



BUILDING A BETTER WAGE: AN ANALYSIS OF THE H-2A VISA PROGRAM'S ADVERSE EFFECT WAGE RATE

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Disclaimer

The author conducted this study as part of the program of professional education at the Frank Batten School of Leadership and Public Policy, University of Virginia. This paper is submitted in partial fulfillment of the course requirements for the Master of Public Policy degree. The judgments and conclusions are solely those of the author, and are not necessarily endorsed by the Batten School, by the University of Virginia, or by any other agency.

Honor Pledge

On my honor as a student, I have not given nor received unauthorized aid on this assignment.

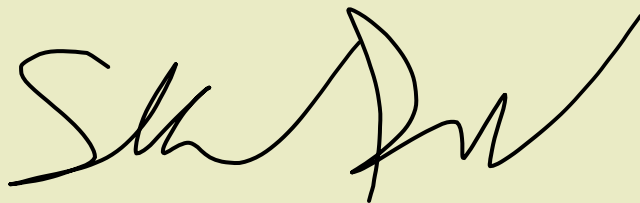
A handwritten signature in black ink, appearing to be 'Skylar Zilka', written in a cursive style.

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Executive Summary

The H-2A visa program must balance the needs of the farm owners, domestic workers, and the H-2A visa holders themselves. The Department of Labor's change to the Adverse Effect Wage Rate accounts for the needs of H-2A visa holders, but risks potentially harming the farm industry by making H-2A wages not representative of the work performed. *The 2023 rule change may not accurately reflect the labor that H-2A workers perform, contributing to concerns that the program is failing to achieve its goal of providing equivalent wages between migrant and domestic workers.*

The H-2A visa program's usage has grown substantially over the past two decades as farm owners search for reliable sources of labor to replace the aging and inconsistent domestic labor force (*From Farm to Table: Immigrant Workers Get the Job Done*, 2023). This growing need places greater emphasis on both the cost of using the H-2A visa program and the experiences of those within and around it. The following analysis considers three options for how the Department of Labor could structure the Adverse Effect Wage Rate.

- 1) Keeping the 2023 Department of Labor Rule Change
- 2) Requiring Farmers to Track Worker Hours
- 3) Using an Unweighted Average of Occupation Salaries

This research evaluates these alternatives through an equity analysis, a cost-benefit analysis compared to pre-2023 wage structure, and a comparison of the average wages of H-2A workers and domestic workers across simulated California Apple Orchards of various sizes. The equity analysis included an evaluation of the environment of historical inequities which surrounds the H-2A visa program, the average hourly salary for H-2A workers, and whether an alternative would disincentivize farm owners from rotating H-2A workers across multiple occupations.

Based on these criteria, the Unweighted Average of Occupation Salaries provided H-2A workers with higher salaries than the alternative requiring farmers to track hours while reducing farm owner income by less than the 2023 Department of Labor rule change. This alternative best balanced the needs of H-2A workers and farm owners. The Department of Labor could implement this change to the Adverse Effect Wage Rate through an agency order, just as they did in 2023. They should prepare to communicate this change with farm owners and State Workforce Agencies beforehand so that all relevant parties are prepared for the change when it occurs.

Introduction

The H-2A visa program is a staple of the modern American agriculture industry. According to the National Center for Farmworker Health, approximately 10% of the 2020 agricultural labor force were H-2A visa holders (*H-2A Guest Workers Fact Sheet*, 2020). The program will continue to grow as an alternative to the faltering domestic agricultural labor market. (*From Farm to Table: Immigrant Workers Get the Job Done*, 2023; *The U.S. Farm Labor Shortage*, 2020). Farmers increasingly utilize the H-2A visa program as domestic farmworkers age out of the industry and too few domestic employees enter the labor market to take their place (*From Farm to Table: Immigrant Workers Get the Job Done*, 2023). Based on this steady rise in usage, the H-2A visa program will continue growing as the domestic labor market decreases (Martin, 2023). Because of this reality, changes in the program's cost could have significant impact on American agriculture.

The Adverse Effect Wage Rate (AEWR) sets the minimum hourly wage that farmers are allowed to pay their H-2A workers. This wage is designed to ensure that the salaries of domestic farm workers are not undercut by the presence of migrant workers who may take lower pay. The Department of Labor changed the minimum wage structure for H-2A workers in 2023. This change accounted for non-farm related work that H-2A workers may perform. Before 2023, farmers could pay H-2A workers a wage equivalent to an average farm worker's wage, as reported by the Department of Agriculture's Farm Labor Survey, regardless of what work they performed on the farm. This includes work that a domestic worker would otherwise receive a high salary to perform. This change requires farmers to pay H-2A workers a wage of an equivalent domestic worker for any occupation outside of farming. If an H-2A worker holds multiple occupations, the farmer must pay the higher wage for the entire duration of their contract with the farm (*2023 AEWR Final Rule FAQ*, 2023).

Problem Statement

The Adverse Effect Wage Rate set by the 2023 rule change may not accurately reflect the work that H-2A workers perform, contributing to concerns that the program is failing to achieve its goal of providing equivalent wages between migrant and domestic workers. Raising the wages of the program above what their domestic counterparts earn could damage the domestic agriculture market. Raising the cost of the H-2A visa program risks lowering the program's usage. This report will analyze the H-2A visa program's history, its rapid growth, and the impact of the current wage structure of the Adverse Effect Wage Rate on both farmers and H-2A workers, with the goal of determining which wage structure will be best for all stakeholders.

Client Orientation

The United States Government Accountability Office (GAO) is a federal agency that ensures other agencies and programs are efficiently meeting their objectives through investigations and policy audits. Although GAO is not analyzing the Adverse Effect Wage Rate, this research is relevant to their ongoing review of the Department of Labor. GAO does not have direct authority over the Adverse Effect Wage Rate. Instead, their official work provides recommendations for how agencies can improve to better meet their goals. This research will help to support their work by providing this topic with additional context and supplemental analysis.

