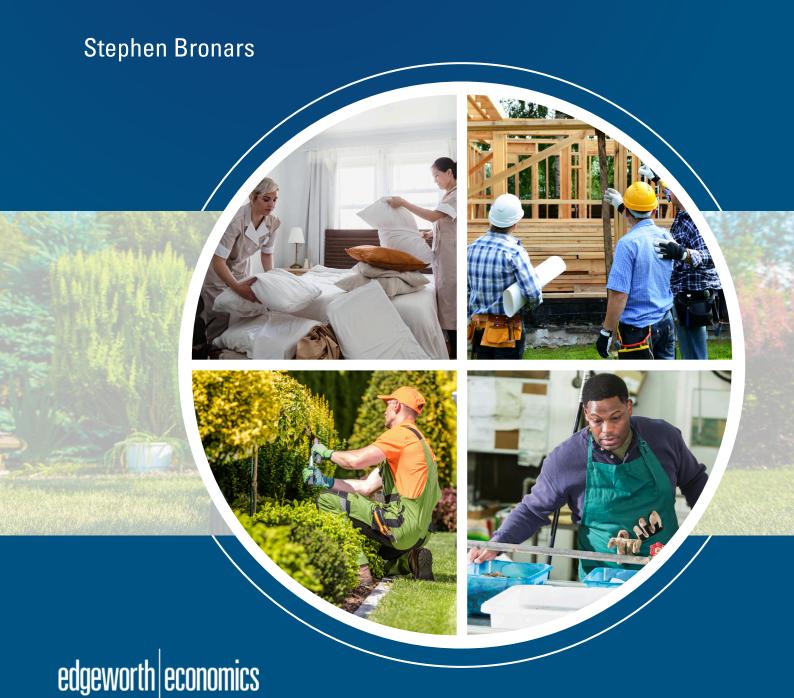
The Impact of the H-2B Visa Program on the Employment and Wages of U.S. Workers



This study examines the impact of an increase in the hiring of seasonal foreign guest workers through the H-2B visa program on the employment and wages of domestic workers in the U.S. The estimates of the program's impact in this study improve on estimates in previous studies in several ways. First, by making use of relatively large recent changes in the number of H-2B visa workers entering the U.S. per year, the program's impact is estimated from changes in labor market outcomes before and after a substantial policy change. Second, this study examines the local effects of the H-2B program rather than more aggregated geographic areas. The study presents evidence that the H-2B program allows employers to fill gaps in the supply of seasonal workers that are unlikely to be filled by domestic workers. This not only allows businesses to continue operation but also benefits other workers employed in these businesses, and the customers who rely on the products or services provided by them. This empirical evidence is bolstered by survey evidence that was collected for this study.

While previous studies have attempted to estimate either the state-wide or nationwide impact of the H-2B program, our empirical analyses focus on the local impact of the program in the areas that rely most on H-2B workers. Because the H-2B program is small relative to the overall size of the U.S. workforce, and seasonal labor shortages mitigated by the hiring of H-2B workers tend to be localized in nature, estimates based on larger geographical areas could understate the true impact of the program because they include areas that have little, if any, demand for seasonal guest workers. In general, there have been strict limits on the number of H-2B visas issued each year. Our estimates rely on policy changes in recent years, that increased the effective H-2B visa cap, to assess the local impact of possible future changes in the number of H-2B visas issued.

This study finds no empirical evidence that the increase in annually issued H-2B visas had a negative impact on the employment and wages of U.S. workers between 2015-2019 and 2023. In fact, we find that areas that were able to hire more H-2B workers due to the increase in H-2B visa cap experienced more

employment growth and higher wage growth among U.S. workers. Our baseline empirical analyses show that:

- Across all workers in the local area, each additional H-2B worker in a local area is associated with the employment of 2.7 to 4.9 additional full-time-equivalent U.S. workers.
- For workers with more than a high school degree, each additional H-2B worker in a local area is associated with the employment of 3.5 to 4.1 additional full-time equivalent employees.
- Across all workers in the local area, wages grew 1.6% more, on average, in areas that hired more H 2Bs.
- For workers with more than a high school degree, wages increased by about 2% more, on average, in areas that hired more H-2Bs.

