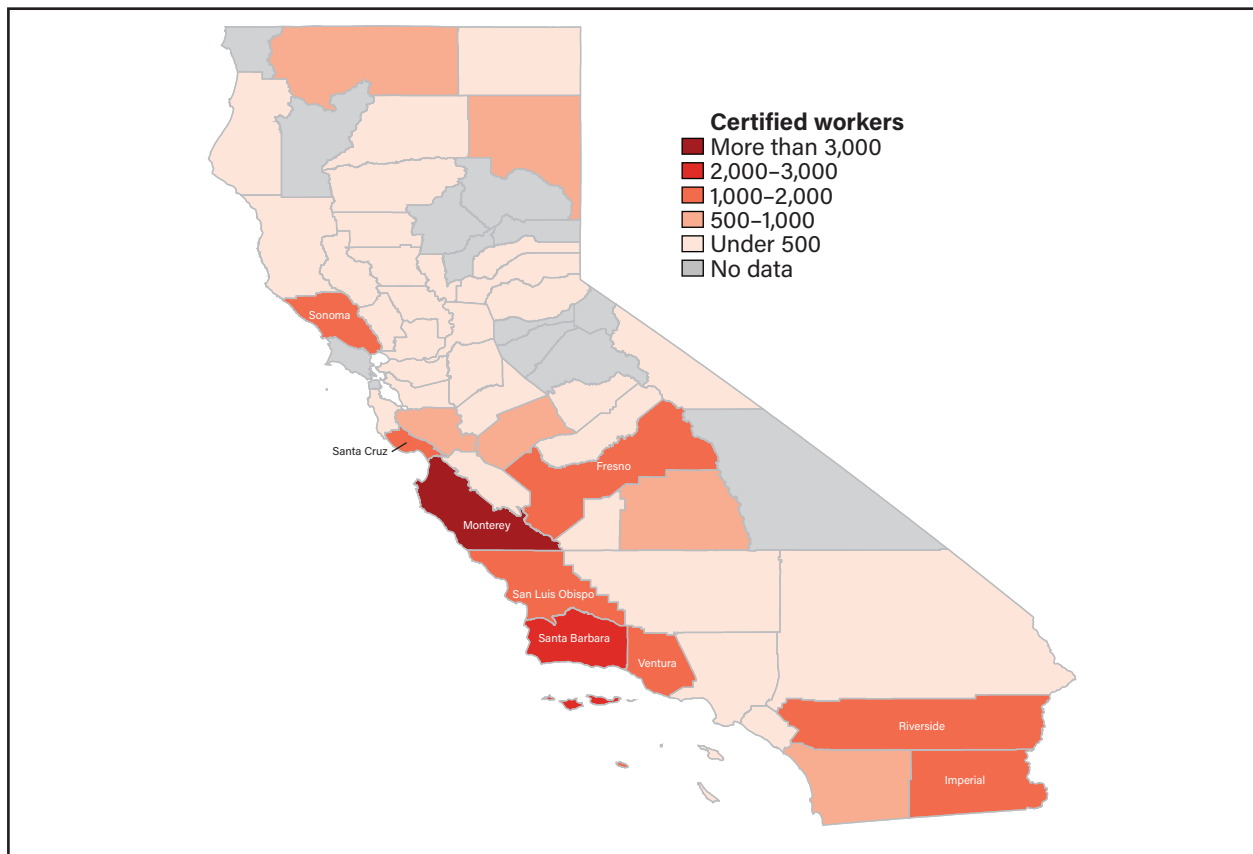
avg. = average. FLC = farm labor contractor.

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

California had 25,453 certified jobs in FY 2020, including 24,697, or 97 percent, that were certified to crop or crop support employers. The distribution of H-2A certifications by county differs from the distribution of farm employment by county. The top five California counties accounted for 55 percent of the H-2A jobs certified in FY 2020 (and 59 percent of the State's H-2A wage bill of \$367 million), even though these five counties accounted for only 38 percent of the State's QCEW crop and crop support employment in FY 2019.

Most of California's H-2A jobs were certified in the central coast region of the State. Monterey County was the leading H-2A employer, with 6,394 jobs certified, followed by Santa Barbara County with 2,668 jobs certified, and San Luis Obispo, Ventura, and Fresno counties, each with more than 1,500 jobs certified (figure 10 and table 7.2). The H-2A share of average crop and crop support employment in a county ranged from 1 percent in Fresno to 25 percent in San Luis Obispo. Half of California farm employment is in the San Joaquin Valley, where there were relatively few H-2A job certifications in FY 2020.

Figure 10

California H-2A jobs by worksite county, fiscal year 2020

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Table 7.2

California H-2A jobs by county, fiscal year 2020

County	H-2A jobs certified	Percent of State H-2A jobs	Contract value (avg. \$)	Wage bill (millions \$)	Percent of State H-2A wage bill	Percent of county crop emp.
Monterey	6,394	25	17,084	109	30	7
Santa Barbara	2,668	10	16,949	45	12	7
San Luis Obispo	1,786	7	18,833	34	9	25
Ventura	1,688	7	9,730	16	4	2
Fresno	1,555	6	8,513	13	4	1
Total or average	14,091	55	15,453	218	59	

avg. = average. emp. = employment.

Notes: The last column shows the estimated H-2A share of average county employment. We divide H-2A full-time equivalent jobs by 2019 average Quarterly Census of Employment and Wages employment in crop and crop support industries to compute the shares.

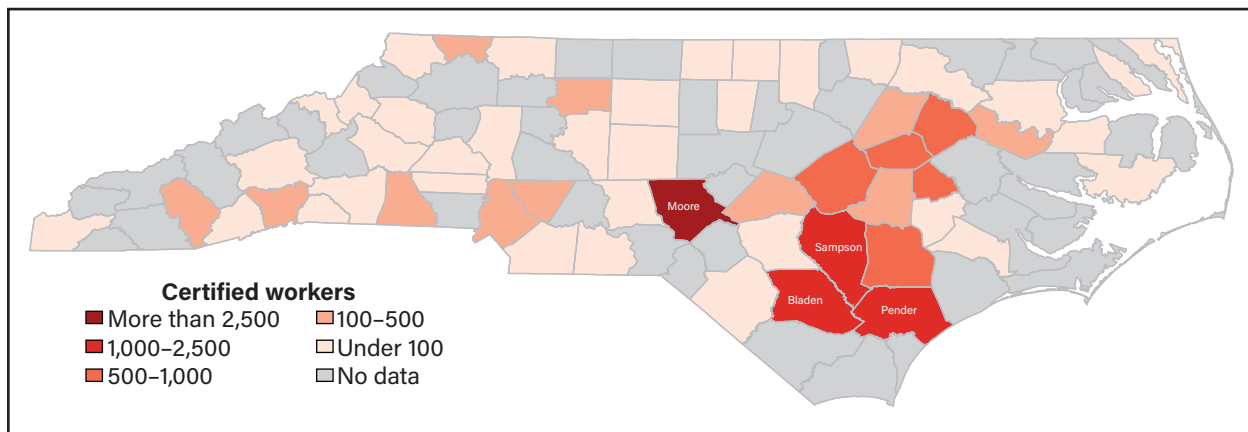
Source: USDA, Economic Research Service using data from the U.S. Department of Labor, Office of Foreign Labor Certification and Quarterly Census of Employment and Wages.

Appendix table A-5 shows that crop support agricultural employers such as FLCs and custom harvesters were certified to fill over 60 percent of all H-2A jobs in California.³¹ A sixth of jobs were certified by California fruit farmers, and 9 percent were in vegetables. The average value of contracts ranged from about \$11,600 for vegetable workers to around \$20,000 for animal and nursery workers.

North Carolina

Figure 11 and table 8.1 show that North Carolina's top five counties accounted for most of the 22,052 H-2A jobs certified in the State. The top five counties accounted for 72 percent of H-2A jobs and around 73 percent of the State's wage bill of \$275 million. Moore County had 10,523 jobs certified or 48 percent of the State's total, followed by Sampson with 2,309 jobs or 10 percent, Bladen with 1,090 jobs or 5 percent, Pender with 1,018 jobs or 5 percent, and Johnston County with 919 jobs or 4 percent.³²

Figure 11
North Carolina H-2A jobs by worksite county, fiscal year 2020



Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

³¹ Crop support agricultural employers are those who involved in “Support Activities for Crop Production” (North American Industry Classification System (NAICS) code 1151). This industry group includes a subgroup of employers involved in “Crop Harvesting, Primarily by Machine” (NAICS code 115113), which we refer to as “custom harvesters.”

³² Moore County is dominated by the North Carolina Growers Association (NCGA), which identifies with NAICS code 81391 “Business Associations.” Using FY 2019 data, we note that most NCGA jobs are Field and Other Crops jobs (e.g., tobacco). In the appendix, we show that if we classify all NCGA jobs as Field and Other crops, 58 percent of North Carolina's jobs fall in this industry group (table A-6). Crop support employers take 25 percent of the State's H-2A jobs, followed by fruits with 10 percent, nursery with 4 percent, and vegetables with 2 percent.

Table 8.1

North Carolina H-2A jobs by county, fiscal year 2020

County	H-2A jobs certified	Percent of State H-2A jobs	Contract value (avg. \$)	Wage bill (millions \$)	Percent of State H-2A wage bill	Percent of county crop emp.
Moore	10,523	48	14,091	148	54	99
Sampson	2,309	10	11,053	26	9	57
Bladen	1,090	5	7,242	8	3	49
Pender	1,018	5	8,253	8	3	69
Johnston	919	4	10,956	10	4	49
Total or average	15,859	72	12,622	200	73	

avg. = average. emp. = employment.

Notes: The last column shows the estimated H-2A share of average county employment. We divide H-2A full-time equivalent jobs by 2019 average Quarterly Census of Employment and Wages employment in crop and crop support industries to compute the shares.

Source: USDA, Economic Research Service using data from the U.S. Department of Labor, Office of Foreign Labor Certification and Quarterly Census of Employment and Wages.

North Carolina's top five employers accounted for 58 percent of the H-2A jobs certified in the State (table 8.2). The leading H-2A employer was the North Carolina Growers Association (NCGA), which had 10,650 jobs certified, or 48 percent of all jobs certified, followed by Florida Orange Gold, Sleepy Creek Farms, Jose Gracia Harvesting, and O'Rea and Sons Harvesting and Hauling, each of whom had between 300 and 700 jobs certified. Three of these employers were FLCs based in Florida. Among the top five employers, the average number of weeks per contract ranged from a low of 18 to a high of 28 weeks. For these employers, the average number of hours per week ranged from a low of 35 to a high of 40 for the NCGA. Average contract values for the top five H-2A employers ranged from \$8,000 to \$14,000.