Background

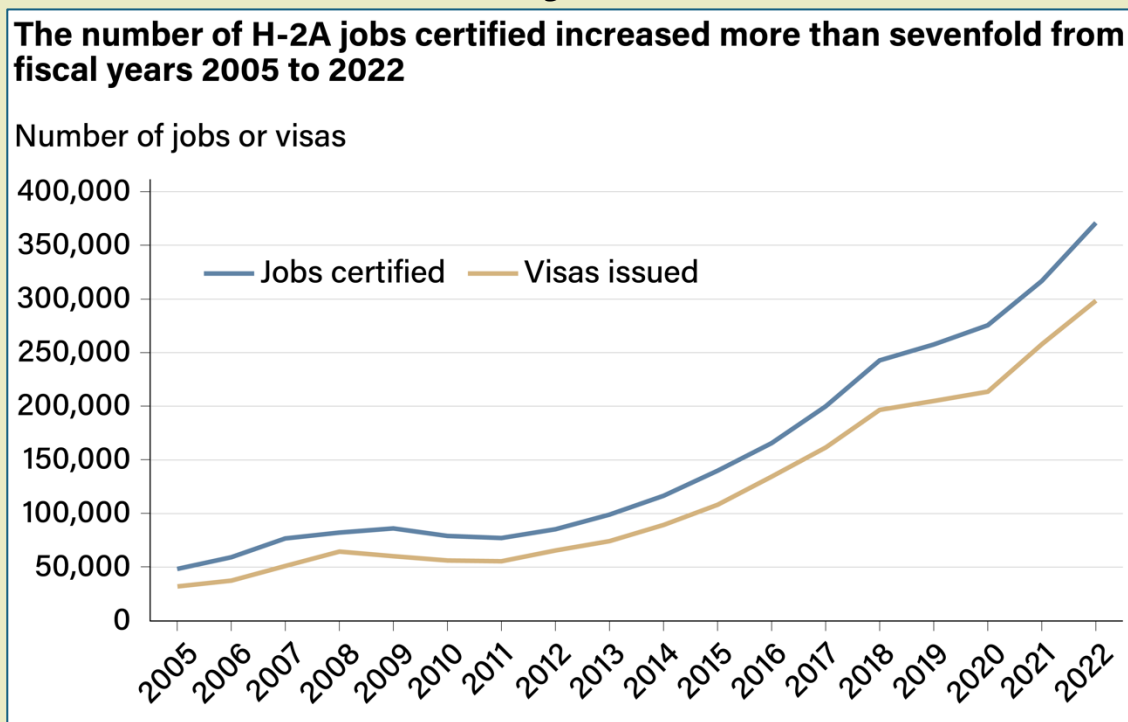
H-2A Visa Program

The H-2A visa program provides temporary visas for migrants interested in working in the US agriculture industry. Farm owners submit petitions for visas to the Department of Labor (DOL) on behalf of potential H-2A workers. Farm owners must also submit evidence to DOL that they attempted to hire domestic workers before turning to the H-2A visa program. They must also demonstrate that they have prepared adequate living accommodations for the H-2A workers (“H-2A Guest Worker Program,” n.d.). Once the Department of Labor reviews and certifies the petition, farm owners apply for visas on behalf of potential workers through the Department of Homeland Security. H-2A workers are legally obligated to work at the farm that sponsored their visa.

The Department of Labor is the primary regulatory body over setting H-2A workers. They set the rules for what work H-2A visa holders can perform and how much they can be paid. They receive this authority from the Immigration and Nationality Act (*H-2A Temporary Agricultural Workers / USCIS*, 2023). To determine the Adverse Effect Wage Rate for farm labor, DOL relies on wage averages from the United States Department of Agriculture's (USDA) Farm Labor Survey. DOL uses the Occupational Employment and Wage Statistics survey from the Bureau of Labor Statistics to estimate wages for all other types of work (*2023 AEWR Final Rule FAQ*, 2023)

H-2A Visa Demographics

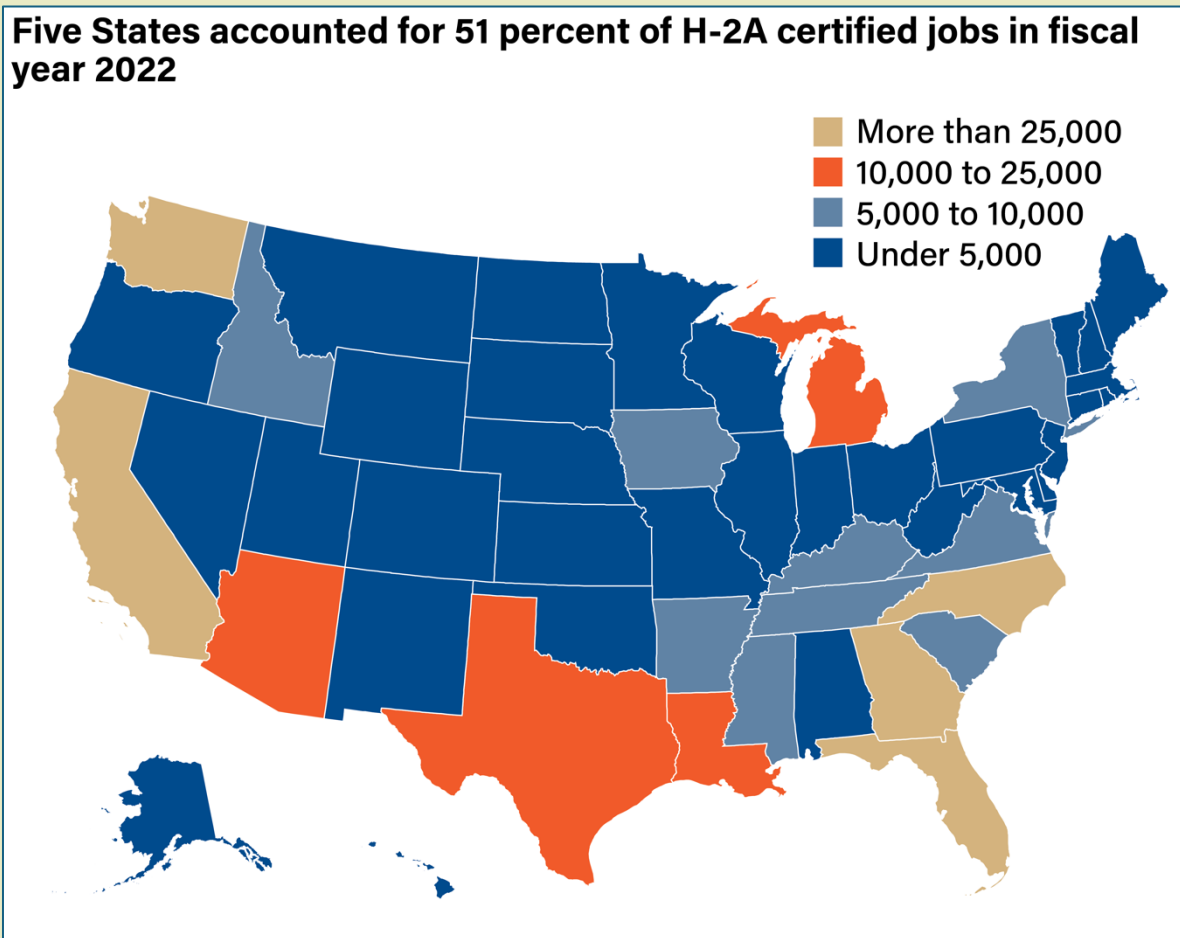
The Department of Labor certified 212,000 H-2A jobs in fiscal year 2023, an increase from 193,000 in fiscal year 2022 (Martin, 2023). Farmers have applied for more H-2A workers each year, with the number of job certifications per year increasing continuously since 2005 (*USDA ERS*, n.d.). Figure 1 depicts the number of certifications per year from 2005 to 2022.