Importantly, we find no significant effects of an increase in H-2B workers on the wages or employment of workers with a high school degree or less. H-2B seasonal guest workers do not appear to take away the jobs or depress the pay of workers with a high school degree or less. Instead, H-2B workers appear to be hired for positions that otherwise would not be filled by U.S. workers. Our results are consistent with the view that an increase in the H-2B cap would allow businesses in certain areas to more efficiently address the problem of seasonal labor shortages. The ability of businesses to more efficiently address seasonal labor shortages during their peak season appears to benefit full-year employees in the area, especially those with relatively more formal education who are complementary to seasonal workers.

This view, that the H-2B program is used by employers to fill gaps in the labor market that are unlikely to be filled by the domestic workforce, is reflected in the responses to a survey undertaken for this study. Respondents shared the efforts they take to hire domestic workers, prior to turning to the H-2B program, and their limited success in this before hiring foreign workers. They shared that, without the ability to fill seasonal job vacancies, they would likely need to limit operations, pass costs on to their customers, reduce investment, and cut sales. Finally, the survey gives insight into the challenges faced by employers going through the H-2B process that they rely upon; not only is the cap on H-2B visas a constraint on their

operations, even following the program's visa cap increase, but the bureaucratic process often results in workers arriving late for the season. This further disrupts their operations.

The final section of the report shows that the way in which H-2B prevailing wages are set further limits the potential positive impact of the program on economic growth in areas that tend to face seasonal labor shortages. First, H-2B wages are typically higher than the market wage of a seasonal or temporary worker, with prevailing wages set above the wages earned by more than half of the workers in an occupation and area. Prevailing wages in the current system that are above the market wage discourage the use of H-2B visas which harms seasonal business. Finally, the current system for setting prevailing wages introduces substantial uncertainty about prevailing wage increases and results in a pay system that is not characterized by the common area pay differences and common occupation pay differences that are typical of the pay systems of large organizations including the federal government.



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INTRODUCTION

The purpose of this study is to assess the impact of the H-2B visa program on the labor market outcomes of U.S. workers. The H-2B program allows U.S. businesses to hire foreign guest workers for seasonal jobs if they are unable to hire domestic workers for these positions. Certain industries in some areas of the U.S. tend to rely more heavily on seasonal workers and the H-2B visa program. While the H-2B program is very important in these areas, the number of workers hired through the visa program is small relative to the size of the U.S. labor force. It is therefore necessary to examine the impact of the H-2B program by focusing on labor market outcomes at the local level rather than at the national level. The

Department of Labor (DOL) sets H-2B prevailing wages by detailed occupation for more than 500 labor market areas based on the *Occupational Employment and Wage Statistics* survey conducted by the BLS. This report focuses on the local economic impact of the H-2B program by using the area definitions from this survey.

The H-2B visa program is characterized by a binding cap on the number of visas issued each year. While the size of the cap has varied slightly from year to year, during the Biden Administration there were relatively large increases in the number of H-2B visas issues relative to earlier years. According to the Department of Homeland Security (DHS) the average number of H-2B visas issued per year increased by about 69% between 2015-2019 and 2022-2024. This substantial increase in H-2B visas is the basis of the empirical analyses in this report. This report shows that the local areas that took advantage of the substantial increase in H-2B visas between 2015-2019 and 2023 were characterized by significantly greater employment growth than other labor market areas. In addition, the employment gains associated with an increase in H-2B visa workers were concentrated among more educated workers that tend to complement the relatively less educated seasonal workers who receive H-2B visas. At the same time, this study finds no empirical evidence that an increase in H-2B workers has a significant negative impact on the employment of less educated workers. Finally, the report finds that overall average wages increased significantly, while the average wages of relatively less educated workers did not see a significant decline in areas with the largest increases in H-2B visas.

The empirical findings in this study are consistent with the view that an increase in the cap on H-2B visas would facilitate more employment growth in local areas that tend to rely more on seasonal workers by allowing businesses to more efficiently address seasonal labor shortages. We find that the employment growth facilitated by an increase in the number of H-2B visas is concentrated among more educated U.S. workers, but there is no empirical evidence that a larger cap would have a significant negative impact on the wages or employment opportunities of relatively less educated domestic workers.