Table 8.2

North Carolina top five H-2A employers, fiscal year 2020

Employer name	H-2A jobs certified	Percent of State H-2A jobs	Contract value (avg. \$)	Employer type	Filer type
NCGA	10,650	48	13,995	Association	In-house
Florida Orange Gold	678	3	12,486	FLC	In-house
Sleepy Creek Farms	581	3	8,010	Fixed site	Agent
Jose M Gracia Harvesting	546	2	10,814	FLC	Lawyer
Orea & Sons Harvesting & Hauling	332	2	12,417	FLC	Lawyer
Total or average	12,787	58	13,466		

avg. = average. NCGA=North Carolina Growers Association. FLC = farm labor contractor.

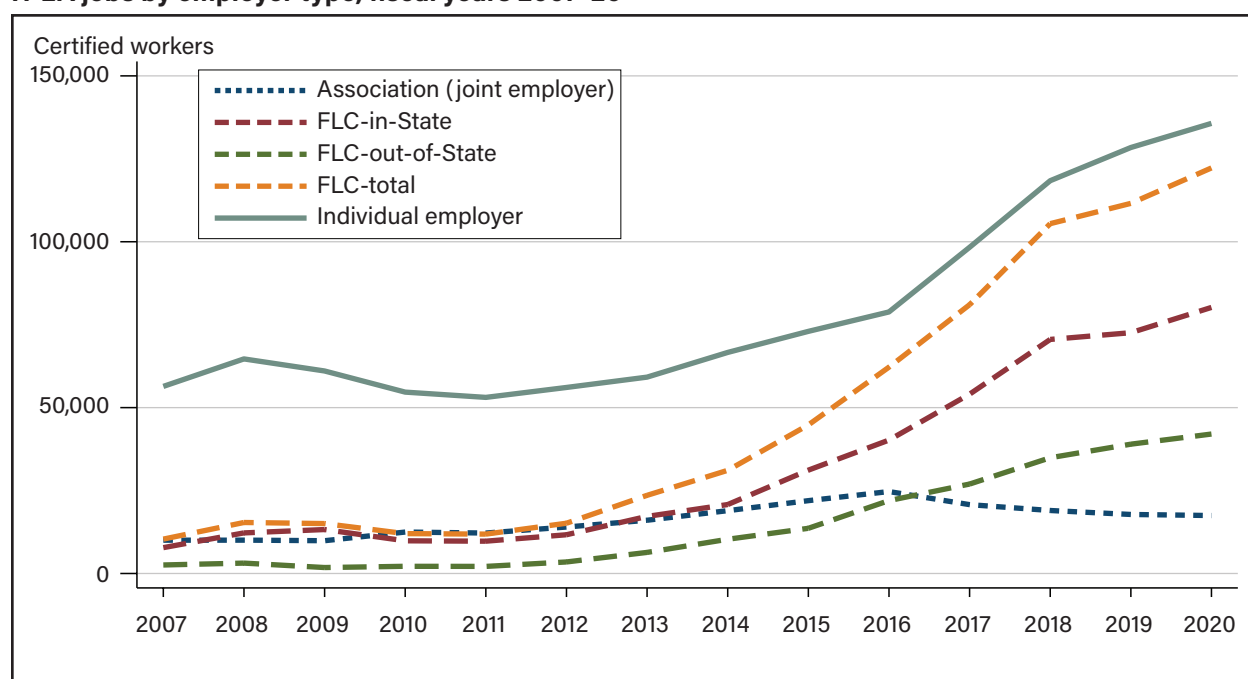
Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Farm Labor Contractors in the H-2A Program

Most guest workers employed through the Bracero program were hired by associations created by farm operators that recruited, housed, and moved Braceros from farm to farm. In contrast, most H-2A employers are farm operators, but FLCs account for over 40 percent of H-2A jobs certified (figure 2). Thus, strong FLC involvement in the H-2A program constitutes a new model of guest worker recruitment and deployment. FLCs are intermediaries that recruit workers and supply them to farms for a fee (Taylor and Charlton, 2018). FLCs make it easier to recruit and manage farmworkers, and they may also aid fixed-situs employers in sharing the risk involved in the employment of unauthorized workers (Taylor and Thilmany, 1993; Thilmany, 1996). FLCs usually provide H-2A workers to multiple fixed-situs farms; thus, some H-2A workers may be employed on several farms while they are in the United States.

Figure 12 shows trends in H-2A certifications by type of employer and highlights the growth in H-2A employment of fixed-situs employers and FLCs. While fixed-situs employers obtained most of the H-2A certifications between 2007 and 2020, the gap between them and FLCs narrowed. More than half of the recent growth in H-2A certifications comes from FLCs, so the FLC share of H-2A jobs increased from 13 percent in FY 2007 to 44 percent in FY 2020.

Figure 12
H-2A jobs by employer type, fiscal years 2007–20

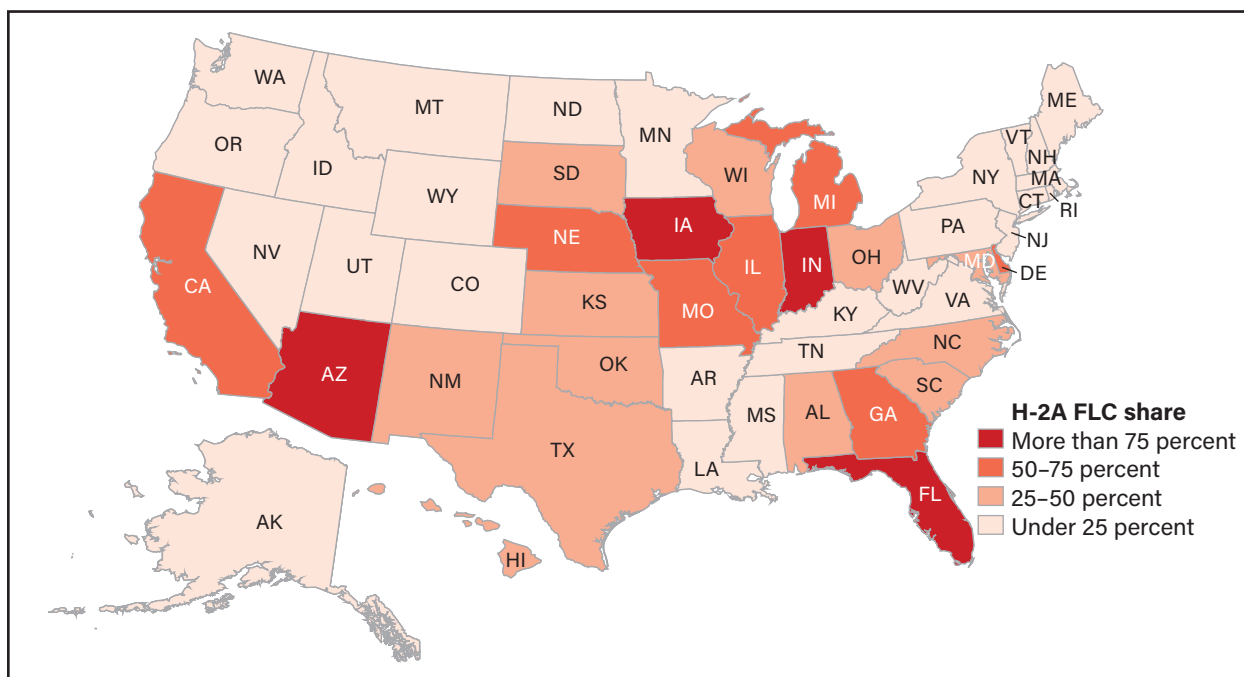


FLC = farm labor contractor.

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Figure 13 highlights the differences in the FLC share of H-2A certifications across States. There is a positive relationship between the FLC share of H-2A jobs and the share of contract labor expenditures in total hired labor expenditures reported in the Census of Agriculture. In States where FLCs are particularly prevalent (e.g., Florida, California, and Arizona) and in many Midwestern States such as Indiana, Illinois, and Michigan, the H-2A FLC share significantly exceeds the contract labor share of farm labor expenditures in the COA, suggesting that FLCs are using the H-2A program at much higher rates than fixed-situs employers who hire workers directly.

Figure 13

Farm labor contractor share of total H-2A employment, fiscal year 2020

FLC = farm labor contractor.

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Out-of-State Jobs

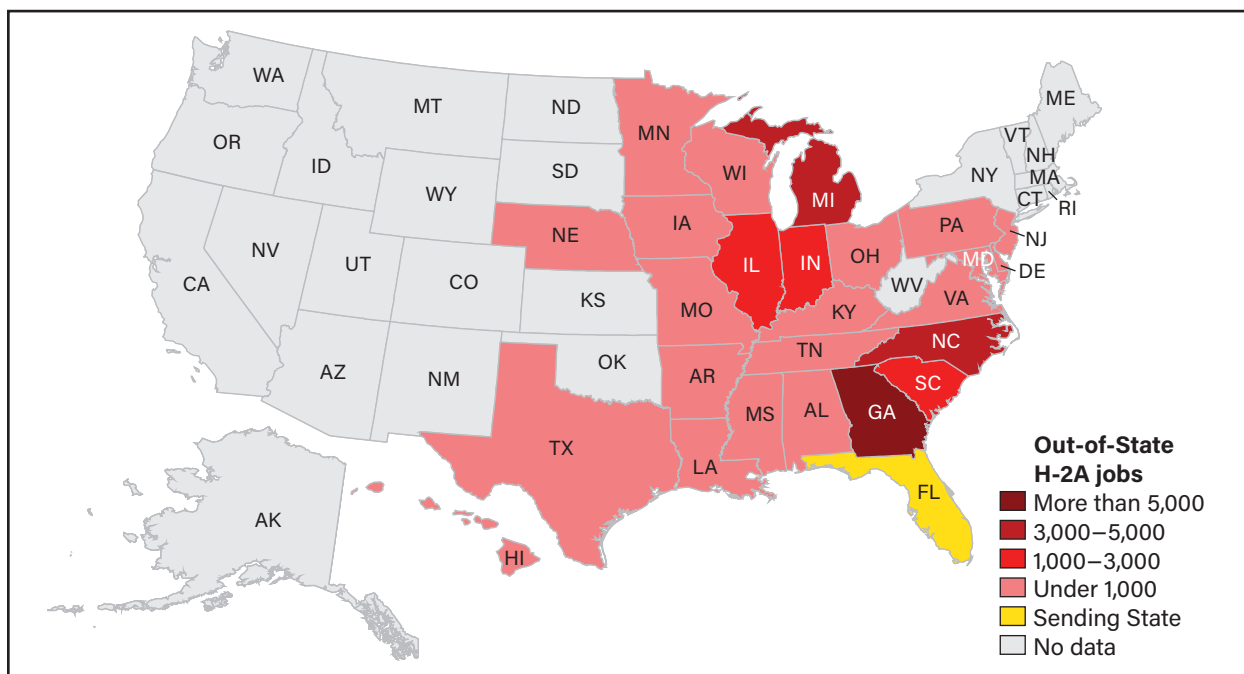
Farm employers based in one State may seek certification to employ H-2A workers in another State. In FY 2020, over 82 percent of the 275,415 H-2A jobs certified were for worksites in the State where the employer was based, while 49,348 H-2A jobs were for employment in other States. In FY 2020, around 85 percent of employers who sought certification to fill jobs outside the State in which they are based were FLCs.