Figure 1

Source: USDA, <https://www.ers.usda.gov/webdocs/charts/106008/H2A-Fig01.png?v=3954.6>

The number of H-2A workers certified by the Department of Labor has risen significantly over the life of the program. This growth reflects the rising need for farm labor amidst a shortage of domestic workers (*From Farm to Table: Immigrant Workers Get the Job Done*, 2023). Farmers continue to use the program at increasing rates even in the face of the continually rising Adverse Effect Wage Rate. Figure 2 displays a map of the United States in fiscal year 2022 with levels of H-2A usage mapped to different colors.

Figure 2



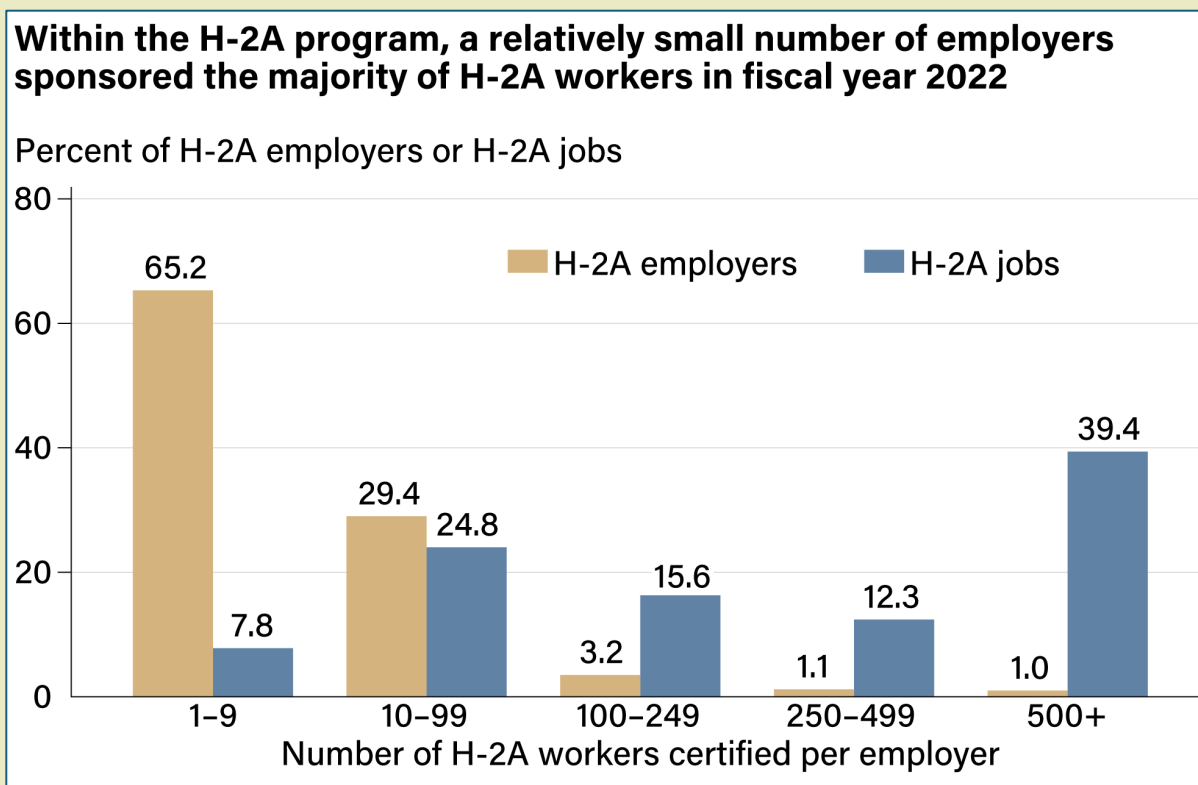
Source: USDA, <https://www.ers.usda.gov/webdocs/charts/106010/H2A-Fig02.png?v=7858.3>

Florida leads all states in H-2A visa program usage with 14 percent of all certified H-2A jobs in fiscal year 2022, followed by California and Georgia (*H-2A Jobs in FY 2022, 2022*). These states alone accounted for 35 percent of H-2A visa certifications in fiscal year 2022 (*H-2A Jobs in FY 2022, 2022*). Because of their significantly higher numbers of hired H-2A works, these states will see the most impact from changes to the Adverse Effect Wage Rate.

Occupations labeled as farm laborers comprised 86.6 percent of all certified H-2A positions in fiscal year 2021 (*Selected Statistics, Fiscal Year 2021, 2021*). The remaining occupations with greater than 1 percent of the share of H-2A visa workers were agricultural equipment operators at 6.4 percent, non-farm labor farmworkers at 4.2 percent, and construction laborers at 1.1 percent (*Selected Statistics, Fiscal Year 2021, 2021*). Most H-2A workers come from Mexico, with some coming from other Latin and South American nations (*H-2A Visas Increase in 2020, 2021*). In fiscal year 2020, Mexicans represented 93% of all H-2A workers (*H-2A Visas Increase in 2020, 2021*). Figure 3 compares the percent of employers who hire various amounts

of H-2A workers, along with the total percent of H-2A workers employed by each group of employers.

Figure 3



Source: USDA, <https://www.ers.usda.gov/webdocs/charts/106012/H2A-Fig03.png?v=6986>

This graph demonstrates that, although most farms hire a small number of H-2A workers each, a select few hire most of the total worker population. These farms would also have the greatest quantity of available resources to move around in response to policy changes given their large size. Although smaller farms may recruit fewer workers each, they may not have the resources to move staff around to respond to higher H-2A wages. Smaller farms already face significant threats to their financial solvency (Semuels, 2019). They would likely face the greatest risk from any changes to the Adverse Effect Wage Rate.

The Adverse Effect Wage Rate

The Adverse Effect Wage Rate is a minimum wage that a farm owner can pay an H-2A worker (*2023 AEWR Final Rule FAQ*, 2023). DOL sets this minimum wage to prevent farm owners from underpaying H-2A workers relative to domestic workers. This underpayment could result in depreciating domestic agriculture wages and lower domestic employment. This wage varies between states and subregions within states. For farm labor occupations, the AEWR matches the Department of Agriculture's Farm Labor Survey (Schumacher, 2023). The rule change in 2023

changed the way in which they set the AEWR to better reflect the fact that many H-2A workers perform jobs that are not classified as farm labor. These changes define a different AEWR for each type of occupation an H-2A worker may engage in mapped to the SOC system (*2023 AEWR Final Rule FAQ*, 2023). Farmers pay H-2A visa holders working in planting occupations, SOC Codes 45-2041, 45-292, 45-2093, 53-7064, and 45-2099, based on the Department of Agriculture's Farm Labor Survey (*2023 AEWR Final Rule FAQ*, 2023). They pay workers under any other occupation SOC Codes based on the Bureau of Labor Statistics Occupational Employment and Wage Statistics (*2023 AEWR Final Rule FAQ*, 2023).

