

## Proposed Immigration Reforms and Legalization of US Crop Workers

Skyler Simnitt, Zachariah Rutledge, Clare McGrady and Marcelo Castillo

*JEL Classifications: J43, J23, J61, K37*

*Keywords: Farm Workforce Modernization Act, Farmworkers, Immigration*

*DOI: 10.22004/ag.econ.393787*

Agricultural producers in the United States (US) continue to rely heavily on farmworkers, especially for labor-intensive commodities in the fruit, vegetable, and horticultural sectors. Much has been written about the tightening of US farm labor markets over the last two decades, and many producers and policymakers have expressed concerns about attrition of the farm labor supply (Fisher and Knutson, 2012; Taylor, Charlton, and Yúnez-Naude, 2012; Hertz and Zahniser, 2012; Kostandini, Mykerezi and Escalante, 2013; Fan et al., 2015; Charlton and Taylor, 2016; Rutledge et al., 2019; Ifft and Jodlowski, 2016; Richards, 2018; Rutledge and Taylor, 2019). Most crop farmworkers in the United States are foreign-born, with an estimated 40% lacking legal work authorization. Since at least the 1990s, the US population of farmworkers has been sustained through ongoing emigration from Mexico. Thus, discussions surrounding US immigration policy frequently reference potential impacts on US farm labor markets and agricultural outputs. A recent legislative proposal, the Farm Workforce Modernization Act (FWMA, reintroduced in the US House of Representatives in May 2025), aims to stabilize the supply of farmworkers by granting conditional adjustment of legal status to foreign-born undocumented workers who continue to work in agriculture. Our research estimates the size of the population of crop farmworkers that this provision will affect should the FWMA become law. Regardless of this bill's political future, our findings are relevant because the FWMA is only the most recent in a long line of proposed bills with similar provisions. The methodology we employ can readily be adapted to estimate affected population sizes for subsequent legislative proposals that include similar offerings of conditional legal status to the nation's undocumented farmworkers.

### The Bill

Title I of the Farm Workforce Modernization Act proposes creation of a "Certified Agricultural Worker" (CAW) status for unauthorized individuals who were

employed in agriculture for at least 180 days during the 2 years immediately preceding implementation of the law. This program would be available only to those unauthorized workers already in the country and would not be available to workers employed legally on H-2A visas. CAW status could be renewed if workers continue to engage in agricultural work for at least 100 days per year. Workers would not be required to do anything else to keep their legal status, but they could earn a Green Card (legal permanent resident status) if they pay a \$1,000 fee and continue to engage in agricultural work. Workers who have at least 10 years of experience in US agriculture must work for 4 more years to qualify for a Green Card, and workers with less than 10 years in US agriculture become eligible after 8 years of continued US farm work (US Congress, House of Representatives, 2021). In this article, we estimate how many crop farmworkers would be eligible for CAW status and how many crop farmworkers would be eligible for a future Green Card under the FWMA using data from the US Department of Labor's (DOL) Quarterly Census of Employment and Wages (QCEW) and the National Agricultural Workers Survey (NAWS). Combining these NAWS estimates with QCEW-based unique crop farmworker estimates, we find that 265,000 to 531,000 undocumented crop farmworkers would qualify for CAW status. Of these, 173,000–347,000 would be eligible for a Green Card in 4 years, with an additional 93,000–185,000 eligible in 8 years.

### Other Legislative Efforts

The FWMA is but one of multiple examples of proposed legislation that include provisions granting adjustment of legal status to undocumented farmworkers who meet certain requirements. To provide greater context for the FWMA and additional motivation for this study, we briefly mention some of its predecessors: a major piece of legislation—the Immigration Reform and Control Act (IRCA) of 1986—and several proposed bills that included provisions like those found in the FWMA. We also discuss some potential concerns of agricultural

employers regarding the CAW provision of the FWMA and immigration reform more broadly.

IRCA (1986) was the last comprehensive immigration reform bill to become law. IRCA's provisions included a Special Agricultural Worker (SAW) program that granted legal work authorization to individuals who could prove they had been employed in US agriculture for at least 90 days over a 12-month period (US Department of Justice, 1986).

After IRCA, numerous immigration and farmworker-related bills were proposed and failed or have yet to be passed. In several cases, these bills included proposals for individuals without legal status to be granted conditional work authorization provided they remained employed in US agriculture. Even when such legislative proposals failed to pass, their language was often included in subsequent bills.

The Agricultural Job Opportunities, Benefits, and Security Act of 2007 included a provision for the creation of a "blue card," a document that would grant legal work authorization to undocumented individuals already employed in US agriculture (Martin, 2007). The subsequent Border Security, Economic Opportunity, and Immigration Modernization Act of 2013 included a similar "blue card" program. In 2022, the Affordable and Secure Food Act proposed creating a special legal status for farmworkers called Certified Agricultural Worker (CAW) status, very similar to the CAW provision of the FWMA.