Figure 12 shows that a significant number of FLC H-2A jobs are outside the State where the FLC is based. In FY 2020, around 34 percent of FLC H-2A employment was for out-of-State employers and worksites. Florida-based FLCs accounted for 55 percent of all FLC-sponsored out-of-State H-2A jobs, and California-based FLCs accounted for another 10 percent. Florida and California-based FLCs accounted for 44 percent and 17 percent of all H-2A jobs, respectively, sponsored by FLCs.

Florida-based FLCs were certified to fill around 53,600 jobs, including 30,600 in Florida and 23,000 in other States.³³ Some Florida-based FLCs obtained more certifications in other States than in Florida, including a few who were certified to employ H-2As exclusively in other States. Florida-based FLCs were certified to fill over 5,000 jobs (22 percent of out-of-State jobs) in Georgia, 3,600 (16 percent) in North Carolina, and 3,000 in Michigan (13 percent) (figure 14). Florida's FLCs were also certified to fill over 1,000 jobs in Indiana, Illinois, and South Carolina. In some of these States, Florida-based FLCs filled a quarter or more of all H-2A jobs.

³³ Florida's employers were certified to fill a total of 60,124 jobs, including 36,600 jobs in Florida and 23,500 in other States. Thus, nearly all out-of-State jobs in Florida were sponsored by FLCs.

Figure 14

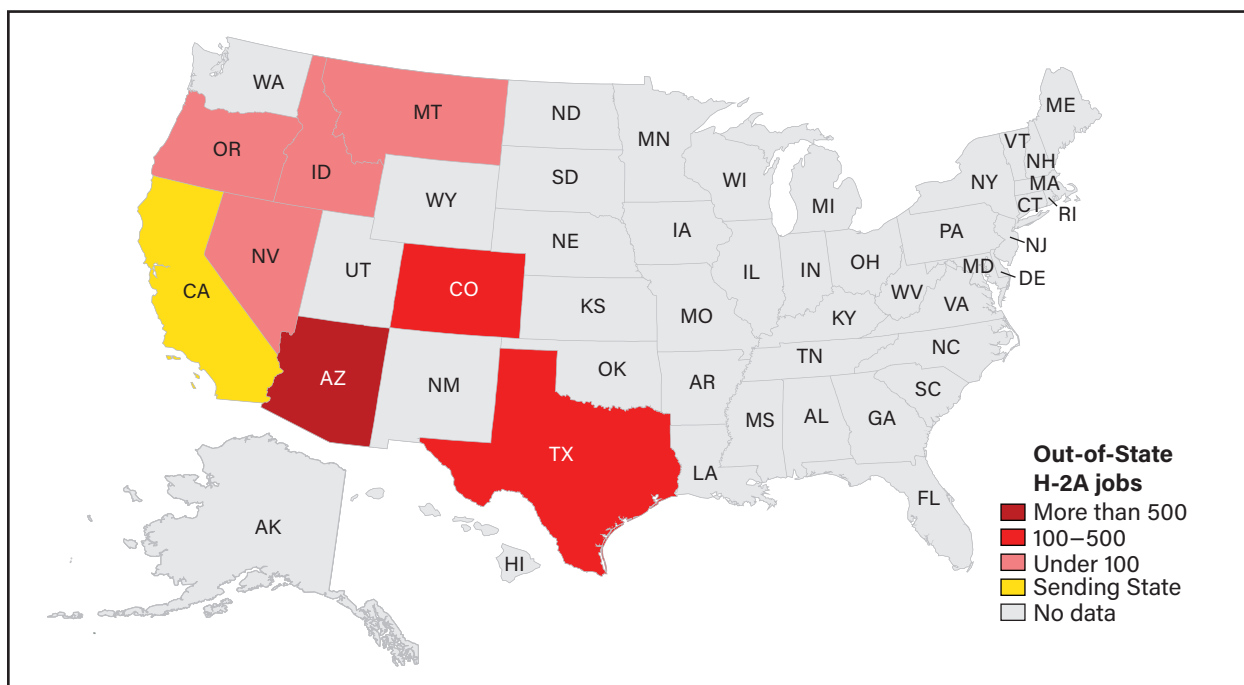
Florida-based farm labor contractors were certified to fill 23,000 jobs in other States, fiscal year 2020

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

California-based FLCs were certified to fill 4,445 H-2A jobs outside the State (figure 15), including 80 percent (3,530 jobs) in Arizona, followed by jobs in Colorado (8 percent) and Texas (4 percent). FLCs based in States other than California and Florida also sponsored H-2As to work outside their home State. Employers based in Georgia, North Carolina, and Texas were each certified to fill over 2,000 jobs in other States. In three States (Indiana, Illinois, and Missouri), the share of total H-2A certifications accounted for by out-of-State FLCs was over 50 percent, and the out-of-State FLC share of H-2A certifications was between 25 and 50 percent in many other States.³⁴

³⁴ See the appendix for a map showing the share of total H-2A employment that comes from out-of-State FLCs, for all States.

Figure 15

California-based farm labor contractors were certified to fill 4,400 jobs in other States, fiscal year 2020

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

FLCs play a more prominent role in the H-2A program than in the domestic U.S. farm labor market (i.e., the FLC share of total H-2A certified employment is larger than the FLC share of total U.S. farmworker employment), perhaps suggesting that those who learn to navigate the H-2A process find it an efficient way to obtain workers to fill seasonal jobs. Some fixed-situs employers may turn to FLCs for workers when FLCs can get farm work done more cheaply and reliably than these employers could by hiring workers directly. Discussions with FLCs suggest that their ability to recruit productive workers and keep them fully employed during their period in the United States enables the FLCs to offset H-2A transportation and housing costs with higher productivity. Several FLCs report that H-2A workers pick 15 to 25 percent more boxes or bins of fruits and vegetables per hour than U.S. workers, and some report that the H-2A workers are more careful, resulting in higher packout rates, the share of harvested produce that is packed and sent to markets.³⁵

³⁵ Authors' personal communications with FLCs who employ H-2A workers.

The Adverse Effect Wage Rate Freeze

In this section, we estimate the wage savings to U.S. employers from a 1-year AEWR freeze. The bipartisan Farm Workforce Modernization Act (FWMA, or HR 1603), which was approved by the U.S. House of Representatives on a 247–174 vote in March 2021, included an AEWR freeze and is likely to be the starting point for farm labor immigration reforms (Rural Migration News, 2021a). The FWMA would allow unauthorized farm workers who did at least 180 days of farm work in the previous 24 months to apply for Certified Agricultural Worker (CAW) status, which would grant them temporary legal rights to reside and work in the United States. CAW status could be renewed indefinitely so long as the worker continued to do at least 100 days of farm work a year. The spouses and children under 18 of CAW status holders would also receive these temporary work and residence visas and would not have to do farm work to maintain their status.

CAW workers could become permanent U.S. residents if they continued to do farm work and paid a \$1,000 fine. Those who were unauthorized in the United States for 10 or more years could become permanent residents if they did at least 100 days of farm work of at least 7.75 hours a day for 4 more years, after which they would be free to choose nonfarm employment, while those with less than 10 years in the United States would have to do 8 more years of farm work to become permanent residents. The FWMA would create 40,000 immigrant visas for farm workers who are sponsored by U.S. employers or H-2A workers who worked at least 10 years in the United States. After the CAW legalization program is implemented, farm employers must use E-Verify to check the status of new hires.

The FWMA would modify the H-2A program by making the application process and job ads electronic, introducing 3-year H-2A visas, allowing up to 20,000 H-2A workers to be employed in year-round dairy and other jobs, and adding funding for rural housing that could be used by H-2A workers. Instead of a single AEWR for most occupations within a State, as is currently the case, AEWRs would be set by job title.³⁶ AEWRs would be frozen for a year, with increases then capped at 3.25 percent a year for the next 9 years. USDA and DOL would study the impact and need for AEWRs and recommend how to proceed after 2030. A Portable Agricultural Worker (PAW) pilot program would allow up to 10,000 foreigners to change farm employers while they were in the United States for 3 years, with PAW visa holders maintaining their status by not being unemployed more than 60 days.

The FWMA could legalize most farm workers and accelerate the growth of the H-2A program, especially if CAWs found nonfarm jobs as soon as they completed the required additional 4 or 8 years of farm work. Extending H-2A eligibility to agricultural employers who offer year-round jobs would likely result in livestock and dairy farms hiring and housing more H-2A workers. Setting AEWRs by job title could lower required minimum wages for crop workers and raise them for workers in nonfarm occupations such as construction work or driving a truck.

³⁶ More specifically, AEWRs for most farm jobs would be set using occupation-specific wage data from USDA's Farm Labor Survey (FLS). For farm-related jobs, such as workers constructing buildings on farms and truck drivers hauling farm goods, AEWRs would be set separately by job title, using DOL's Occupational Employment and Wage Statistics (OEWS) (Martin and Rutledge, 2022). On December 1, 2021, DOL proposed to change its regulations to set an AEWR for each farm-related occupation using the OEWS while continuing to set a single AEWR for all farm occupations based on the FLS (U.S. Department of Labor, 2021).

H-2A Wage Savings

How would an AEWR wage freeze affect the wage bill for H-2A and U.S. domestic farm workers? A simple estimate is based on our approximation of the 2020 national H-2A wage bill and on the historical average growth rate of the AEWRs across U.S. States. AEWRs rose by an average of 4 percent a year over the past decade. Assuming that they would continue to rise at 4 percent per year, and holding the size of the H-2A workforce constant at its 2020 value, freezing the H-2A wage bill of around \$3.5 billion in 2020 would save H-2A employers \$140 million a year.