The Department of Labor determines wages for workers whose role includes occupations outside of this description using the Bureau of Labor Statistics' Occupational Employment and Wage Statistics (OEWS) survey (*2023 AEWR Final Rule FAQ*, 2023). For these occupations, the AEWR is equal to the average wage of that occupation reported by the OEWS survey in the region in which the farm is located. Each region and occupation have a different reported average wage. For OCC code 53-7121 (Tank Car, Truck, and Ship Loaders), an average wage in the Northwestern Idaho nonmetropolitan area is \$16.25 an hour, \$21.96 an hour for individuals in the Northern Indiana nonmetropolitan area, and \$17.29 an hour for workers in the West Texas Region of Texas nonmetropolitan area (*OES Home*, n.d.). The employer must pay the highest AEWR among the different SOC codes of the occupations an employee has worked under over the entire duration of their contract, or until the AEWR is raised again (*2023 AEWR Final Rule FAQ*, 2023). In the H-2A program, the contract dictates the length of time that an H-2A laborer is legally allowed to work in the United States before returning home. Most contracts last between 6 and 10 months.

The Farm Labor Market

The agricultural labor market comprises farmers who purchase labor and laborers who sell their time. The labor group is composed of H-2A workers, undocumented workers, and domestic US workers. Farmers turn to non-domestic labor sources when the domestic labor market fails to meet their needs for an immediate labor force during the harvest season (*From Farm to Table: Immigrant Workers Get the Job Done*, 2023). The lagging availability of domestic labor places H-2A visas in direct competition with undocumented labor. As of 2018, undocumented workers comprised 45% of the agriculture workforce (Rosenbloom, 2022). Undocumented immigrants are not protected by labor regulations, and are frequently victims of abuse and mistreatment (Luckstead & Devadoss, 2019; Rosenblum, 2006). The H-2A visa program provides migrants with an opportunity for temporary legal employment within the United States. Devadoss & Luckstead (2018) found that H-2A laborers replaced undocumented labor at a 1:1 ratio. This data demonstrates that there is a relationship between the rates of undocumented employment and H-2A employment (Devadoss & Luckstead, 2018). This also implies that companies hiring

prefer hiring legal H-2A despite the high cost of the program. If the H-2A visa program becomes too costly, it may incentivize farm owners to rely more heavily on undocumented labor.

Literature Review

Equity Analysis

To understand the equitability of the alternatives presented later in this research, this analysis uses the equitability framework developed by the University of Chicago Urban Institute (Martín & Lewis, 2019). This method examines program equity holistically. Before determining the equitability of the alternatives themselves, I begin by understanding the historical inequities surrounding the program and the inequities in access within the program itself.

Historical Inequities Within Migrant Labor

Migrant workers have historically faced inequitable treatment at the hands of American employers (Chuang, 2013; Khanna & Brown, 2019; Mize Jr., 2006; Morgan, 2004). Workers entering the United States through labor programs have faced inequitable access to federal labor protections despite laws explicitly intended to protect migrant labor rights (Chuang, 2013; Mize Jr., 2006; Morgan, 2004). As a result, the migrant labor community has less experience engaging with legal protections than domestic workers have had.

Exemplifying this is the predecessor to the H-2A visa program, the Bracero Program. Operational from 1942 to 1964, the Bracero Program offered Mexican citizens temporary agricultural work permits with legal protections against discrimination and unfair wages, similar to the H-2A visa program (Chavez & Partida, 2020). Despite these protections, Braceros, the nickname for those within the program, still experienced discrimination, wage theft, and illegal housing charges (Chavez & Partida, 2020; Mize Jr., 2006; Morgan, 2004). Although Morgan (2004) confirms that Braceros benefited from higher wages than they would have otherwise received in Mexico, their migrant status made accessing legal recourse against unequal treatment a challenge. These inequities grew significantly once growers gained more control over the structure of the program (Maria Elena Bickerton & Bickerton, 2001). The modern H-2A visa program guarantees similar protections and serves the same sets of constituents as the Bracero Program. As a result, the H-2A visa program is present within an ecosystem with already existing inequities.

Structural Inequities Within the H-2A Visa Program

Migrant workers have strengthened legal protections under the H-2A visa program. H-2A workers have the ability to file complaints with the Department of Labor and the Department of Justice in the face of mistreatment or discrimination (Holtkamp,

2021). Migrant workers in California successfully sued their employer for more than one million dollars in back wages and other violations, and other similar lawsuits have resulted in wins for H-2A workers (*Federal Court Orders Labor Contractor to Pay More Than \$1M in Back Wages*, 2023). These examples demonstrate that the enforcement mechanisms within the program are capable of working.

Despite these wins, the H-2A visa program still faces similar equity challenges as the Bracero Program. A lack of understanding of the American legal system and the fear of being fired and deported both reduce the likelihood that H-2A workers will report violations despite their greater legal protections (Beltran, 2018). This represents a stark contrast to their domestic counterparts who are both more likely to understand the American legal system and can advocate for themselves without the threat of lost citizenship status. This leaves H-2A workers particularly vulnerable to injustices like wage theft compared to domestic workers (Beltran, 2018; Erin N. Robinson et al., 2011; Johnston, 2010; Sanchez-Palumbo, 2019). Wage theft results in H-2A workers receiving income from wages than they are owed under the rules of the program. These same pressures may also dissuade H-2A workers from negotiating for higher wages upon receiving employment. Any change to the Adverse Effect Wage Rate will have heightened impacts on H-2A worker salaries because of these de facto differences in access to legal protection between domestic and H-2A farm workers.

The Value of Diversified Work

One consequence to changing the ways in which farmers pay H-2A workers will be a change in the amount of diverse work experiences that H-2A workers receive. Farmers will likely avoid unnecessarily rotating H-2A workers onto occupations that increase an H-2A workers' wage. This means that the structure of the H-2A visa program could harm the job satisfaction of H-2A workers and limit their ability to learn new skills through barriers not faced by domestic workers.

Most researchers within the literature agree that rotating between different occupations at work increases job satisfaction (Alfuqaha et al., 2021, 2021; Dinis & Fronteira, 2015; Končar et al., 2020; Subhasish Chatterjee et al., 2023). Dinis & Fronteira (2015) found that rotating nurses across different occupational assignments improved job satisfaction through a variety of metrics, including performance and optimization. Although many of the studies in this field relate to nursing rather than agriculture, both professions have a variety of occupations that require workers to utilize different skills. A similar study among retail workers in various Balkans nations found that the presence of a job rotation system was one of the highest determinants of a worker's job satisfaction level alongside more obvious factors like job security and opportunities for promotion (Končar et al., 2020). This literature demonstrates that rotating H-2A workers through different occupations on a farm has the potential to raise H-2A worker job satisfaction.

These improvements in job satisfaction are a function of both psychological and physical benefits. Research has determined that rotating workers between occupations reduces their psychological load so long as these rotations do not disrupt ongoing projects (Leite et al., 2024; Mlekus & Maier, 2021). H-2A workers are often performing repetitive work like picking or planting crops, rather than long-term projects with a set completion point. Rotating between different occupations at different times could help to reduce the mental stress of this style of work.