This study also demonstrates that the way in which H-2B prevailing wage rates are set by the DOL sets a minimum wage that is much higher than the market wage for seasonal/temporary workers. This higher minimum wage harms businesses that face seasonal labor shortages and indirectly harms the U.S. workers who complement seasonal labor. Rather than relying on a consistent set of inter-area and inter-occupation pay differentials, such as the pay system used for federal employees, the DOL estimates average wage rates specific to a detailed occupation and local area combination each year based on limited sample information. The granular nature of the mean wage estimates used to set H-2B prevailing wages result in: (i) substantial variation in area pay differentials among common H-2B occupations, (ii) wide pay differentials between common H-2B occupations depending on the local area, and (ii) substantial variation in year-over-year prevailing wage changes across both areas and occupations.

H-2B PROGRAM: BACKGROUND

The H-2B visa program allows non-agricultural employers to hire a limited number of foreign guest workers for seasonal jobs if they are unable to hire domestic workers for these positions. There are two regulations that substantially limit the impact of the H-2B visa program on domestic workers performing similar work. First, there is a strict limit on the annual number of H-2B visas issued. Second, workers are required to be paid the "prevailing wage rate" for comparable workers in their area of work, although in practice these wage rates are set above the market wage rate for these types of jobs.

While there has been an official limit of 66,000 H-2B visas per year, over the past two decades the actual number of H-2B visas issued per year has been higher than the official cap for various reasons. The largest increase in the number of H-2B visas issued has occurred in the past few years. This report focuses

¹ The primary two causes through which this has occurred are supplementary caps approved by Congress for all fiscal years since 2017, with the exception of 2020, and a further allocation of supplemental visas made available to returning H-2B workers from any of the previous three fiscal years. https://www.dhs.gov/archive/news/2024/11/15/dhs-supplement-h-2b-cap-nearly-65000-additional-visas-

fiscal-year-2025.

on the impact of a 69% increase in the annual number of H-2B visas issued from about 94,000 per year from 2015 to 2019 to about 159,000 per year from 2022 to 2024.

Even with the substantial percentage increase in the number of H-2B visas issued in the past few years, H-2B visa workers continue to represent a small share of the U.S. labor force. As of May 2025, there were 163.4 million employed workers in the U.S. labor force. There was one H-2B visa issued each year from 2022 to 2024, on average, for approximately each 1,000 U.S. workers. However, only a fraction of U.S. workers are employed in seasonal jobs that H-2B visa workers are expected to fill. The U.S. workforce includes over 49 million employed workers who are either aged 16-19 or aged 25 and above with a high school degree or less. The number of H-2B visas issued each year is quite small relative to this number of inexperienced or relatively less educated domestic workers who may compete for the seasonal temporary jobs offered to H-2B visa workers. About one H-2B visa was issued each year, from 2022 to 2024, for every 300 U.S. workers who are either aged 16-19 or have a high school degree or less.

In addition to the annual cap on the number of H-2B visas issued, the DOL sets an area-specific and occupation-specific prevailing wage each year. In general, the prevailing wage is set equal to the average wage in the specific occupation and local area where the work will be conducted. The mean wage estimates are based on data from the most recent Occupational Employment and Wage Statistics (OEWS) survey. By not recognizing variation in wage rates by skill and experience, this regulation sets a prevailing wage above the wages paid to entry level workers in the occupation and area in which H-2B visa workers will be employed. While prevailing wages set above market wages may mean that the H-2B program does not adversely impact the wages and employment opportunities of domestic workers performing similar work, higher prevailing wages also make H-2B visas less attractive to businesses facing seasonal labor shortages and can therefore indirectly harm U.S. workers. A prevailing wage above the market wage for seasonal/temporary jobs limits the potential for the H-2B program to have a positive impact on economic growth in areas that depend on seasonal guest workers and indirectly harms U.S. workers who are complementary to seasonal workers.