These H-2A wage savings are lower—\$105 million a year—if employers satisfy only the three-fourths guarantee, that is, if they pay only 75 percent of the value of the contract. The wage savings are higher if employers offer, and H-2A workers accept, more hours of work than specified in their contracts. If H-2A earnings are 125 percent of the value of the contract, the U.S. H-2A wage bill is \$4.4 billion, and the savings from not having AEWRs increase by 4 percent are \$175 million a year.

Some of the workers employed on farms with H-2A workers are U.S. domestic workers in corresponding employment who are employed by H-2A employers and thus must also receive the AEWR. Table 9 shows that there were an estimated 50,340 of these U.S. domestic workers, and the bill for their wages was an estimated \$717 million. If AEWRs were frozen, the wages of these U.S. workers would also be frozen, saving employers an additional \$29 million a year.³⁷ Our estimate of total wage savings from an AEWR freeze is \$169 million a year (\$140 million from H-2A workers and \$29 million from the wages of corresponding U.S. workers) and is very similar to the U.S. Department of Labor (2020) annualized estimate of \$170 million.³⁸

Table 9
U.S. workers employed by H-2A employers, fiscal year 2020

State	COA crop labor expenditure (millions \$)	Percent of COA crop labor expenditure	U.S. workers	U.S. workers wage bill (millions \$)
California	9,554	36	4,885	67
Washington	2,111	8	13,867	177
Florida	1,535	6	2,618	37
Oregon	974	4	454	9
Texas	892	3	1,382	29
North Carolina	680	3	336	4
Top six States	15,746	59	23,542	322
United States	26,717	100	50,340	717

COA = Census of Agriculture.

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data, and USDA, National Agricultural Statistics Service, 2017 Census of Agriculture.

³⁷ Our measure of U.S. workers in “corresponding employment,” whom we assume would also be paid the AEWR, is calculated by taking the difference between the total number of workers (H-2A and domestic) that H-2A applicants claimed they needed and the number of H-2A jobs certified. Our approximation may differ from the true number of workers in corresponding employment for many reasons. For example, there is no guarantee that employers will end up hiring all the workers they claimed they needed in the application, even if they hired all the H-2A workers for whom they obtained certification.

³⁸ See U.S. Department of Labor (DOL) (2020) for the methodology used by DOL to compute its wage savings estimate. It is worth noting that the DOL characterizes their wage savings estimate stemming from an AEWR freeze as a transfer of income from workers to employers.

In terms of certified jobs, the H-2A program expanded at an average annual rate of 14 percent during 2010–20. The H-2A wage savings due to the AEWR freeze could be greater if the shocks to the farm labor market responsible for increased H-2A uptake continue (e.g., a decline in domestic labor supply as workers find work in the nonfarm sector). Coupled with the negative labor supply shock of domestic workers exiting, the AEWR freeze could speed the expansion of the H-2A program. There would be further wage savings in 2023 if AEWRs were adjusted according to the Employment Cost Index (ECI) for all U.S. workers rather than according to USDA’s FLS, as proposed by DOL. The ECI has been increasing by 2 percent a year, half as fast as the 4-percent yearly rate of the FLS.

U.S. Domestic Worker Wages

How would an AEWR freeze affect the wage bill of U.S. domestic workers? H-2A regulations assume that U.S. and H-2A workers are close to perfect substitutes, which is presumably, at least in part, why farm employers must try and fail to recruit U.S. workers before being certified to employ H-2A workers.³⁹ This means that freezing the wages of H-2A workers would affect the wages of domestic workers, with the magnitude of the effect depending on factors that range from the actual degree of substitutability to differences in productivity and labor costs between H-2A and domestic workers.

An estimated 90 percent of U.S. farm jobs are filled by U.S. domestic workers. Farmers reported to the Census of Agriculture (COA) that they had \$31.6 billion in labor expenses for directly hired workers in 2017 and another \$7.6 billion in contract labor expenses, for a total of \$39.2 billion.⁴⁰ All agricultural establishments, including forestry and fisheries, reported paying \$43.5 billion in wages to State unemployment insurance authorities in the 2017 Quarterly Census of Employment and Wages (QCEW).

Over 95 percent of H-2A jobs certified are for crop work. The QCEW reported that U.S. crop farmers paid \$19.4 billion for directly hired workers in 2019 and \$11.7 billion for crop support services, for a total of \$31.1 billion.⁴¹ Most States exempt small-farm employers from the unemployment insurance (UI) system, and some States exempt H-2A workers from the UI system, so the total wages paid to crop workers who are hired directly and brought to farms by support service firms are likely more than \$31 billion.

If the H-2A wage bill had been fixed at its value in 2020, and if employers had paid 100 percent of the value of certified H-2A contracts, H-2A employers would have saved \$169 million a year from not having to raise wages for H-2A workers and U.S. workers in corresponding employment.

Would freezing the AEWR also affect the wages of the U.S. workers who fill 90 percent of U.S. crop and crop support jobs and are not employed on farms with H-2A workers? In the most extreme scenario, if an AEWR freeze prevents the wages of U.S. workers from rising at the average rate of 4 percent a year, employers could save \$1.2 billion based on QCEW crop and crop support wages for 2019. Of the combined approximately \$1.4 billion in wage savings, including \$169 million from H-2A and corresponding U.S. workers and \$1.2 billion from other U.S. crop workers, almost 90 percent would come from other U.S. crop workers.

We found no studies showing a causal link between the AEWR in a given year, which depends on farm-worker compensation in the previous year, and the current wages of U.S. domestic farm workers. The H-2A program is concentrated by commodity and area, so there may be little spillover between AEWRs and U.S. worker wages.

³⁹ This is not to say that U.S. domestic workers and H-2As are necessarily equally productive. For example, H-2As tend to be younger and thus could have a productivity advantage over U.S. domestic workers.

⁴⁰ Authors’ calculations using the 2017 Census of Agriculture.

⁴¹ Table 9 shows that total labor expenses for crop work in the 2017 Census of Agriculture were \$26.7 billion.

Conclusion

H-2A guest workers account for an estimated 10 percent of average employment in U.S. crop agriculture, and their share of farm employment is expanding (Costa and Martin, 2020). This report uses FY 2020 H-2A certification data from DOL to explore how H-2A employment differs by State, employer size, industry, and employer and filer types. We document that 55 percent of certified FY 2020 jobs were in the top six States for these jobs: Florida, Georgia, Washington, California, North Carolina, and Louisiana. Around 90 H-2A employers, the top 1 percent of H-2A applicants, obtained 40 percent of all H-2A certifications in 2020. However, most H-2A applicants request relatively few workers, with around two-thirds requesting between one and nine H-2A jobs (8 percent of the national total). Most employers depend on specialized third parties such as lawyers, agents, and growers associations to file H-2A applications on their behalf, with only 15 percent of applications filed by the farmers themselves.

Over the last decade the FLC share of H-2A jobs has been increasing. FLCs accounted for 44 percent of H-2A jobs certified in FY 2020 and accounted for most H-2A jobs in Florida and California. Many FLCs are large. Of the top 10 H-2A employers, 6 were FLCs. Many FLCs that are based in one State employ H-2A workers outside of that State; more than a third of total FLC H-2A employment was for out-of-State employers and worksites. Florida and California-based FLCs accounted for around two-thirds of all FLC-sponsored out-of-State jobs.

For this study, we analyzed the H-2A contracts approved in FY 2020 and found that, on average, they offered almost half a year's work and were worth an estimated \$12,500, generating an estimated H-2A wage bill of \$3.5 billion. We estimate that DOL's AEWR freeze would save H-2A employers \$169 million a year (if agricultural employers paid 100 percent of certified H-2A contract values).

References

- Bampasidou, M., and M.E. Salassi. 2019. "Trends in U.S. Farm Labor and H-2A Hired Labor: Policy and Related Issues," *Choices* 34(1).
- Beatty, T., A. Hill, P. Martin, and Z. Rutledge. 2020. "COVID-19 and Farm Workers: Challenges Facing California Agriculture," *Agriculture and Resource Economics Update* 23(6).
- California Institute for Rural Studies. December 2020. "COVID-19 Farmworker Study." Available online.
- Castillo, M., and D. Charlton Thronson, 2022. "Housing Booms and H-2A Agricultural Guest Worker Employment," *American Journal of Agricultural Economics* 1–23.
- Castillo, M., S. Simnitt, G. Astill, and T. Minor. 2021. *Examining the Growth in Seasonal Agricultural H-2A Labor*, EIB-226, U.S. Department of Agriculture, Economic Research Service, August 2021.
- Charlton, D., and M. Castillo, 2021. "Potential Impacts of a Pandemic on the U.S. Farm Labor Market," *Applied Economic Perspectives and Policy* 43(1):39–57
- Congressional Research Service. 1980. *Temporary Worker Programs: Background and Issues*, U.S. Government Printing Office, Washington, DC.
- Costa, D., and P. Martin. 2020. *Coronavirus and Farmworkers Farm Employment, Safety Issues, and the H-2A Guestworker Program*, Economic Policy Institute, Washington, DC.
- Costa, D., P. Martin, and Z. Rutledge. 2021. *Federal Labor Standards Enforcement in Agriculture: Data Reveal the Biggest Violators and Raise New Questions About How to Improve and Target Efforts to Protect Farmworkers*, Economic Policy Institute Report, Washington, DC.
- Escalante, C., T. Luo, and C. Taylor. 2020. "The Availability of H-2A Guest Farm Workers during the COVID-19 Pandemic," *Choices* 35(3).
- Georgia Farm Bureau. 2021. "About Georgia Agriculture," Georgia Farm Bureau, Macon, Georgia.
- Luckstead, J., and S. Devadoss. 2019. "The Importance of H-2A Workers in Agriculture," *Choices* 34(1).
- Martin, P. 2017. *Immigration and Farm Labor: From Unauthorized to H-2A for Some?* Migration Policy Institute, Washington, DC.
- Martin, P. 2019. "The Role of the H-2A Program in California Agriculture," *Choices* 34(1).
- Martin, P., and Z. Rutledge. 2022. "Proposed Changes to the H-2A Program Would Affect Labor Costs in the United States and California," *California Agriculture* 75(3):135–141.
- Moretti, M., and J. Perloff. 2002. "Efficiency Wages, Deferred Payments, and Direct Incentives in Agriculture," *American Journal of Agricultural Economics* 84(4):1144–55.
- Rural Migration News*. 2010. "H-2A Regs, Cases," *Rural Migration News*, Davis, California.
- Rural Migration News*. 2020a. "Covid and Farm Labor in 2020," *Rural Migration News*, Davis, California.