## Potential Impacts on the Farm Labor Supply

Unlike IRCA, the FWMA and its more recent predecessors condition the adjustment of status of unauthorized farm workers on their continued employment in agriculture. This stipulation is rooted in broad concerns about occupational out-migration, wherein newly authorized farmworkers may be more likely to leave agricultural employment for higher paying nonfarm jobs. The amnesty of undocumented immigrants as proposed under the CAW provision of the FWMA can affect the agricultural industry and rural communities in multiple ways. Agricultural employers and industry groups have expressed concerns about how immigration enforcement might reduce the supply of available farmworkers. The National Council of Agricultural Employers' website links to several economic studies suggesting that increased immigration enforcement may hurt agricultural producers through negative shocks to the labor supply (Zahniser et al., 2012; Kostandini, Mykerezzi and Escalante, 2013; Richards, 2018). Rob Larew of the National Farmers Union (Larew, 2025) provided testimony to Congress that farmers were uncertain whether they would be able to secure enough workers due to concerns over deportation. Thus, legalization of these workers as proposed in the FWMA would protect them from forced and voluntary deportation, helping agricultural employers

hold onto their current workers (American Farm Bureau Foundation, 2025).

However, a couple of related mechanisms by which amnesty may negatively impact agricultural employers include its potential to cause a reduction in the supply of farmworkers and increases in production costs due to higher wages. Researchers have shown that newly legalized workers have more mobility in the labor market and experience increased earnings (Amuedo-Doranges and Bansak, 2011). Others have proposed that legalization may increase the reservation wages, the lowest wage a worker is willing to accept for a new job, for workers who are now eligible for welfare and public assistance programs (Martin, 1994). Writing within the first few years of IRCA's implementation, Martin (1994) reported that some newly legalized farmworkers left agricultural for better paid jobs in the nonfarm sector. His conclusion has been echoed by others (Taylor and Charlton, 2019; Charlton, 2024). The findings of other researchers examining the effects of the IRCA's amnesty provision on occupational out-migration from agriculture have been more mixed (Tran and Perloff, 2002; Emerson, 2007). Many agricultural employers and organizations representing producers have spoken in favor of the bill, and its intentions are widely understood. However, the actual effects on the labor market remain unknown. Each CAW recipient will fall into one of two categories: eligible for a Green Card in 4 years and eligible for a Green Card in 8 years. Some attrition of the farm labor supply may occur once workers receive CAW status, but requirements that the recipient meet a minimum number of days worked in agriculture per year for renewal of CAW status and the provision granting legal permanent residency conditional on continued farm work are designed to prevent this. Even if these provisions effectively delay occupational outmigration, some attrition may occur after 4 years due to CAW workers receiving an adjustment of status to permanent resident and again after 8 years.

Our estimates provide a new baseline for policymakers considering the scope of proposed legislation in terms of the population size affected or any potential stabilizing effects the legislation might have on farm labor availability. Furthermore, these initial estimates can be considered by future researchers seeking to identify the potential effects of legalization on local farm economies with a high concentration of hired agricultural workers or who have a general interest in farmworker wellbeing. These estimates are specific to the population of hired crop workers in US agriculture and do not include the workers' family members, many of whose own status may be affected by a change in their crop worker relatives' legal status. To our knowledge this is the first study to provide estimates of the population of farmworkers specifically employed in crop production who would receive legalization under the CAW and permanent residency provisions of the Farm Workforce Modernization Act.

**Table 1. Summary of US Crop Farm Workforce**

Category	Percentage of Workers
Immigrant	69
Mexican, if foreign-born	91
Unauthorized to work in the United States	41

Source: USDA Economic Research Service based on National Agricultural Workers Survey, FY 2018–FY 2022 (US Department of Labor, Employment and Training Division 2022).

## The Crop Farm Workforce

The US-based crop farm workforce is largely made up of foreign-born employees, mostly from Mexico. The National Agricultural Workers Survey (NAWS) reported that between fiscal years 2018 and 2022, 69% of US-based crop farm employees were born outside of the United States, and 91% who were foreign-born were natives of Mexico (table 1). Moreover, 41% of crop farm employees were not legally authorized to work in the United States.