The changing composition of the U.S. labor force over time has made it more difficult to find domestic workers willing to accept seasonal jobs requiring manual labor. Historically, teenage workers and relatively less educated workers would compete for some of the seasonal and temporary jobs for which H-2B workers are hired. Today, teenage workers and relatively less educated workers comprise a much smaller share of the labor force than in previous years. While the U.S. labor force in 2024 was 60% larger than in 1979, the number of workers aged 16-19 fell by 30% over this 45-year period. Over the same period, the share of the labor force with a high school degree or less fell from 64% to 31%. There are relatively fewer domestic workers in the education and age groups that are most likely to accept seasonal jobs. This is especially true for jobs in industries with peak or high seasons (e.g. resorts or seafood processing) that will temporarily demand more employees than can be accommodated with local workers, causing businesses to turn to H-2B workers to fill positions.

ECONOMIC IMPACT OF THE EFFECTS OF MIGRATION AND IMMIGRATION: ECONOMIC THEORY

According to economic theory, an increase in the number of H-2B visa workers entering the U.S. represents a labor supply shift. Holding constant labor demand, an increase in the supply of relatively less educated and less skilled workers is generally expected to drive down the wages of workers performing similar work in the U.S. through competition. Whether or not these effects are large enough to be measured depends on: (1) the magnitude of the supply shift relative to the size of the domestic labor market and (2) whether there are seasonal labor shortages in the domestic market. Even with no labor shortages, the expected aggregate impact of a modest increase in the size of the H-2B program on the employment and wages of U.S. workers would likely be small because the supply shift due to an increase in H-2B visas is small relative to the size of the domestic workforce.² In the presence of seasonal labor shortages, it is possible for H-2B visa workers to have no significant impact on domestic workers performing similar tasks. Regardless of

² For this reason, we analyze the impact of the H-2B program at the local area level.

the effect on domestic workers performing similar work, an increase in the supply of seasonal workers will benefit domestic workers who are complementary to seasonal workers. The positive impact would be even larger if the influx of H-2B workers alleviates seasonal labor shortages.

An increase in the number of H-2B workers in the U.S. is unlikely to depress the wages of domestic workers engaged in similar work in the presence of seasonal labor shortages. These shortages are expected to be more common in areas which require guest workers to fill the seasonal positions. In these areas, the number of workers required to meet the demand for positions in the peak season is larger than the local population. While it is true that domestic workers could move to fill a seasonal for a high enough wage, the costs of eliminating the seasonal labor shortage with domestic workers may exceed the benefits. If the wage required to attract enough domestic guest workers for these jobs is too high, the business is likely to keep these positions unfilled and generate less output and lower revenue during the peak season due to the seasonal labor shortage.

In addition to the potential impact of an increase in H-2B visa workers on U.S. workers performing the same work, an increase in the available supply of seasonal workers will increase the demand for workers who are complementary to them. For example, an increase in seasonal landscaping workers will increase the ability of landscaping businesses to provide services to their customers, which will increase the demand for the managers and supervisors at these businesses. The supply shift may also have a positive impact on employees in other businesses who sell or repair landscaping equipment. Similarly, an increase in the supply of maids and housekeeping cleaners in a resort community will allow the resort to provide better service and accommodate more guests during their peak season. This will increase the demand for managers and supervisors at the resort and may impact local businesses, such as shops and restaurants, if their businesses benefit from greater occupancy rates at the resort.

A SURVEY OF H-2B EMPLOYERS

Before pursuing an empirical analysis of how the increase in H-2B workers has impacted American workers, this report considers survey evidence on the use of the H-2B program by employers. This evidence also highlights how the H-2B program affects employer decisions regarding hiring and output, and the issues they encounter in the process of hiring H-2B workers.³

HOW DO EMPLOYERS USE THE H-2B PROGRAM?