- Rural Migration News*. 2020b. “House Approves HR 5038, the Farm Workforce Modernization Act,” *Rural Migration News*, Davis, California.
- Rural Migration News*. 2021a. “FWMA, H-2A; H-2B,” *Rural Migration News*, Davis, California.
- Rural Migration News*. 2021b. “H-2A, H-2B,” *Rural Migration News*, Davis, California.
- Taylor, J.E., and D. Charlton. 2018. *The Farm Labor Problem: A Global Perspective*, Academic Press.
- Taylor, J. E., and D. Thilmany.1993. “Worker Turnover, Farm Labor Contractors, and IRCA’s Impact on the California Farm Labor Market,” *American Journal of Agricultural Economics* 75(2):350–60.
- Thilmany, D. 1996. “FLC Usage Among California Growers Under IRCA: An Empirical Analysis of Farm Labor Market Risk Management,” *American Journal of Agricultural Economics* 78(4):946–60.
- U.S. Citizenship and Immigration Services. 2020. “USCIS Response to Coronavirus 2019 (COVID-19): H-2A Temporary Agricultural Workers,” U.S. Citizenship and Immigration Services, Washington, DC.
- U.S. Department of Agriculture, Economic Research Service. Selected Weekly Fresh-Market Vegetable Movement and Price, September 2021.
- U.S. Department of Labor. 2015. “Employer Guide to Participation in the H-2A Temporary Agricultural Program,” U.S. Department of Labor, Washington, DC.
- U.S. Department of Labor. 2019. “Temporary Agricultural Employment of H-2A Nonimmigrants in the United States,” U.S. Department of Labor, Washington, DC.
- U.S. Department of Labor. 2020. “Adverse Effect Wage Rate Methodology for the Temporary Employment of H-2A Nonimmigrants in Non-Range Occupations in the United States,” U.S. Department of Labor, Washington, DC.
- U.S. Department of Labor. 2021. “Adverse Effect Wage Rate Methodology for the Temporary Employment of H-2A Nonimmigrants in Non-Range Occupations in the United States,” U.S. Department of Labor, Washington, DC.
- U.S. Department of Labor. 2021. “U.S. Department of Labor Launches Initiative focused on Education, Outreach, Enforcement in Nation’s Agricultural Industry,” U.S. Department of Labor, Washington, DC.

Appendix

Table A-1

H-2A applications, fiscal year 2020

	U.S.	CA	FL	Other States
Determination issued - certification	13,425	706	572	12,147
Determination issued - partial certification	127	7	14	106
Determination issued - withdrawn	264	10	15	239
Determination issued - denied	247	11	41	195
Applications partially or fully certified	13,552	713	586	12,253
Applications withdrawn or denied	511	21	56	434
Total number of applications	14,063	734	642	12,687

U.S. = United States. CA = California. FL = Florida

Note: A partially certified application is one where only some of the jobs requested in the application were certified by DOL.

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Table A-2

Florida H-2A jobs by industry, fiscal year 2020

Industry group	H-2A jobs certified	Percent of State H-2A jobs	Contract value (avg. \$)	Hours per week (avg.)	Weeks (avg.)
Crop support (inc. FLCs)	24,730	63	10,015	36	24
Vegetables	7,509	19	9,297	37	21
Fruits	4,762	12	9,618	38	23
Field and other crops	1,326	3	10,051	39	22
Nursery	523	1	14,630	40	33
Animals	214	1	18,897	42	39
Total or average	39,064	100	9,940	37	23

FLC = farm labor contractor. avg. = average.

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Table A-3

Georgia H-2A jobs by industry, fiscal year 2020

Industry group	H-2A jobs certified	Percent of State H-2A jobs	Contract value (avg. \$)	Hours per week (avg.)	Weeks (avg.)
Crop support (inc. FLCs)	9,266	34	6,693	38	15
Fruits	7,022	25	8,058	36	19
Field and other crops	5,631	20	11,830	39	26
Vegetables	5,227	19	6,580	37	15
Nursery	392	1	15,005	40	33
Animals	76	0	16,737	42	34
Total or average	27,614	100	8,212	38	19

FLC = farm labor contractor. avg. = average.

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Table A-4

Washington H-2A jobs by industry, fiscal year 2020

Industry group	H-2A jobs certified	Percent of State H-2A jobs	Contract value (avg. \$)	Hours per week (avg.)	Weeks (avg.)
Fruits	15,855	59	13,192	38	22
Field and other crops	9,039	34	16,099	38	27
Crop support (inc. FLCs)	1,706	6	12,816	36	22
Nursery	162	1	15,292	39	24
Animals	52	0	19,564	41	38
Vegetables	18	0	20,383	40	32
Total or average	26,832	100	14,177	38	24

FLC = farm labor contractor. avg. = average.

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Table A-5

California H-2A jobs by industry, fiscal year 2020

Industry group	H-2A jobs certified	Percent of State H-2A jobs	Contract value (avg. \$)	Hours per week (avg.)	Weeks (avg.)
Crop support (inc. FLCs)	17,077	67	14,644	37	27
Fruits	3,956	16	13,102	39	23
Vegetables	2,172	9	11,621	39	22
Field and other crops	1,307	5	16,632	39	29
Animals	756	3	19,479	41	37
Nursery	185	1	20,177	46	30
Total or average	25,453	100	14,432	38	26

FLC = farm labor contractor. avg. = average.

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Table A-6

North Carolina H-2A jobs by industry, fiscal year 2020

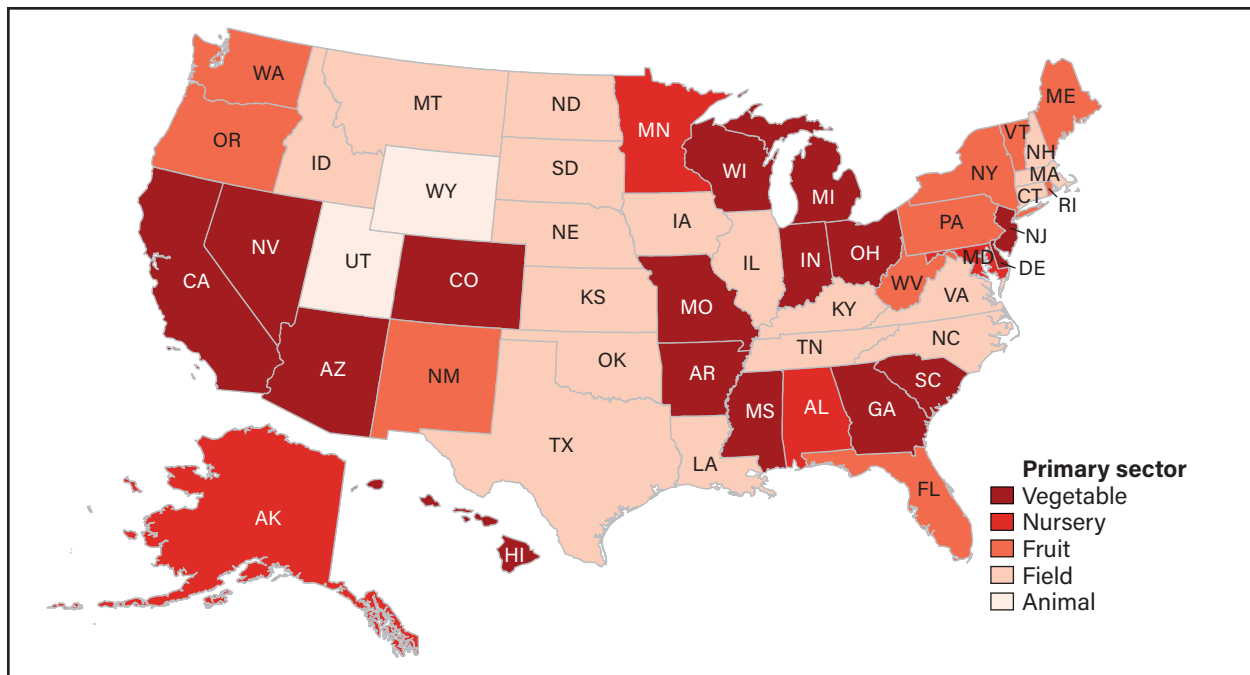
Industry group	H-2A jobs certified	Percent of State H-2A jobs	Contract value (avg. \$)	Hours per week (avg.)	Weeks (avg.)
Field and other crops	12,833	58	13,894	39	28
Crop support (inc. FLCs)	5,590	25	10,460	36	23
Fruits	2,230	10	8,420	36	19
Nursery	921	4	14,071	37	30
Vegetables	468	2	11,806	36	26
Animals	10	0	26,129	51	41
Total or average	22,052	100	12,439	38	26

FLC = farm labor contractor. avg. = average.

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Figure A-1

Primary H-2A industry, fiscal year 2019

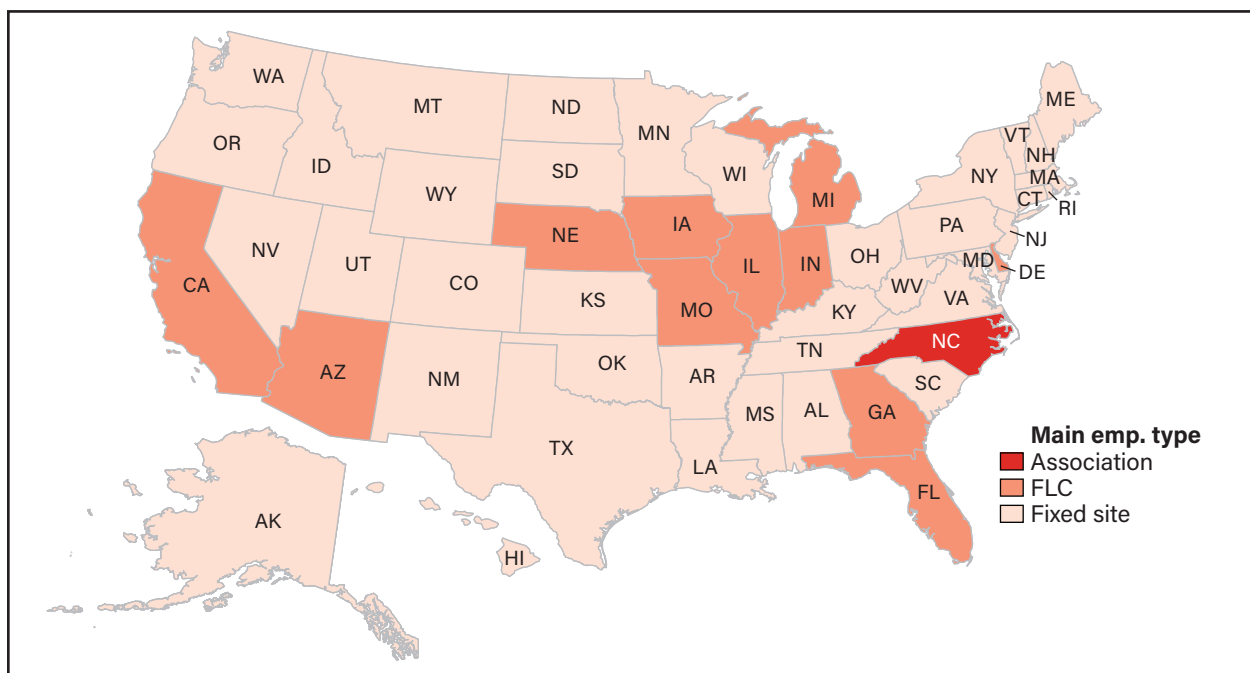


Note: FY 2019 data were used since the FY 2020 data do not always report the primary crop associated with an H-2A petition.

Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Figure A-2

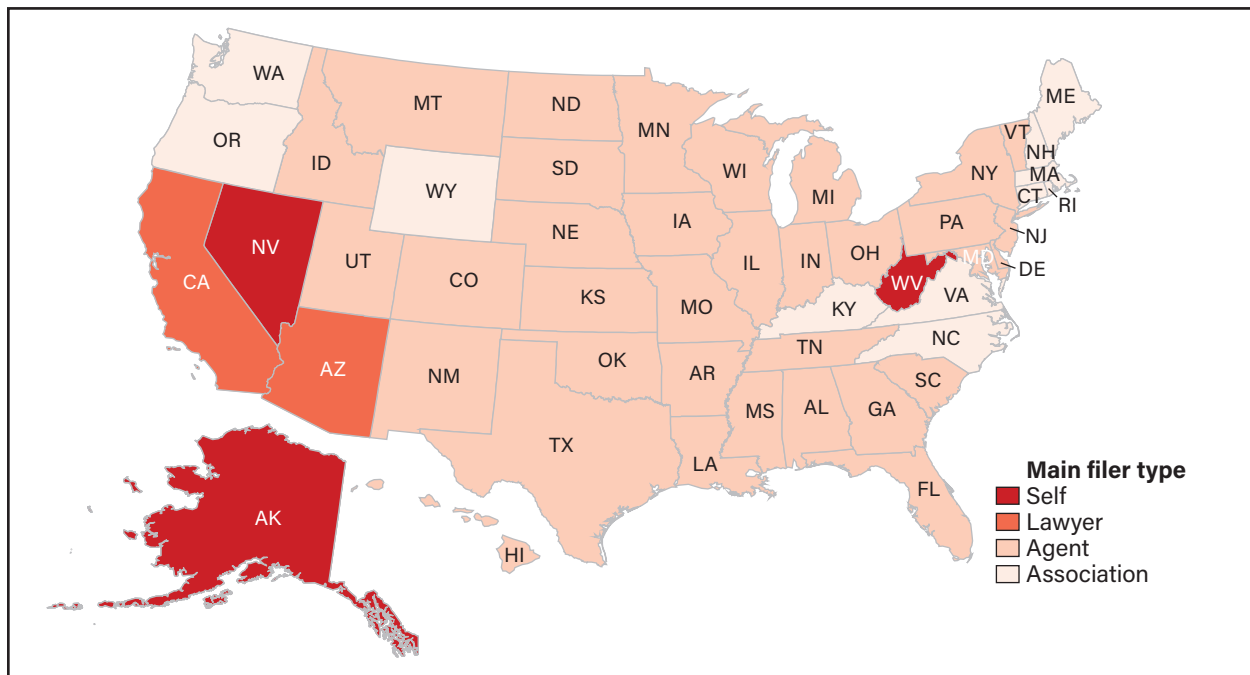
Primary employer type, fiscal year 2020



FLC = farm labor contractor. emp. = employer.

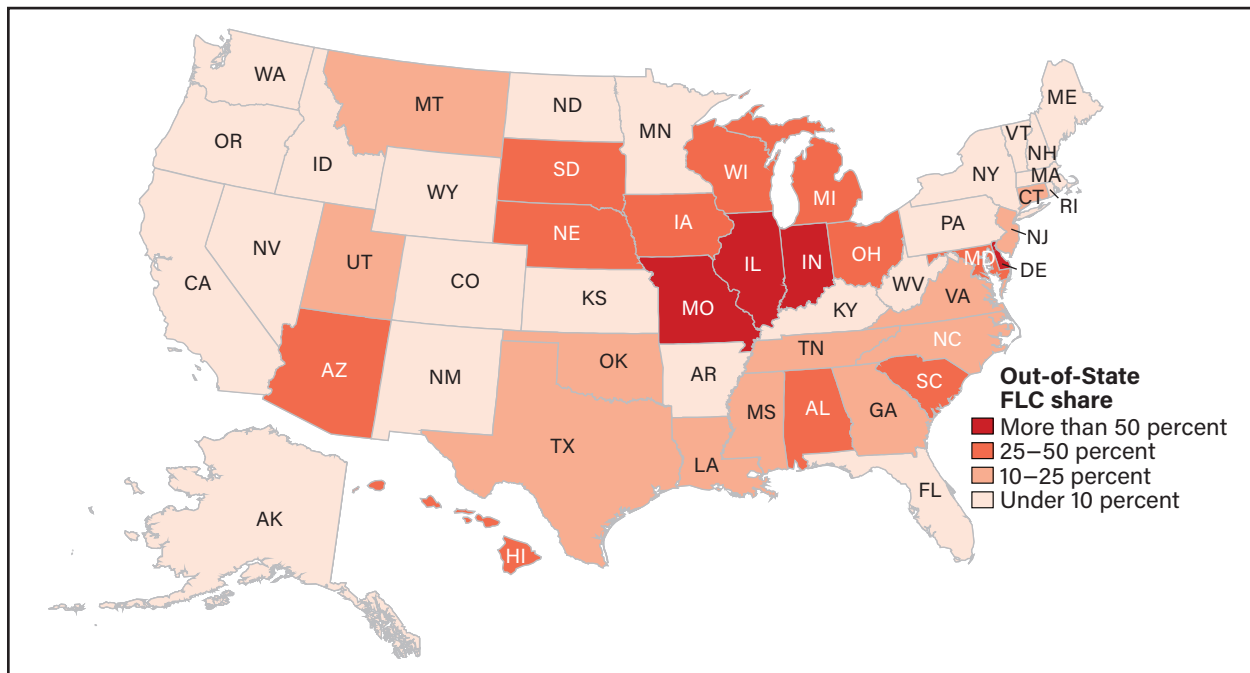
Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Figure A-3
Primary filer type, fiscal year 2020



Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

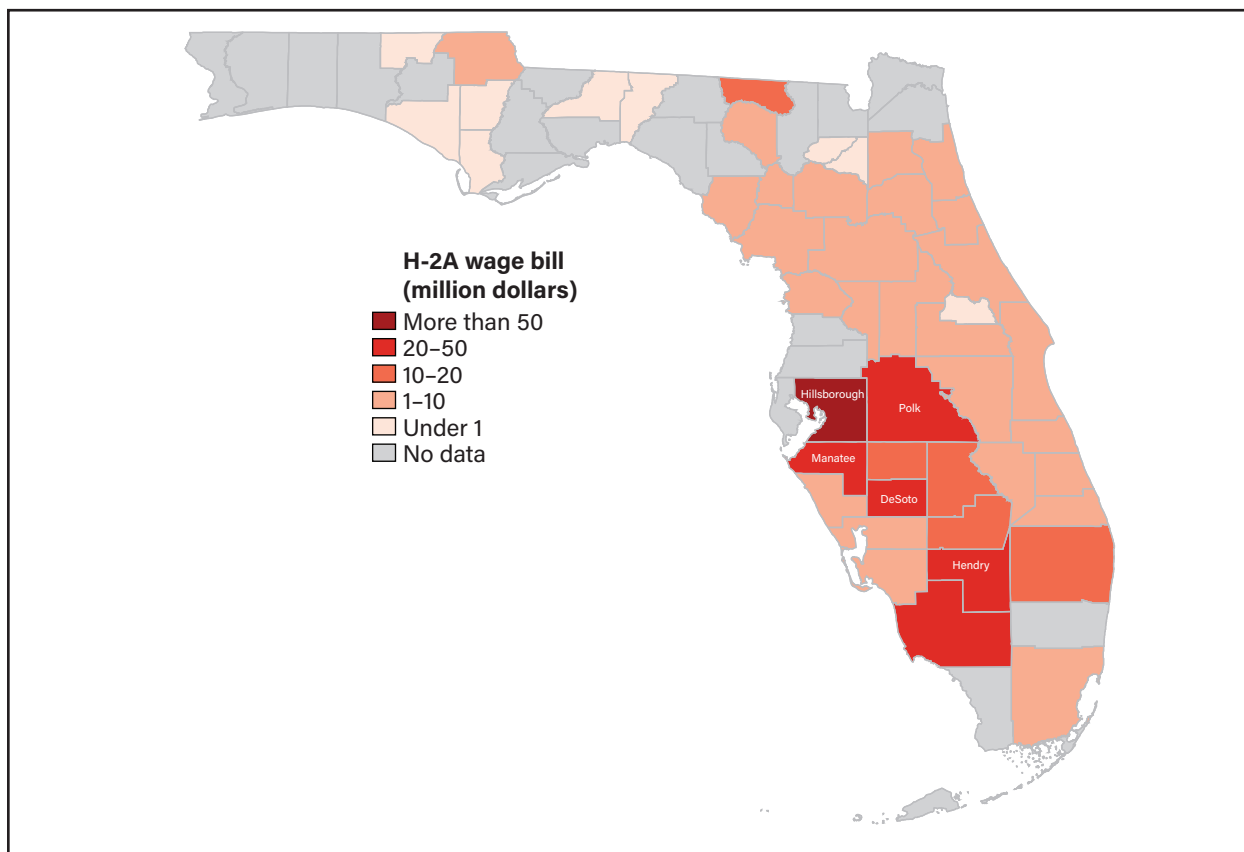
Figure A-4
Out-of-State farm labor contractor share of total H-2A employment, fiscal year 2020



FLC = farm labor contractor.