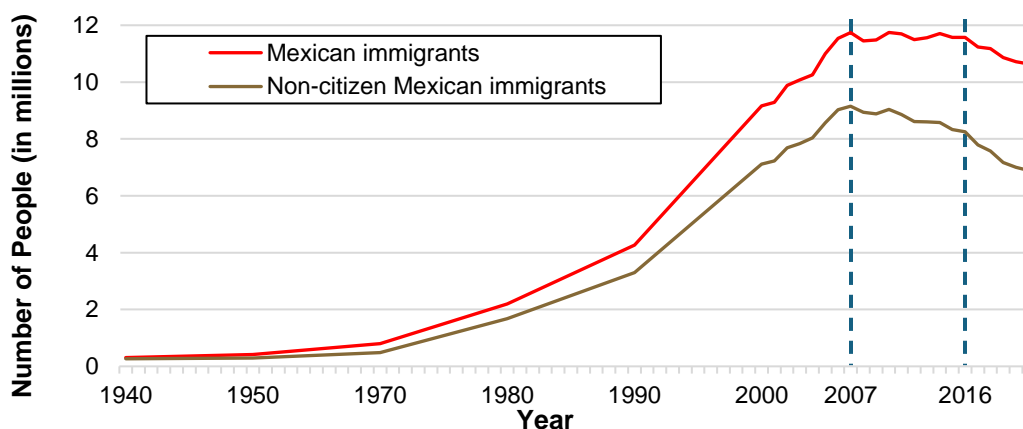
In recent years, multiple indicators suggest a decline in the supply of Mexican workers to US agriculture (Charlton and Taylor, 2016; Zahniser et al., 2018). Given that Mexican immigrants make up such a large share of the US agricultural workforce, it may be possible to glean important information about the farm labor supply by observing trends within the entire population of Mexican immigrants (Boucher and Taylor, 2007; Zahniser et al., 2018). Figure 1 reveals that the Mexican immigrant population (top blue line) residing in the United States increased from less than 1 million in 1940 to nearly 12 million at the start of the Great Recession in 2008. However, since 2016, the Mexican immigrant

population has declined. Moreover, the number of noncitizen Mexican immigrants (including Green Card holders and other authorized and unauthorized immigrants) in the United States (bottom gold line) has been on a downward trajectory since its peak of 9 million at the beginning of the Great Recession. A smaller Mexican immigrant population means fewer employees willing and able to work on US farms. Zahniser et al. (2018) suggested that a decline in the population of Mexican immigrants to the United States willing to work in agriculture may be indicative of changing demographics in rural Mexico. They found that more work opportunities outside of agriculture in Mexico and a strong Mexican economy may reduce the supply of Mexican nationals interested in performing US-based farm work. Furthermore, competition from the construction and food service sectors, among others, has likely drawn workers away from agriculture (Castillo and Charlton, 2022; Rutledge and Merel, 2023).

## Estimates of Certified Agricultural Workers and Green Card holders

The NAWS provides valuable information on the US-

**Figure 1. US Mexican Immigrant Population Is Declining**



Notes: The population of Mexican immigrants increased from 1 million in 1940 to 12 million in 2008 (first dashed line) but began decreasing in 2016 (second dashed line).

Source: Authors' calculations using US Department of Commerce, Bureau of the Census, and American Community Survey Data obtained from the Integrated Public Use Microdata Series (Ruggles et al., 2025).

**Table 2. Estimated CAW Eligible Workers by Region**

<b>NAWS Region</b>	<b>Estimated Certified Agricultural Workers</b>	<b>Estimated CAWs Eligible for Permanent Resident Status After 4 Years</b>	<b>Estimated CAWs Eligible for Permanent Resident Status After 8 Years</b>
Appalachian	9,000–18,000	6,000–12,000	3,000–6,000
California	153,000–306,000	106,000–211,000	48,000–95,000
Corn Belt and Northern Plains	2,000–3,000	500–1,500	1,000–2,000
Delta Southeast	5,000–11,000	3,000–6,000	3,000–5,000
Florida	21,000–42,000	14,000–28,000	7,000–12,000
Lake States	7,000–14,000	4,000–8,000	3,000–6,000
Mountain 1/2	5,000–9,000	2,000–4,000	2,000–5,000
Mountain 3	4,000–7,000	2,000–3,000	2,000–3,000
Northeast 1	4,000–9,000	1,000–3,000	3,000–6,000
Northeast 2	9,000–17,000	4,000–7,000	5,000–10,000
Pacific	44,000–87,000	29,000–58,000	15,000–29,000
Southern Plains	4,000–9,000	2,000–5,000	2,000–3,000
US total	265,000–531,000	173,000–347,000	93,000–185,000