Job rotations may also reduce the physical wear that a worker experiences from continuous physical labor. Leite et al. (2024) found that workers in a sandal factory experienced reduced physical load from rotating between different roles. These results did not hold for workers who rotated between occupations using similar motions. Mlekus & Maier (2021) similarly found that, while all types of rotations improved psychological health, rotations between tasks on the same job failed to improve physical health compared to rotations onto different jobs across a variety of professions. This demonstrates that not every rotation on a farm will yield health benefits, particularly between agriculturally focused occupations. Rotations to occupations outside of agriculture, the occupations whose wages are subject to change, would likely be different enough from agriculture to provide H-2A workers with health benefits. H-2A workers potentially see improved job satisfaction because of the psychological and physical benefits of rotating between different occupations.

Rotating occupations also provides H-2A workers with additional skills that they could use to grow their career. Research shows that employees gain new skills when they take on new roles while working (Nisa et al., 2023; Tor Eriksson et al., 2006). Because H-2A workers only temporarily work in the United States, they will return to their home countries with the skills they have developed while working in the United States. The more occupations they hold, particularly non-farming occupations, the more skills they will potentially develop. Learning new skills could provide them with tangible benefits that may improve both their own earning ability and benefit their home nations. Research shows that migrant workers who return to their home countries after gaining additional skills earn higher incomes than they otherwise would have earned (Wahba, 2021). For H-2A workers, this could lead to a potential domestic career in their home countries based on an occupation they held while working on a farm in the United States. Rotating H-2A workers across various occupations could lead to additional skills and higher earnings after leaving the program.

The Psychological Consequences of Tracking Workers

Attempting to increase the accuracy of an H-2A workers' wage could incur unintended financial costs depending on how the farm records labor data. To record what activities H-2A workers perform, farmers could monitor their workers directly

or allow employees to self-report their time. One potential limit to the accuracy of self-reporting different occupations is how accurately employees record the work they perform.

Self-reporting can lead workers to inaccurately report numbers of hours or activities performed, with employees often remembering too few activities and more hours over weekly and monthly periods (Burke et al., 2000; Goldstein et al., 2005; Saunders et al., 2005). Similarly, employees have struggled to accurately self-report their prior work histories to their employers (Bourbonnais et al., 1988; Wahrendorf et al., 2019). These studies suggest that requiring workers to self-report their work may lead to inaccurate wages due to the limits of human memory. Goldstein et al. reviewed the New York Presbyterian Hospital's solution to inaccurate self-reporting. The NYPH implemented a self-monitoring strategy in which surgical residents reported their working hours to other residents appointed as monitoring officers. They found that this program increased compliance from 93% to 99%. Farm owners could employ similar strategies to increase wage accuracy.

Increased oversight from monitoring may have risks to H-2A worker wellbeing. Research by Loughry & Tosi (2008) suggest that simple indirect peer monitoring can lead to workers feeling less cohesion and greater stress in the workplace. Similarly, Samet (2023) determined that workplaces experienced hidden control costs when they attempted to monitor their employees. This effect dissipated however when they reviewed employees relative to one another rather than to a preset standard. Both results demonstrate that implementing peer monitoring or monitoring on the executive level may have additional negative consequences that could offset reduced labor cost from more accurate reporting. These studies however are not specifically reviewing oversight over time reporting or a migrant program like the H-2A visa program. As a result, their expected outcomes may not match up with what the agriculture industry and H-2A workers would experience under a monitoring program. These results do suggest that there may be additional costs to consider should the agriculture industry need to implement a system to record the number of hours workers spent under various occupations.

Alternatives

The Pre-2023 Rules

Before 2023, All H-2A workers were paid at an average farmworker's wage for their state based on the Department of Agriculture's Farm Labor Survey, regardless of their occupation. This would mean that H-2A workers who engage in construction and those who work crops will be paid at the same rate. This granted a lighter workload for the federal government and farm owners as neither would need to worry about applying different wages for different workers. These wage rules also

had a far higher chance of farmer exploitation because farm owners could pay a farm worker's wage for non-farming occupations like construction.

This risked H-2A workers being undercompensated for their work relative to their domestic counterparts. H-2A workers are also tied to their place of employment and unable to transfer to another farm in return for a higher wage. Although H-2A wages under this structure were always like the wages of domestic farm laborers, their wages fell significantly below the wages of domestic workers in other occupations.

Alternative 1: Keeping the 2023 Department of Labor Rule Change

This alternative would keep the Adverse Effect Wage Rate governed by the current rules as of the 2023 change. Under these rules, Farm owners must pay H-2A workers in occupations outside of those classified as planters (those outside of SOC Codes 45-2041, 45-292, 45-2093, 53-7064, and 45-2099 which are defined as: workers who “plant, tend, pack, and harvest field crops, fruits, vegetables, nursery and greenhouse) at a regionally equivalent wage to domestic employees in that profession (2023 AEWR Final Rule FAQ, 2023). An H-2A visa holder will earn the highest wage among the set of all occupations that they work while on the farm during their contract (2023 AEWR Final Rule FAQ, 2023). The State Workforce Agencies set which wage an H-2A worker must be paid based on the information farm owners provide in form ETA-790A (Form ETA-790A, n.d.). Farm owners provide a detailed description of their worker's job duties in field 8a of section IIIA of the form (Form ETA-790A, n.d.). If an H-2A worker's job description states that they will be performing work outside of the planter SOC coders, they will be paid at the highest wage their job description qualifies them for.

This alternative would likely provide the greatest benefit for H-2A workers as it would earn them the highest income. It also presents a potential challenge to farmers as they pay higher wages for workers and occupations that they previously paid for with lower wages. Larger farms could get around these costs by specializing their larger workforce, but smaller farms may not have the labor nor the capital to overcome higher costs. This alternative would be easy for the Department of Labor to implement because it does not require them to change their current practices. The Department of Labor would enforce these rules through their already existing methods of enforcement.

Alternative 2: Requiring Farmers to Track Worker Hours

This alternative would require farmers to keep track of how many hours that H-2A workers spend in each occupation over the duration of their contracted time. Under this system, farmers would be able to transition their H-2A workers into any occupation that they are qualified to occupy under their job description. To manage this, farmers would need an employee management system which could accurately manage both imputing and tracking times. After recording the number of labor-

hours that workers spent in each occupation, the farmer would pay at the amount associated with each occupation's SOC code over the hours that they worked. The sum of each occupation's salary multiplied by the number of hours for each occupation would be the worker's contracted payment over their term.

Farmers would need to decide whether to allow workers to input their time themselves or have farm management input their times for them. Farmers could have their workers input their own time, alleviating the need on the farm's part to pay for additional workforce monitoring. They would need to ensure that each worker has a method of inputting their times, like a phone, paper timesheet, or some other system. This would also run the risk of workers over reporting hours in occupations with higher wages. Farm owners could also choose to oversee the inputting of hours directly. This would reduce the risk of over reporting but could lead to farms underreporting hours in higher-wage occupations to cut costs at the expense of the workers themselves. Greater monitoring could also lead to reduced productivity.