Employers hire H-2Bs to work in many different industries. However, there are certain industries in which H-2B workers are disproportionately employed. The same can be seen in terms of occupations. Table 1 shows the top five industries and the top five occupations mentioned by respondents that hire the most H-2B workers.⁴

TABLE 1
TOP 5 H-2B INDUSTRIES AND OCCUPATIONS

2023-2024

Industry	Occupation
[b]	[c]
Landscaping Services	Landscaping and Groundskeeping Workers
All Other Amusement and Recreation Industries	Amusement and Recreation Attendants
Seafood Product Preparation and Packaging	Meat, Poultry, and Fish Cutters and Trimmers
Other Specialty Trade Contractors	Maids and Housekeeping Cleaners
Traveler Accommodation	Cooks, Restaurant
	[b] Landscaping Services All Other Amusement and Recreation Industries Seafood Product Preparation and Packaging Other Specialty Trade Contractors

The top industry, "Landscaping Services", is consistent with the largest occupation reported. As will be further demonstrated in the empirical analysis, the landscaping industry makes up a large portion of

³ To collect this evidence, we circulated a survey of questions to H-2B employers across the United States. The survey asked 19 questions that covered employers use of the visa program, the issues they encountered and their likely response to the any shortage of workers encountered. 243 responses were collected.

⁴ Some responses were made on an earlier version of the survey which had less detail on industry and occupation. For these responses, an assumption has been made that they operate in the most common detailed industry or occupation highlighted by the detailed responses.

demand for H-2B workers. A similar picture is seen with amusement workers and meat and fish processors which are the second and third industries and occupations respectively. Other key occupations include workers involved in traveler accommodation, such as maids, workers in specialty trades, and restaurant cooks.

The survey also demonstrates that demand for H-2B workers is spread across the country, as shown in Table 2. When asked where workers would be located, 19.7% of the H-2B workers were reported to be working in Texas, 9.3% were reported as working in Alaska, followed by Michigan with 7.7%, Colorado with 6.7%, and Pennsylvania with 5.9%. These five states comprise almost half of the demand for H-2Bs reported in the survey. Overall, the top ten states make up 70.5% of reported demand for H-2Bs.

TABLE 2 SHARE OF H-2B WORKERS BY WORK STATE

2023-2024

State	Share
[a]	[b]
Texas	19.7%
Alaska	9.3%
Michigan	7.7%
Colorado	6.7%
Pennsylvania	5.9%
Louisiana	5.4%
Ohio	4.4%
Georgia	4.3%
Tennessee	3.8%
Missouri	3.3%
All Other	29.5%

The survey also asked questions related to the hiring of American workers prior to turning to the H-2B visa program. When asked about the frequency and length of time job postings were advertised to American workers prior to applying for H-2B workers, the median job opening was posted five times and that the median duration of advertisements was 45 days. This reveals the length to which employers go before relying on the H-2B program for the seasonal workers their businesses require.

This issue was further demonstrated when respondents were asked how many H-2B workers they hired and how many Americans workers they hired in the same positions. Table 3 shows the distribution of hired workers in each category over the last three years. The median response was that employers hired 24 H-2B workers, while the median number of American workers that they were able to hire into the same roles was 8.

TABLE 3
DISTRIBUTION OF H-2B & AMERICAN WORKERS HIRED INTO SAME ROLE

2023-2025

				Percentiles		
Type of Worker	Mean	10th	25th	Median	75th	90th
	[a]	[b]	[c]	[d]	[e]	[f]
H-2B	63	5	12	24	60	140
American	60	0	1	8	30	118

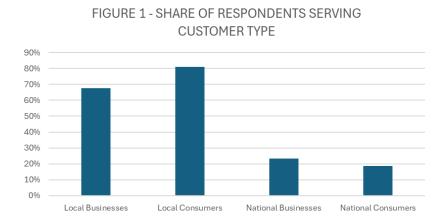
The mean count of H-2Bs hired was larger at 63 workers. This is affected by the presence of some employers who hire many more H-2B workers; the 90th percentile of H-2B workers hired is 140 over three years.

HOW DOES THE H-2B PROGRAM AFFECT BUSINESS DECISIONS?

The survey provides insights into how H-2B employers' ability to hire workers affects their operations and the customers they serve. These insights bolster the findings from the empirical analysis discussed later in this report.