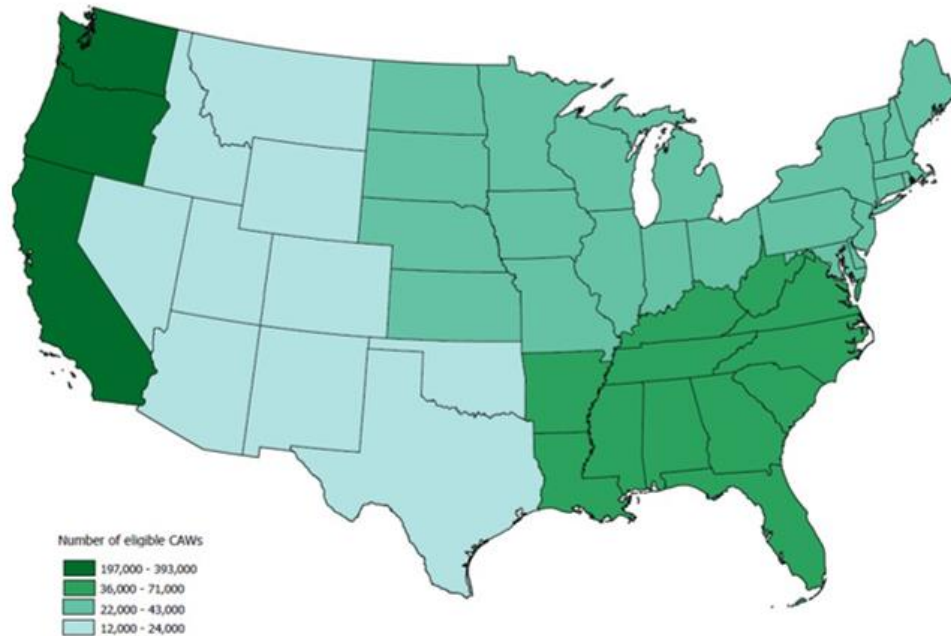
Note: Each of the regions include the states contained in parentheses: Appalachia (North Carolina, Virginia, Kentucky, Tennessee, West Virginia), California (California), Corn Belt and Northern Plains (Illinois, Indiana, Ohio, Iowa, Missouri, Kansas, Nebraska, North Dakota, South Dakota), Delta Southeast (Arkansas, Louisiana, Mississippi, Alabama, Georgia, South Carolina), Florida (Florida), Lake States (Michigan, Minnesota, Wisconsin), Mountain 1/2 (Idaho, Montana, Wyoming, Colorado, Nevada, Utah), Mountain 3 (Arizona, New Mexico), Northeast 1 (Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont), Northeast 2 (Delaware, Maryland, New Jersey, Pennsylvania), Pacific (Oregon, Washington), Southern Plains (Oklahoma, Texas).

based crop farm workforce. Administered by DOL, NAWS is an employment-based random sample of US crop workers and the primary source of estimates on the workers' legal status, demographics, and health and wellbeing. NAWS samples a relatively small number of individuals per year (between 1,500 and 3,600) and uses a complex sampling design (US Department of Labor, 2020). To estimate the number of crop farmworkers who would initially be eligible for CAW status at the regional level, we used data from the 2018–2022 NAWS. We calculated the proportion of the sample that is unauthorized and that performed at least 180 days of farm work in the United States over 2 years during that period. These survey data are useful for estimating demographic characteristics of the population of crop farmworkers; however, they cannot be used to directly estimate the population size. Thus, we relied on additional data sources to derive population estimates. Data from the DOL's 2022 QCEW and H-2A disclosure database were used to obtain an estimate of the number of crop farmworkers. The QCEW provides monthly estimates of unemployment and earnings for all industries but is limited to employers who pay unemployment insurance for their employees. The authors confirmed for 38 states whether H-2A employees were included in QCEW employment measures (Simnitt and Castillo, 2025). For the states

that included H-2A workers in their QCEW employment values, the authors subtracted the number of full-time equivalent (FTE) H-2A jobs from the QCEW FTE values, thus reducing the state's QCEW employment numbers to reflect only domestic (non-H-2A) crop employment. QCEW data are classified by industry according to the North American Industry Classification System (NAICS) codes. We focus on NAICS codes 111 (direct hire crop employees) and 1151 (crop support service employees). We calculate a lower bound estimate of the number of individuals who would be eligible for CAW status by multiplying the proportion of the workforce that was CAW-eligible by an estimate of the crop workforce based on the QCEW. To calculate the upper bound, we repeat the process stated previously, but we inflate the estimate of the crop workforce based on the QCEW by a factor of 2.

We adapt the methods outlined above to estimate the number of crop farmworkers who would be eligible for permanent resident status under the terms of the program. To estimate the population of crop farmworkers who would be eligible for a Green Card in 4 years (and 8 years respectively), we calculate the share of the NAWS (FY2018–2022) sample that had performed 10 or more years (or less than 10 years) of farm work and were

**Figure 2. Number of Crop Workers Eligible for Certified Agricultural Worker (CAW) Status**



Notes: the statistics presented in the graph key correspond to the estimated number of crop farmworkers eligible for CAW status for each multistate region, not for each state individually. The NAWS data source did not contain reliable estimates for Alaska and Hawaii; therefore, these states have been excluded from the regions considered.

Source: Authors' calculations using data from the Department of Labor National Agricultural Workers Survey and the Bureau of Labor Statistics' Quarterly Census of Employment and Wages.