The goal of this alternative will be to ensure that H-2A workers receive fair pay and that farm owners can maximize efficiency. This alternative generates an Adverse Effect Wage Rate as accurate as possible to the work that H-2A workers perform.

Alternative 3: Unweighted Average of Occupation Salaries

Under this alternative, farmers would pay H-2A workers an unweighted average between all the occupations that worker held during a given pay period. The reporting from the farm owner's perspective would look the same as it does under the present status quo. Farmers currently describe in detail the roles workers will have when completing their H-2A visa applications for the Department of Labor. This description is then used by the farm's respective State Workforce Agency to determine what occupation this description falls under (*Form ETA-790A*, n.d.). The State Workforce Agencies would use this same description, but instead of using it to assign the highest possible SOC code wage, they would use this information to assign an average wage. If an H-2A worker will hold occupations which pay \$17.51, \$18.10, and \$23.4 per hour respectively, the farmer would pay them \$19.97 per hour over the course of their term regardless of how much time they spent at each occupation.

Using this policy for the Adverse Effect Wage Rate would be less accurate to the work that the H-2A workers perform but would be easier to implement. It would also require no additional work from farmers but would require some additional work on the part of the State Workforce Agencies. This wage structure could also incentivize farmers to include lower-wage occupations in their workers' job descriptions to artificially lower their average wages. Even if an H-2A worker were to only hold that

occupation for a short period of time, it would still contribute to lowering their earnings.

Criteria

Criterion 1: Costs and Benefits

This criterion will compare the costs of implementing each policy relative to the benefits from the change in wage structure. This analysis will solely consider the costs and benefits to farm owners and will assume that they hire their H-2A workers themselves. This excludes Farm Labor Contractors, which hire and manage H-2A workers on behalf of farm owners. This analysis will also assume a set of basic farm needs like equipment and consumable goods that are consistent across all analyses. Estimates for these costs will come from the UC Davis Agriculture and Resource Economics Cost and Return Studies (*Apples / Cost & Return Studies*, 2024). I assume that non-H-2A workers are compensated for their labor based on the work that they perform at different hourly wages for each occupation. This analysis will cover a set of simulated apple orchards over the course of 15 years. I chose an apple orchard because apples are one of the most common fruits grown in the United States by acreage and are eligible to employ H-2A workers (*Labor in Fruit and Vegetable Agriculture*, 2020). Apples require specific sets of occupations to harvest as well as specific amounts of required labor hours. Farms growing more labor-intensive produce or with higher-salaried occupations according to the Occupational Employment and Wage Statistics survey will see different results. I chose to place these orchards in California because California is the second highest user of H-2A workers and has available data on farm labor hours (*H-2As: 5 States Had 50% H-2A Jobs in FY23*, 2024).

I randomly assigned workers time in chunks and calculated their salaries based on the occupations, then randomly assigned these chunks to different occupations. I ran this simulation with time chunks of 10, 25, and 50 hours to test the sensitivity of my results to different rates that workers may rotate between occupations. California requires employees in occupations involving herbicide and pesticide to have a Qualified Applicator Certificate (QAC) (*Qualified Applicator Certificate*, 2024). I assumed that approximately 35% of workers would randomly receive this certificate on the farm, and that only those with this certificate would work in occupations involving herbicide or pesticide. Because of the potential for bias stemming from the outcomes of the randomization process, I simulated each farm size 80 times and average the results. The results of the individual randomizations are in the "Randomization" sheet in the excel document under Appendix 1. The STATA code responsible for the randomization is found in Appendix 2.

The full cost-benefit analysis, including assumptions, are found in the excel document in Appendix 1. The cost-benefit analysis also includes a sensitivity

analysis for the size of the farm. This analysis will assume that a farm grows one type of crop, apples, and that its value of \$1000 is the market price of that crop per-ton. This is a conservative estimate based on the export price of American apples in 2022 (*Apple Price per Ton June 2022, 2022*). I also assume that farm owners hire one farm manager and one HR specialist per 500 acres of land because farmers will require additional staff of some kind to manage larger labor forces. Assuming 500 per acre also ensures that my estimates will be conservative if farms require less management. Their yearly wages correspond to SOC codes 25-9021 and 13-1071 respectively (*California - May 2022 OEWS State Occupational Employment and Wage Estimates*, n.d.). The analysis will compare the cost of implementing each alternative on farmers with their expected crop yields. I also assume that the farm owner will not need to purchase or retire new equipment over the duration of the analysis.

Alternatives with greater positive differences between costs and benefits will score higher on this criterion. I also compare the average change in net benefit from the pre-2023 simulation to each alternative. A more negative percent change reflects a lower score.

Criterion 2: Equity

This criterion will consider how equitable each policy is from the perspective of H-2A workers by utilizing the University of Chicago Urban Institute's "The State of Equity Measurement" (Martín & Lewis, 2019). This framework considers the historical legacies surrounding a policy, the level of awareness of affected populations, the degree to which the policy considers other voices, potential access discrimination, differences in policy outputs, and the policy's disparate impacts. This criterion considers the needs of migrant workers from Latin America as a whole and the H-2A visa program's impact on their lives relative to the work they perform in the United States.

This analysis will evaluate how well each policy addresses the three most relevant of these six points. Success under each point is as follows:

- **Historical Legacies:** A policy should acknowledge and seek to address historical differences in treatment for migrant workers.
- **Awareness of Populations:** A policy should recognize the populations most at risk of inequitable treatment while within the H-2A visa program.
- **Output Differences:** The wages within the H-2A visa program should not be different from the quality of wages for domestic workers.

I analyzed the H-2A program's historical legacies and the level of awareness of populations within the literature review. This assessment is shared across alternatives. I measure output differences by the hourly wage an H-2A worker earns

under each alternative. I evaluate this both as a flat number and as a percent change from the pre-2023 outcomes. This reflects the increased value that each alternative places on historically undervalued migrant labor. These calculations are found in Appendix 1.

I also measure output differences by whether an alternative would disincentivize a farm owner from rotating H-2A workers across different occupations. Rotating across different jobs reduces mental and physical strain compared to working the same job each day. An alternative that reduces the rate of H-2A worker rotation relative to domestic workers would lead to inequitable rates of mental and physical stress. I determine this by assuming that a farm owner will increase the time H-2A workers spend on the same occupation if it saves them money. If an alternative yields a higher net benefit when hours are distributed in larger chunks, a farm owner would rotate H-2A workers less often. This will be ranked as “High,” “Medium,” and “Low,” levels of disincentives with “Low” being the best and “High” being the worst. The alternatives will be scored compared to each other.