One question asked to respondents was who their customers were, which is important in understanding the potential effects of a firm's ability to operate efficiently. Figure 1 shows the share of firms that serve different types of customers. As can be seen, there is a tendency for these firms to support local consumers and businesses with 81% and 67% of firms stating that they serve these markets respectively. However, the share of H-2B employers whose businesses support national customers is not negligible; approximately 23% of respondents stated that they served business customers nationally with roughly 19%

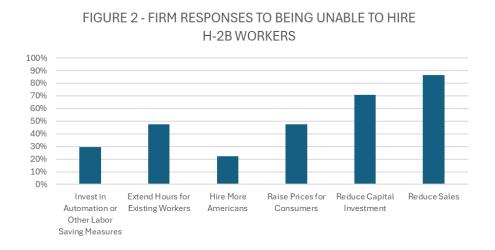
supporting national consumers. The results show that, while often serving final consumers, there is an important share of H-2B employers that provide services or products to other businesses.



These responses highlight a mechanism through which a key finding of the empirical analysis below may operate. As will be shown, there is strong evidence of complementarities between lower and higher skilled workers that mean that higher skilled workers are likely to benefit when gaps in the low skilled labor market are filled by H-2B workers. This survey result shows that such complementarities not only take place within a firm but also could occur between firms; firms that hire H-2B workers and firms that utilize those firms' goods and services. This underscores that the benefits of the H-2B program are felt more widely than in the narrow constraints of H-2B employers. Furthermore, because business clients served by H-2B employers may be national rather than only local, the estimates provided by the empirical analysis, which focuses on local area effects, may understate the positive relationship between H-2B supply, job growth, and pay.

This prompts the question of how the H-2B program impacts the decisions of employers and their ability to continue their operations efficiently. When asked, 75.7% of respondents stated that they had to limit or scale-back their operations prior to hiring H-2B workers. This highlights how employers use the program when there are few alternatives to allow them to operate at full capacity, rather than as an alternative to available U.S. workers.

When given the chance to provide details on how employers would change their operations if they were unable to hire H-2B workers, employers indicated several responses that are shown in Figure 2 below. The most frequently cited response, for 86% of respondents, was that they would need to reduce their sales. This is followed by 71% of respondents stating they would need to reduce their investment, and 47% of respondents indicating that they would need to raise prices. This is consistent with the view that a reduction in H-2B visas is a negative supply shock to an industry, reducing output while raising prices and discouraging investment. When explaining the impact on investment, 30% of respondents indicated that a decline in H-2B visas could encourage investment in automation with a labor-saving focus, trying to avoid reliance on a labor supply that is unable to accommodate their demand. When considering their response to hiring, 47% of respondents indicated that they would look to extend the hours of their existing workers, while only 22% of respondents indicated that they would hire more American workers. These results highlight the role of the H-2B visa program in filling in key gaps in the labor market, rather than simply allowing employers to circumvent the hiring of U.S. workers.

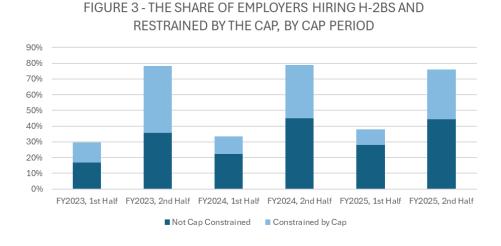


Finally, in terms of the program's impact on decisions, respondents were asked whether they had used the supplemental H-2B visas provided in recent years by the Federal government. A large share of respondents, 71.6%, indicated that they had made use of these visas. This result has important implications in terms of validating the methodological approach followed below in the empirical analysis. As is discussed

below, the empirical analysis provides new insights by making use of the increase in the cap to disentangle the effect of a supply shock from possible demand shocks. By showing that there were many employers who were willing to demand H-2B workers once restrictions on loosened-2B visas were relaxed provides evidence that the methodology is based on reliable assumptions.

WHAT ISSUES DO EMPLOYERS ENCOUNTER IN THE H-2B HIRING PROCESS?