CAW-status eligible, and then multiply by an estimate of the population of crop farmworkers based on the QCEW.

These estimates indicate that about 32% of the US crop workforce were undocumented and performed at least 180 days of farm work in the previous 2 years and thus would be eligible for CAW status under the FWMA. According to the QCEW, there were about 823,000 FTE jobs in crop production in 2022. Using these statistics and applying the calculations outlined above, we estimated that 265,000–531,000 undocumented US crop farmworkers would be eligible for CAW status under the FWMA. Table 2 displays the breakdown of CAW status eligibility by region, while Figure 2 shows how many farmworkers were estimated to be eligible for CAW status across the nation. We estimated that 153,000–306,000 undocumented crop farmworkers would be eligible for CAW status in California, 44,000–87,000 in the Pacific region, and 21,000–42,000 in Florida. The regions with the fewest CAW-eligible workers were the Corn Belt and Northern Plains, Southern Plains, and Mountain 3 regions, each with an estimated upper bound of less than 10,000 employees.

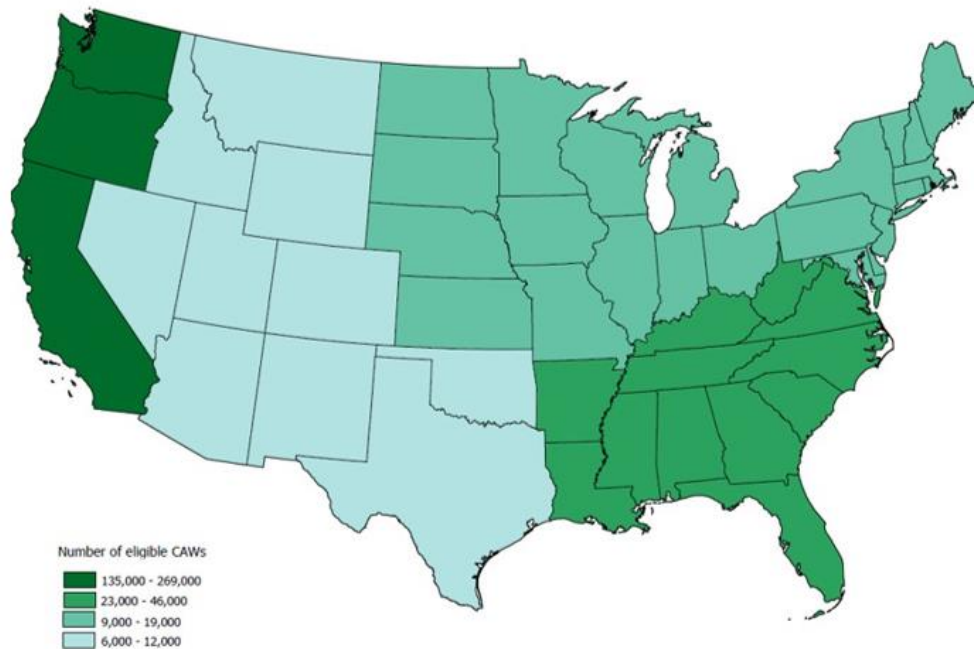
Workers who maintain CAW status and pay the necessary fees can receive a Green Card if they

continue working in US agriculture for 4 or 8 more years. Roughly 65% of the CAW-eligible workforce had worked in US agriculture for 10 or more years and would be eligible for permanent residence status after 4 years under the FWMA. We estimated this number to be 173,000–347,000 workers, or roughly 21% of the total crop workforce.

Figure 3 displays the estimated number of crop farmworkers who would be eligible for permanent resident status in 4 years for several multistate regions that overlap with the 12 NAWS regions. We estimated that 106,000–211,000 workers would be eligible in California, 29,000–58,000 in the Pacific region, and 14,000–28,000 in Florida. The regions with the fewest Green Card eligible employees were Corn Belt and Northern Plains, Northeast 1, and Mountain 3, each with less than 4,000 employees. Table 2 contains details about the other regions.

Our estimates indicated that about 35% of the CAW eligible workforce (93,000–185,000 employees) would be eligible for permanent resident status in 8 years under the proposed FWMA legislation. Figure 4 shows how many farmworkers would be eligible for permanent resident status in 8 years for several multistate regions

**Figure 3. Number of Crop Workers Eligible for Permanent Resident Status After 4 Years**



Notes: The statistics presented in the graph key correspond to the estimated number of crop farmworkers eligible for permanent residency for each multi-state region, not for each state individually. The NAWS data source did not contain reliable estimates for Alaska and Hawaii; therefore, these states have been excluded from the regions considered.