Criterion 3: Equivalence to Domestic Wages

This criterion measures how close each Adverse Effect Wage Rate is to the wages of their domestic counterparts. This considers the wages of both farm labor and non-farm labor because H-2A workers can occupy a variety of positions. This criterion measures how distant each alternative is from domestic wages by comparing the distance between the wages of H-2A workers and hypothetical domestic workers performing the same occupations. The domestic workers’ wages are made up of the wages of a given occupation in a region based on the Occupational Employment Wage Statistics Survey and Farm Labor Survey by the hours worked in each occupation. I compare domestic and H-2A workers by finding the difference in the average hourly wage between domestic and H-2A workers on simulated farms. Success under this criterion will be the magnitude of the difference between the Adverse Effect Wage Rate and the hypothetical worker, with a smaller magnitude equating a more similar wage. These calculations are found in Appendix 1.

Findings

Results from the Pre-2023 Rules

Equity

Hourly Wage

H-2A workers earned an average hourly wage of \$17.51 across small, medium, and large farm simulations under the pre-2023 wage rules. This is the only possible wage for H-2A workers under the pre-2023 rules.

Discourage Job Rotation

The pre-2023 wage rules would discourage job rotation the least compared to the three alternatives because H-2A workers were paid the same farmworker wage regardless of which occupations they worked.

Costs and Benefits

The small farm earned an average net income of \$4,764,219.75 the medium sized farm earned \$14,340,148.80, and the large farm earned \$30,812,900.07. I simulated these results over a 15-year period at a 3% discount rate.

Equivalence to Domestic Wages

H-2A workers earned on average \$.30 less per hour than their domestic counterparts across the farm simulations under the pre-2023 wage structure. This is because farms under this wage structure pay H-2A workers the same farmers wage even if they spend time in a higher earning occupation.

Alternative 1: Keeping the 2023 Department of Labor Rule Change

Equity

Hourly Wage

H-2A workers earned an average hourly wage of \$23.20 across the small, medium, and large farms under the current rules. Across the simulations, wages ranged between \$22.00 and \$24.00. These results represented a 33% increase from the pre-2023 wages, with a range between 26% to 37%.

Discourage Job Rotation

Across the three alternatives, the current minimum wage structure discourages job rotation the highest. Farm net benefits under this alternative grew the most as the rate of job rotation decreased. This alternative would push farmers to rotate H-2A workers the least often.

Costs and Benefits

Small farms earned an average net income of \$3,440,522.32, the medium sized farm earned \$10,345,155.88, and the large farm earned \$22,871,129.90 over 15 years with a 3% discount rate. The current wage structure resulted in an average net decrease of 27% compared to the pre-2023 wage structure. This result ranged from a 22% decrease to a 33% decrease.

Equivalence to Domestic Wages

H-2A workers earned an average of \$5.40 more per hour than their domestic counterparts under the current wage structure. These results varied between \$4.23 to \$6.16 an hour.

Alternative 2: Requiring Farmers to Track Worker Hours

Equity

Hourly Wage

H-2A workers earned an average of \$17.81 an hour across the small, medium, and large farm simulations under the tracked hour alternative. Simulated wages ranged between \$17.68 and \$17.95 an hour. These results represented a 2% average increase in wages compared to the pre-2023 wage structure, with individual simulations ranging from 1% to 3%.

Discourage Job Rotation

The tracked hours alternative would discourage farmers from rotating their workforce the lowest as this alternative saw no meaningful change in the farm's net benefit with lower rates of rotation. Farmers pay based on the job rather than the worker, the identity of the worker does not impact how much that job costs.

Costs and Benefits

Small farms earned an average net benefit of \$4,688,350.22, medium sized farms earned \$14,126,172.88, and large farms earned \$30,372,045.00 over 15 years with a 3% discount rate. The tracked hour wage structure resulted in a 2% average reduction in net benefits compared to the pre-2023 wage structure. This result ranged from a 1% to a 2% decrease.

Equivalence to Domestic Wages

H-2A workers earned a wage equal to their domestic counterparts under the current wage structure. This result varied between \$0.09 less than domestic workers to \$0.11 more than domestic workers.

Alternative 3: Unweighted Average of Occupation Salaries

Equity

Hourly Wage

H-2A workers earned an average hourly wage of \$19.00 across the small, medium, and large farm simulations. Results varied between \$18.61 to \$19.39 an hour. This alternative resulted in an average wage increase of 8% compared to the pre-2023 wage structure. This result varied between 6% and 11% across simulations.

Discourage Job Rotation

An unweighted average would discourage farmers from rotating H-2A workers more than the tracked hours alternative but less than the 2023 status quo. This alternative saw a slightly higher net benefit with higher hour chunks, but this net benefit only increased net benefits by 1% between the cost-benefit analysis under 10- and 25-hour chunks, and 1% between the cost-benefit analysis between the 25- and 50-hour chunks.

Costs and Benefits

Small farms earned an average net benefit of \$4,764,219.75, medium farms earned an average of \$13,287,411.00, and large farms earned an average of \$28,695,709.56 over 15 years with a 3% discount rate. The unweighted average had an average reduction in net benefits of 6% compared to the pre-2023 wage structure. This result varied between reductions of 6% and 9% across the different simulations.

Equivalence to Domestic Wages

H-2A workers on average earned a wage that was \$1.19 an hour higher than their domestic counterparts. This difference varied between \$0.84 and \$1.55 an hour across different simulations.

Outcomes

Outcomes Matrix

| | Hourly Wage | Discourage Job Rotation | Costs and Benefits | Equivalence to Domestic Wages |
|---------------------------|------------------------------------|--------------------------------|--------------------------------|--------------------------------------|
| 2023 Status Quo | \$23.20 Per Hour (33% Increase) | High | 27% Lower Average Net Benefits | \$5.40 Per Hour More Than Domestic |
| Tracked Hours | \$17.81 Per Hour (2% Increase) | Low | 2% Lower Average Net Benefits | Equal to Domestic Wages |
| Unweighted Average | \$19.00 Per Hour (8% Increase) | Medium | 6% Lower Average Net Benefits | \$1.19 Per Hour More than Domestic |

Trade-Offs

The 2023 status quo was the highest performing in hourly wages while the tracked hours alternative performed the highest under the cost benefit analysis, equivalent to domestic wages, and discouraged job rotation the least. This could lead to greater stress on H-2A workers from farmers keeping them in the same occupations for longer periods of time to avoid raising costs. Remaining on the 2023 status quo also risks reducing farm profits by over 25%. Although the 2023 status quo did not yield any net negative outcomes from the cost-benefit analysis, my analysis ignored potential major costs like new machinery or expansions. This alternative could make necessary purchases like these impossible due to significantly reduced earnings.