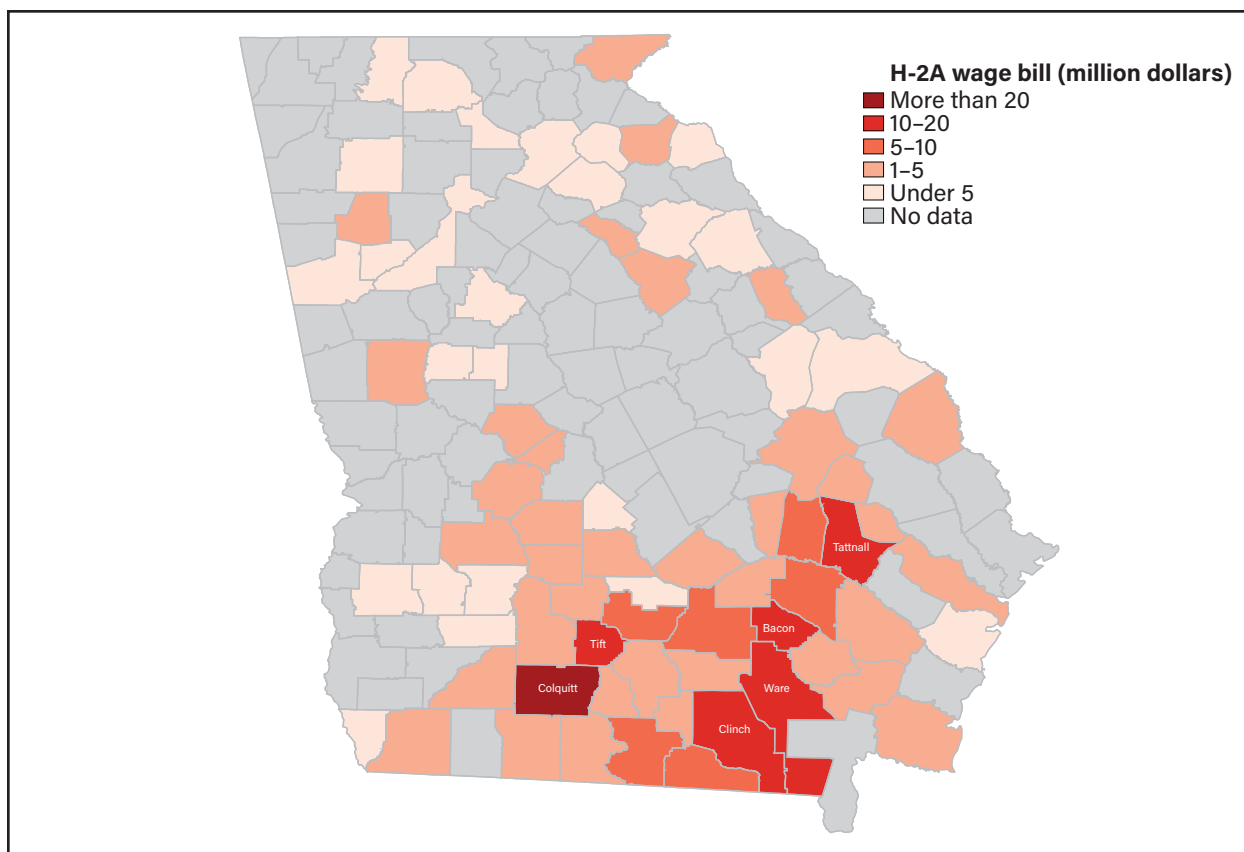
Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Figure A-5
Florida H-2A wage bill by worksite county, fiscal year 2020



Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

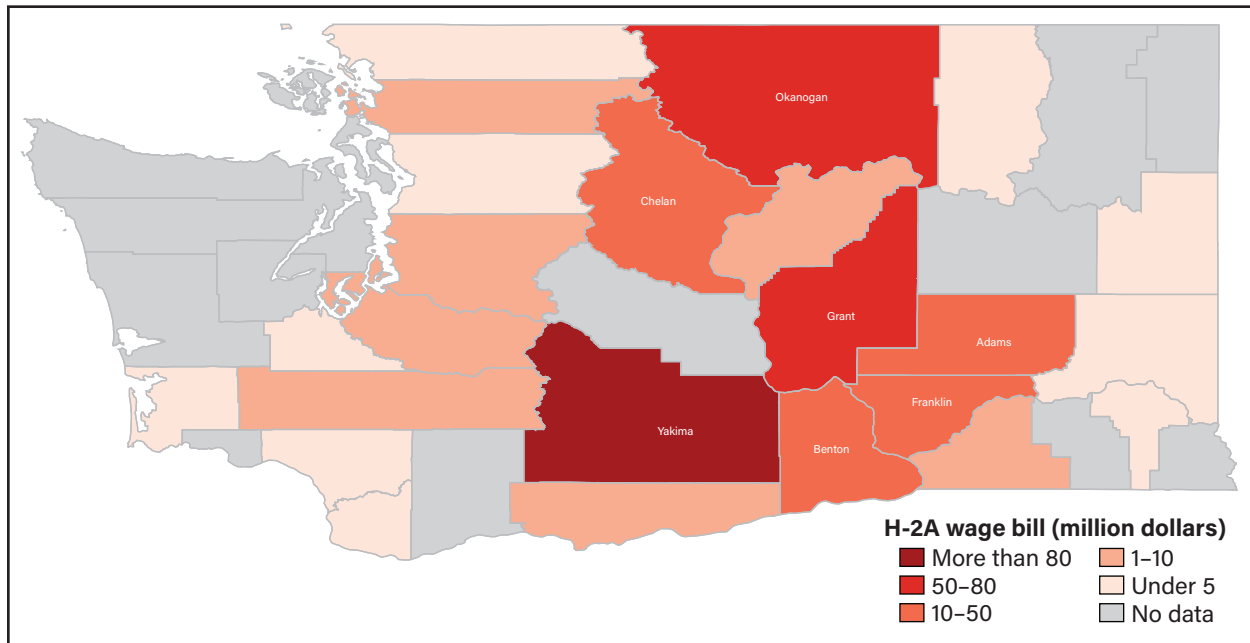
Figure A-6
Georgia H-2A wage bill by worksite county, fiscal year 2020



Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Figure A-7

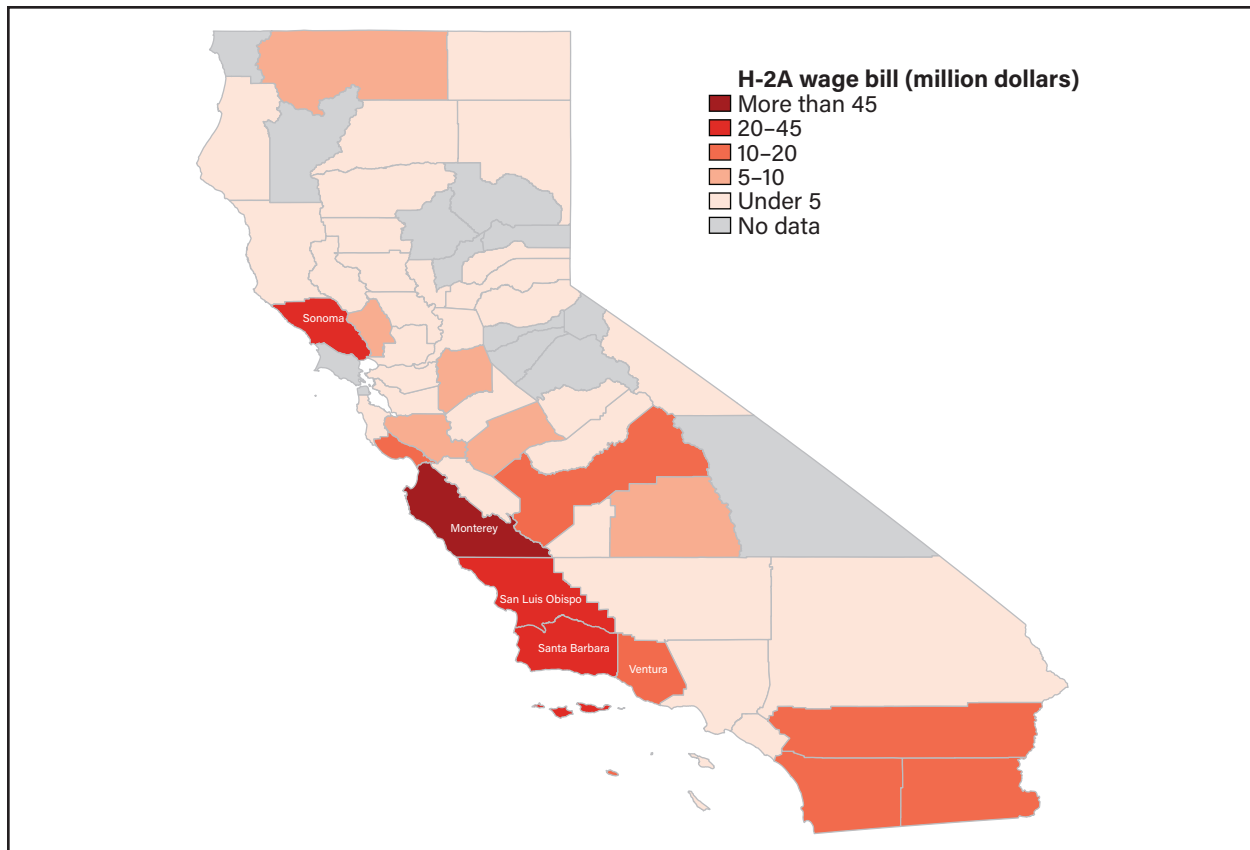
Washington H-2A wage bill by worksite county, fiscal year 2020



Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Figure A-8

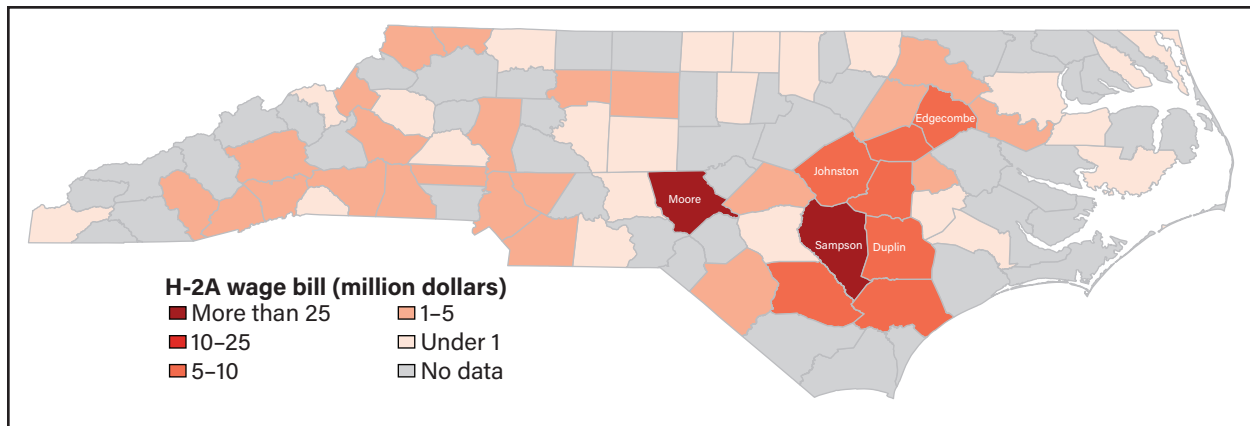
California H-2A wage bill by worksite county, fiscal year 2020



Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Figure A-9

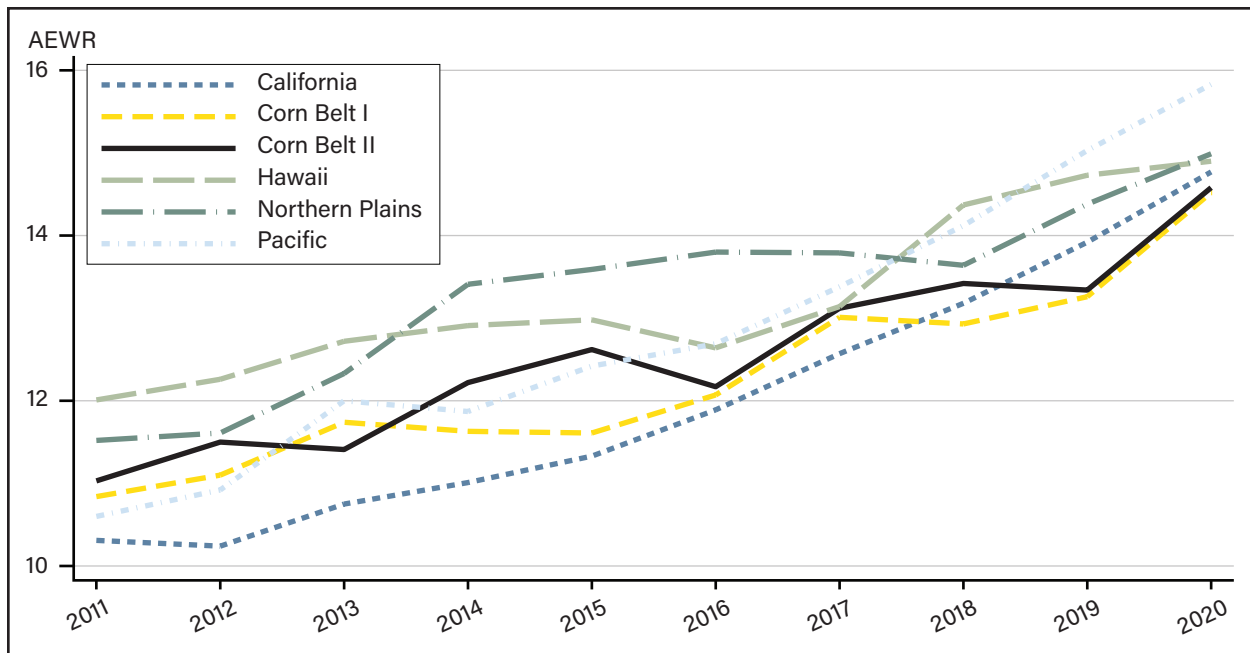
North Carolina H-2A wage bill by worksite county, fiscal year 2020



Source: USDA, Economic Research Service using U.S. Department of Labor, Office of Foreign Labor Certification disclosure data.

Figure A-10.1

Adverse Effect Wage Rate trends by U.S. region

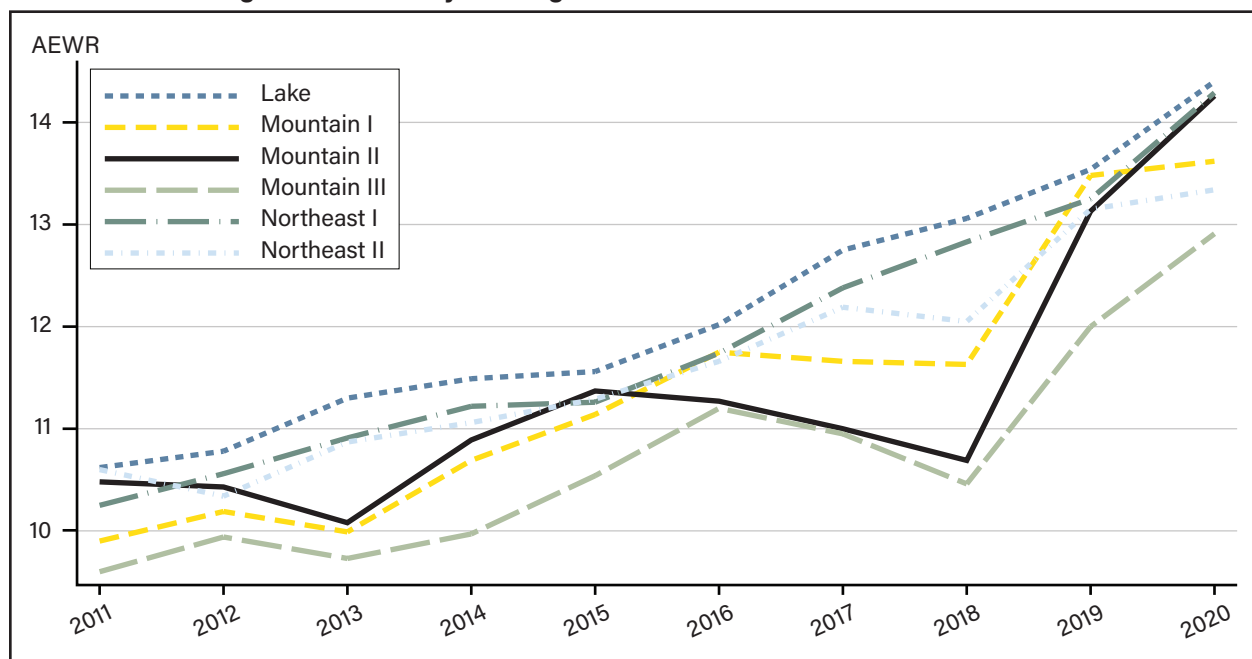


Notes: AEWR = Adverse Effect Wage Rate. Corn Belt I: Illinois, Indiana, Ohio. Corn Belt II: Iowa, Missouri. Northern Plains: Kansas, Nebraska, North Dakota, South Dakota. Pacific: Oregon, Washington.

Source: USDA, Economic Research Service using USDA, National Agricultural Statistics Service, Farm Labor Survey.

Figure A-10.2

Adverse Effect Wage Rate trends by U.S. region

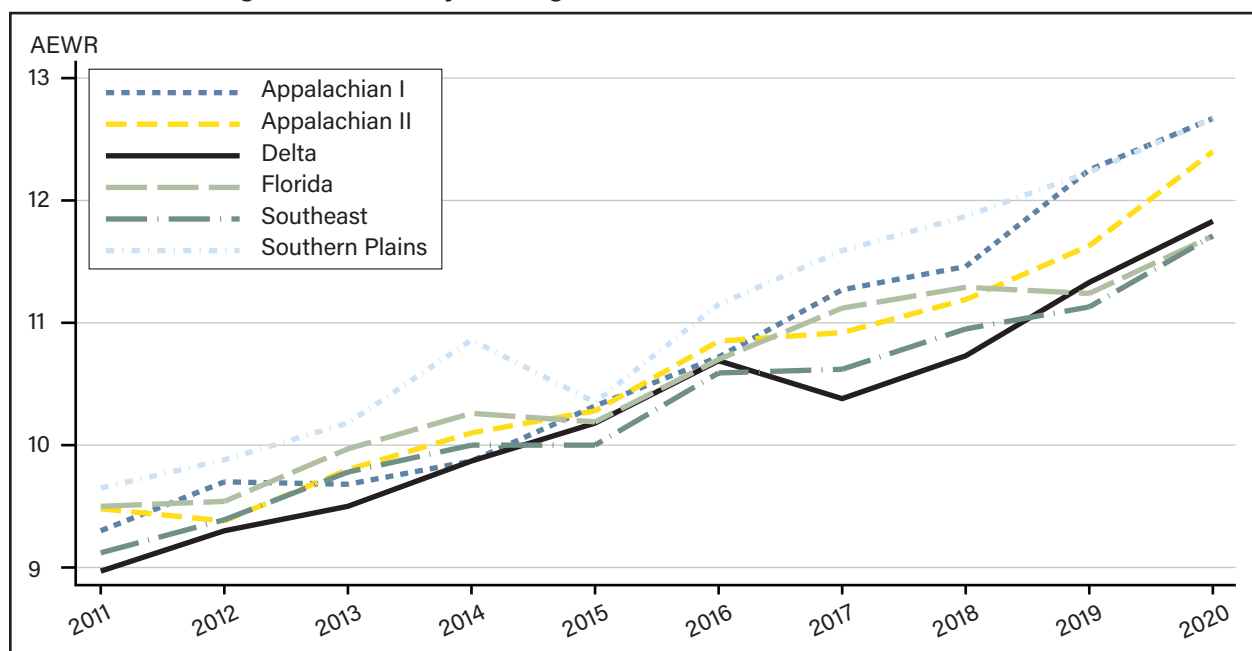


Notes: AEWR = Adverse Effect Wage Rate. Lake: Michigan, Minnesota, Wisconsin. Mountain I: Idaho, Montana, Wyoming. Mountain II: Colorado, Nevada, Utah. Mountain III: Arizona, New Mexico. Northeast I: Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont. Northeast II: Delaware, Maryland, Pennsylvania, New Jersey.

Source: USDA, Economic Research Service using USDA, National Agricultural Statistics Service, Farm Labor Survey.

Figure A-10.3

Adverse Effect Wage Rate trends by U.S. region



Notes: AEWR = Adverse Effect Wage Rate. Appalachian I: North Carolina, Virginia. Appalachian II: Kentucky, Tennessee, West Virginia. Delta: Arkansas, Louisiana, Mississippi. Southeast: Alabama, Georgia, South Carolina. Southern Plains: Oklahoma, Texas.

Source: USDA, Economic Research Service using USDA, National Agricultural Statistics Service, Farm Labor Survey.