Source: Authors' calculations using data from the Department of Labor National Agricultural Workers Survey and the Bureau of Labor Statistics' Quarterly Census of Employment and Wages.

that overlap with the 12 NAWS regions. We estimated that 48,000–95,000 workers would be eligible in California, 15,000–29,000 in the Pacific region, and 7,000–12,000 in Florida. The regions with the fewest employees eligible in 8 years were Corn Belt and Northern Plains, Southern Plains, and Mountain, each with fewer than 4,000 employees (see also Table 2).

## Conclusions

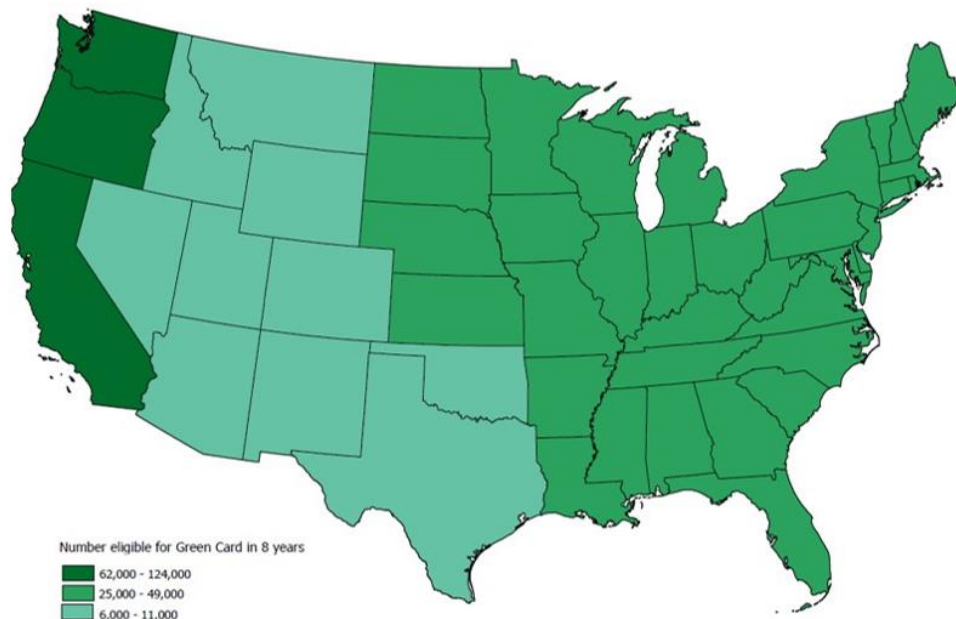
The supply of farm labor in the United States has shown signs of tightening over the last 2 decades, and farm labor is a topic of growing interest among farmers, policymakers, and agricultural researchers (Charlton and Taylor, 2016; Richards, 2018; Ferguson, 2022; Rutledge, 2024). Foreign-born workers are the primary source of hired labor on US farms, and any legal reforms of the nation's immigration system are likely to affect agricultural producers.

Many hired US crop workers lack legal work authorization, so numerous proposed legal acts addressing immigration and the nation's food system have included protections or incentives for individuals to remain employed in US agriculture. Such proposals include granting adjustment of legal status to individuals

conditional on their past and future employment in US agriculture. One such proposed piece of legislation, the Farm Workforce Modernization Act (FWMA), could provide a pathway to legal status for undocumented farmworkers while tying their work status to the agricultural sector for a specified period of time.

This article proposes a methodology for estimating the number of undocumented crop farmworkers who would be eligible for legal status under the FWMA. The act includes a provision for giving undocumented farmworkers a Certified Agricultural Worker status if they worked at least 180 days in the agricultural sector during the previous 2 years. Our methodology relies upon data from the National Agricultural Workers Survey and the Quarterly Census of Employment and Wages to generate upper and lower bound estimates of the number of workers who would be eligible for CAW status as well as those who would be eligible for a Green Card in 4 and 8 years under the FWMA. Our estimates suggest that 265,000–531,000 undocumented crop farm employees would be eligible for CAW status, 173,000–347,000 would be eligible for a Green Card in 4 years, and an additional 93,000–185,000 would be eligible in 8 years. These numbers provide broad estimates for the quantity of crop farmworkers who would be eligible for

**Figure 4. Number of Crop Workers Eligible for Permanent Resident Status After 8 Years**



Notes: The statistics presented in the graph key correspond to the estimated number of crop farmworkers eligible for permanent residency for each multi-state region, not for each state individually. The NAWS data source did not contain reliable estimates for Alaska and Hawaii; therefore, these states have been excluded from the regions considered.