The tracked hour alternative matched most closely to domestic workers and provided the farm the highest net benefit and lowest net decrease when compared to the pre-2023 rules. This alternative achieves this by sacrificing H-2A worker earnings. Unlike domestic laborers, H-2A workers are unable to switch to working at other farms for higher pay. This also means that they cannot leverage other job opportunities for higher salaries at their farm of employment. Because they inherently have fewer avenues to ensure that their labor is adequately valued, this system prevents H-2A workers from seeing the same financial benefits that domestic workers see long term by cutting the salaries that H-2A workers would make. This wage change also frees farmers to rotate their H-2A employees the most frequently of all the alternatives. This ability to rotate between occupations more frequently could reduce the mental and emotional stress of working one job over their entire time on the farm.

The unweighted average wage sits between the other two alternatives across all criteria. Although it would reduce H-2A worker wages compared to the 2023 status quo, it still produces higher wages compared to the pre-2023 rules and the tracked hours alternative. It also produces higher net benefits for farmers than the 2023 status quo and has a more closely matching wage. Implementation of this alternative would benefit farmers at the expense of H-2A workers, but this change would be less severe than the tracked hour alternative. This alternative does somewhat disincentivize farmers from rotating their workers, but the increased net benefits from decreasing rotations are small. This increase is especially small compared to the current status quo.

Recommendation

I recommend that the Department of Labor switch to requiring farmers to pay H-2A workers a minimum wage equivalent to a flat average of a worker's occupations. Although the 2023 status quo and tracked hours alternative both performed better on some criteria, they also performed worse on others. The unweighted average provided significantly higher wages than the tracked hours alternative while reducing the farm owner's net benefit by less than the 2023 status quo. This alternative also does not discourage rotation as much as the 2023 status quo. The flat average wage structure provides the least negative impact on farm owners while still providing H-2A workers with more equitable wages given their inability to advocate for their own wages.

Implementation

There are multiple potential challenges to implementing this policy alternative. The Department of Labor and State Workforce Agencies must collaborate to ensure that this rule change would succeed. The Department of Labor's audit process must also

ensure that H-2A workers are performing the occupations that farm owners reported. The Department of Labor must also make sure that farmers are aware of this new rule and can comply. These are issues that the Department of Labor will need to overcome before effectively switching to a flat average.

Stakeholders

The key stakeholders in this process are the leaders within the Department of Labor, congress, labor advocacy groups, and the farmers themselves. The Department of Labor can unilaterally make changes to the methodology behind setting the Adverse Effect Wage Rate (*2023 AEWR Final Rule FAQ*, 2023). Should the Department of Labor believe that this change will benefit them, they would be able to make this change without an act of Congress. Congress can also pass legislation restricting or altering the Department of Labor's ability to change the AEWR, as seen through a bill that Republican House member Ralph Norman posed in 2023 to nullify DOL's 2023 rule change (H.J.Res.59, 2023). Both labor advocacy groups and farmers want to see their respective interests represented in DOL's rule making. Labor advocacy groups want more rights, protection, and income for H-2A workers while farmers and farm advocacy groups want greater control over H-2A workers and lower required costs. These groups can both sue the Department of Labor to stall or prevent a rule change. Farm owners most recently attempted this to prevent the 2023 rule change from taking effect, while labor advocacy groups did so in 2019 (Synder, 2021; *U.S. Farm Labor, Inc. V. Julie Su*, 2023). Farm owners would be more likely to support the flat average because it reduces the cost of the H-2A visa program, while labor advocacy groups are more likely to oppose the change because it reduces the wages of H-2A workers. All these groups can impact the process of enacting a new wage rule.

Necessary Steps

The Department of Labor should go through steps to ensure that this rule change is implemented successfully. First, the Department of Labor must coordinate with the State Workforce Agencies to ensure that they agree on how to determine different occupations. At the same time, DOL should announce their plan to change the wage structure. This will ensure that the change does not come as a surprise for farm owners and other non-government stakeholders. Both should occur several months before the rule change goes into effect. During the time between the initial announcement and the rule change, DOL should create explanatory materials to describe and justify the new rules to farm owners. They should also produce similar materials for farm advocacy groups to distribute to their members. Completing these before the change goes into effect will minimize incidental rule violations or confusion. After DOL implements the rule change, they must continue to audit and observe farms to ensure that farm owners are abiding by the change.

Worst Case Scenario

The worst case scenario for DOL's implementation of this policy would be a lawsuit from either the farmers or the labor advocacy groups. Although both are potential sources of a lawsuit, the labor advocacy groups would be the most likely to sue since this alternative would reduce the wages of H-2A workers compared to the present status quo. The Department of Labor should be prepared to face lawsuits over this change just as they faced after 2023. The ruling rejecting a challenge to the 2023 rule change should help the Department of Labor in court (*U.S. Farm Labor, Inc. V. Julie Su*, 2023). Another potential scenario is a bill from the federal government which nullifies the rule change, similar to the attempt in 2023 (H.J.Res.59, 2023). A law on the Adverse Effect Wage Rate is unlikely because it would require cooperation between the House, Senate, and President. Coordination may be possible however if the program became an issue during the election cycle. Should this become a problem, the Department of Labor could meet with members of congress to explain the change and rally support.

Conclusion

With the rise in the H-2A visa program, the Adverse Effect Wage Rate impacts more and more workers and farm owners. The Department of Labor has an opportunity to balance the needs of all stakeholders to this growing program by shifting the structure of the Adverse Effect Wage Rate to a flat average of all occupations within an H-2A worker's job description. This report demonstrates the difference that a change in wage structure could make to ensure the continued viability of the H-2A visa program, and the value of considering costs and equity in the decision-making process.

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Appendix 1: Cost Benefit Analysis

Cost-Benefit Analysis Using 10-Hour Chunks

https://docs.google.com/spreadsheets/d/1nv-1MjHQBK3BAXrdPrdQuCXEpEphr5Oc/edit?usp=drive_link&ouid=102110436776170695854&rtpof=true&sd=true

Cost-Benefit Analysis in 25-Hour Chunks

https://docs.google.com/spreadsheets/d/1WGIHb0FCpsuFGqwpEfRUv5xFRDw0tSGa/edit?usp=drive_link&ouid=102110436776170695854&rtpof=true&sd=true

Cost-Benefit Analysis in 50-Hour Chunks

https://docs.google.com/spreadsheets/d/1E8nYIYIleOY0rgV9T7-rLgIHZpis9_lq/edit?usp=drive_link&ouid=102110436776170695854&rtpof=true&sd=true

Appendix 2: STATA Code for Randomization

Simulation File

https://drive.google.com/file/d/1Gs8N05UvIK3Xo21SmujktpJfVYnnvyf2/view?usp=drive_link

Simulation Setup for Small Farm

https://drive.google.com/file/d/1kIVfe6WpF96HDP7PjSuEwc_tfB-YV4Oh/view?usp=drive_link

Simulation Setup for Medium Farm

https://drive.google.com/file/d/1WGpLbLz7WPHz3NR-6GJpbntb2IRtd4Ge/view?usp=drive_link

Simulation for Large Farm

https://drive.google.com/file/d/1wmZ4bCYv1i1HBDao577T2iM3xk5TZ0qf/view?usp=drive_link