Source: Authors' calculations using data from the Department of Labor National Agricultural Workers Survey and the Bureau of Labor Statistics' Quarterly Census of Employment and Wages.

legalization under the proposed rules, either as CAWs or permanent legal residents. Furthermore, the provisions for continued CAW status, as well as for permanent residency, would be contingent on the candidates continuing to meet certain requirements for years after receiving their initial CAW status. Due to natural attrition, an unknown share of these workers would not continue on to receive permanent residency status, which these upper-bound estimates did not consider. Furthermore, after receiving legal permanent residency an unknown share of program beneficiaries will leave farm work for employment in other sectors, further complicating efforts to determine what kind of theoretical long-term (8+ year) stabilizing effect the program will have on the US farm labor supply. It is also worth noting that these proposed figures are likely an undercount of the true number of

crop workers to be affected by FWMA because the QCEW data used to create these estimates excludes an estimated 20% of workers from its annual average employment level estimates of wage and salaried agricultural workers (US Bureau of Labor Statistics, 2023). While the exact number of unique individuals employed in US crop work is unknown (hence, the range of estimates), this study found that 32% of the US crop workforce—75% of the currently unauthorized crop workforce—would receive temporary legal status under the program. The leading regions where employees would obtain a legal status were California, the Pacific region, and Florida. The Corn Belt and Northern Plains, Southern Plains, and Mountain 3 regions would have the fewest employees legalized.

---

## For More Information

- American Farm Bureau Foundation. 2025. "Agricultural Workforce: Solution for Ag Labor Reform and Workforce Stability." Available online: <https://www.fb.org/issue/labor/agriculture-labor-reform>
- Amuedo-Doranges, C., and C. Bansak. 2011. "The Impact of Amnesty on Labor Market Outcomes: A Panel Study Using the Legalized Population Survey." *Industrial Relations* 50(3): 443–471. <https://doi.org/10.1111/j.1468-232X.2011.00642.x>
- Boucher, S., and J.E. Taylor. 2007. "Policy Shocks and the Supply of Mexican Labor to U.S. Farms." *Choices* 22(1). <https://doi.org/10.22004/ag.econ.94465>
- Castillo, M., and D. Charlton. 2022. "Housing Booms and H-2A Agricultural Guest Worker Employment." *American Journal of Agricultural Economics* 105(2):709–731. <https://doi.org/10.1111/ajae.12320>
- Charlton, D. 2024. "The Farm Workforce Modernization Act and Warnings from Previous Immigration Reforms." *Applied Economic Perspectives and Policy* 46(3):934–953. <https://doi.org/10.1002/aep.13458>
- Charlton, D., and J E. Taylor. 2016. "A Declining Farm Workforce: Analysis of Panel Data from Rural Mexico." *American Journal of Agricultural Economics* 98(4):1158–1180. <https://doi.org/10.1093/ajae/aaw018>
- Emerson, R.D. 2007. "Agricultural Labor Markets and Immigration." *Choices* 22(1). <https://doi.org/10.22004/ag.econ.94471>
- Fan, M., S. Gabbard, A. A. Pena, and J. M. Perloff. 2015. "Why Do Fewer Agricultural Workers Migrate Now?" *American Journal of Agricultural Economics* 97(3):665–679. <https://doi.org/10.1093/ajae/aau115>
- Ferguson, J. 2022, November 22. "Labor Shortages Continue to Impact Farmers." *Agri-News*. Available online: <https://www.agrinews-pubs.com/opinion/columnists/2022/11/21/ferguson-labor-shortages-continue-to-impact-farmers/>
- Fisher, D.U., and R.D. Knutson. 2012. "Uniqueness of Agricultural Labor Markets." *American Journal of Agricultural Economics* 95(2):463–469. <https://doi.org/10.1093/ajae/aas088>
- Hertz, T. and S. Zahniser. 2012. "Is There a Farm Labor Shortage?" *American Journal of Agricultural Economics* 95(2): 476–481. <https://www.jstor.org/stable/23358420>
- Ifft, J., and M. Jodlowski. 2022. "Is Ice Freezing U.S. Agriculture? Farm-Level Adjustment to Increased Local Immigration Enforcement." *Labour Economics* 78(102203). <https://doi.org/10.1016/j.labeco.2022.102203>
- Kostandini, G., E. Mykerezi, and C. Escalante. 2013. "The Impact of Immigration Enforcement on the U.S. Farming Sector." *American Journal of Agricultural Economics* 96(1):172–192. <https://doi.org/10.1093/ajae/aat081>
- Larew, R. February 5, 2025. "Perspectives from the Field: Farmer and Rancher View on the Agricultural Economy, Part 1." Submitted to the US Senate Committee on Agriculture, Nutrition, and Forestry.
- Martin, P. 1994. "Good Intentions Gone Awry: IRCA and U.S. Agriculture." *Annals of the American Academy of Political and Social Science* 534:44–57. <https://doi.org/10.1177/0002716294534001004>
- . 2007. "Immigration Reform, Agriculture, and Rural Communities." *Choices* 22(1). <https://doi.org/10.22004/ag.econ.94466>
- Richards, T.J. 2018. "Immigration Reform and Farm Labor Markets." *American Journal of Agricultural Economics* 100(4):1050–1071. <https://doi.org/10.1093/ajae/aay027>
- Ruggles, S., S. Flood, M. Sobek, D. Backman, G. Cooper, J. A. R. Drew, et al. 2025. "Integrated Use Public Microdata Series - USA Version 16.0" [dataset]. Retrieved from <https://usa.ipums.org/usa/cite.shtml>

- Rutledge, Z. 2024. *Farm Labor Shortages, Their Implications, and Policy Options to Help Promote the domestic Fresh Produce Industry*. International Fresh Produce Association Report.
- Rutledge, Z. and P. Mérel. 2023. "Farm Labor Supply and Fruit and Vegetable Production." *American Journal of Agricultural Economics*. 105(2):644–673. <https://doi.org/10.1111/ajae.12332>
- Rutledge, Z. and J.E. Taylor. 2019. "California Farmers Change Production Practices as the Farm Labor Supply Declines." *ARE Update*. 22(6):1–4.
- Rutledge, Z., J.E. Taylor, B. Little, S. Neagu-Reed, and D. Kranz. 2019. "Still Searching for Solutions: Adapting to Farm Worker Scarcity Survey 2019" [news release]. California Farm Bureau Federation and UC Davis. California Farm Bureau.
- Simnitt, S., and M. Castillo. 2025. "Labor Contractors in U.S. Agriculture: Recent Trends and H-2A Program Usage." *Applied Economic Perspectives and Policy*. 47(4):1298–1322. <https://doi.org/10.1002/aepp.13534>
- Taylor, J.E., and D. Charlton. 2019. *The Farm Labor Problem: A Global Perspective*. Academic Press.
- Taylor, J.E., D. Charlton, and A. Yúnez-Naude. 2012. "The End of Farm Labor Abundance." *Applied Economic Perspectives and Policy* 34(4):587–598. <https://doi.org/10.1093/aepp/pps036>
- Tran, L.H., and J. Perloff. 2002. "Turnover in U.S. Agricultural Labor Markets." *American Journal of Agricultural Economics* 84(2):427–437. <https://doi.org/10.1111/1467-8276.00308>
- US Bureau of Labor Statistics 2023. "Quarterly Census of Employment and Wages: Employment and Wages, Annual Averages 2023." US Department of Labor. Available online: <https://www.bls.gov/cew/publications/employment-and-wages-annual-averages/2023/>
- . 2024. "Quarterly Census of Employment and Wages" [data file]. Available online: <https://www.bls.gov/cew/downloadable-data-files.htm>
- US Congress, House of Representatives. 2021. *Farm Workforce Modernization Act of 2021*. HR 1603, 11th Congress, 1st session.
- US Department of Justice. 1986. *Immigration Reform and Control Act of 1986*.
- US Department of Labor. 2020. "An Introduction to Analyzing the NAWS Public Access Data."
- US Department of Labor, Employment and Training Division 2022. "National Agricultural Workers Survey" [data file]. Available online: <https://www.dol.gov/agencies/eta/national-agricultural-workers-survey/data>
- Zahniser, S., T. Hertz, P. Dixon, and M. Rimmer. 2012. "The Potential Impact of Changes in Immigration Policy on U.S. Agriculture and the Market for Hired Farm Labor." USDA Economic Research Service Economic Research Report ERR-135.
- Zahniser, S., J. E. Taylor, T. Hertz, and D. Charlton. 2018. *Farm Labor Markets in the United States and Mexico Pose Challenges for U.S. Agriculture*. USDA Economic Research Service Economic Information Bulletin EIB-201.

**About the Authors:** Skyler Simnitt ([Skyler.simnitt@usda.gov](mailto:Skyler.simnitt@usda.gov)) is a Research Economist with the USDA Economic Research Service. Zachariah Rutledge ([rutled83@msu.edu](mailto:rutled83@msu.edu)) is an Assistant Professor with the Department of Agricultural, Food, and Resource Economics at Michigan State University. Clare McGrady ([cmcgrady@msu.edu](mailto:cmcgrady@msu.edu)) is a Graduate Student with the Department of Agricultural, Food, and Resource Economics at Michigan State University. Marcelo Castillo ([marcelo.castillo@usda.gov](mailto:marcelo.castillo@usda.gov)) is a Research Economist with the USDA Economic Research Service.

**Acknowledgments:** The authors would like to acknowledge Choices Editor, Ruiqing Miao, Peter Feather (USDA, Office of the Chief Economist), Philip Martin (University of California, Davis) and anonymous reviewers for their helpful comments. Zachariah Rutledge and Clare McGrady are grateful for support from a cooperative research agreement with the United States Department of Agriculture's Office of the Chief Economist (award number 58-0111-24-005). The findings and conclusions in this article are those of the authors and should not be construed to represent any official USDA or U.S. Government determination or policy.