A final set of questions provides us with insight into issues that employers encounter as they go through the H-2B process. Figure 3 shows the share of respondents that applied for H-2B workers in each semi-annual cap period, as well as the share of these respondents who were unable to hire the number of H-2Bs they wanted due to the cap restrictions. What is notable is that we see the expected seasonal pattern that is typical of H-2B employers often ramping up for the summer period that is covered by the second half of the fiscal year. We can also see that this important period for the employers is when they are the most cap constrained, relative to their desired hiring levels. This highlights that there are many employers who are unable to operate at full capacity in their peak seasons, a period which likely determines their annual income and the long-term viability to maintain their operations. This is despite the relaxation of the cap in recent fiscal years.



A further issue that was explored in the survey was the potential for delays in the process that may prevent H-2B workers from arriving at the work location on time. As shown in Table 4 below, over 33.6% of the businesses that responded to the survey reported workers arriving late during the previous three years. When further prompted on how long this delay was, the responses indicated that delays were often substantial. The most common response, with 60.7% of respondents, was that this delay was between one to three months. The second most common response at 35.5% of respondents, was from businesses that encountered delays of over a week but less than one month. Only 3.8% of respondents indicated that this delay was less than one week. These delays prevent employers from operating at full capacity during their peak season, often for long periods of time. Not only is this damaging to the economic prospects of employers but also to the businesses and consumers who rely on their services and products, and the other workers in the firm whose jobs depend on the firm operating efficiently.

TABLE 4
PREVALENCE OF DELAYS IN H-2B WORKER ARRIVAL

2023-2025

			How Late Did the Workers	Arrive?
	Did Workers Arrive Late?	Less Than 1 Week	More Than 1 Week, Less Than 1 Month	More Than 1 Month, Less Than 3 Months
	[a]	[b]	[c]	[d]
•	33.6%	3.8%	35.5%	60.7%

DATA RELIED UPON FOR THE EMPIRICAL ANALYSES OF THE IMPACT OF H-2B VISA WORKERS

OFLC DISCLOSURE DATA AND H-2B EMPLOYER DATA HUB

Our empirical analyses focus on H-2B workers employed in either a state or the District of Columbia from 2015 to 2023. Because some areas rely much more heavily on seasonal guest workers than other areas, we evaluate the impact of the H-2B program at the local area level. The areas we rely on are the metropolitan

and non-metropolitan areas defined for the 2023 OEWS survey, which is used to establish local area-specific prevailing wages for H-2B workers.

We determine the number of H-2B workers in an area by relying on administrative data from employers' H-2B Applications and the final determinations as reported by the Office for Foreign Labor Certification (OFLC). The worksite information in the OFLC data is used to allocate certified H-2B prevailing wage determinations (PWDs) to a labor market area.

To allocate certified H-2B workers to areas, we created a crosswalk to match various worksite location variables in the OFLC data (state and county or postal code) to the metropolitan and non-metropolitan areas specified in the 2023 OEWS. ^{5 6} Because these areas are typically collections of counties, we primarily use the worksite state and county indicators to assign certified H-2B PWDs to labor market areas. ⁷ If the worksite state and county were not reported by the OFLC, we rely on the worksite postal code to assign certified H-2B workers to labor market areas. ⁸ For observations missing both worksite county and zip code, we then use the employer county and zip code, in turn. This process allows the successful mapping of 99.88% of observations from the OFLC data to areas defined for the OEWS, with the remaining unmapped PWD observations dropped.

⁵ For a small percentage of certified H-2B PWDs in the OFLC disclosure data, neither a worksite's state and county nor a postal code are reported. Because the location of the worksites for these PWDs cannot be accurately determined, we drop these observations from our analysis.

⁶ To map counties to statistical areas, we use the crosswalk defined for the 2023 OEWS https://www.bls.gov/oes/2023/may/oessrcma.htm. To map zip codes to counties we rely on the crosswalk created by the University of Missouri's *Census Data Center* https://mcdc.missouri.edu/applications/geocorr.html.

⁷ Because there are a handful of instances when a single county is split across multiple OEWS labor market areas, in these cases we assign the certified PWDs in these counties to the labor market area that contains the highest share of the county's population.

⁸ We combine the 2022 crosswalk matching counties to postal codes from the Missouri Census Data Center with the 2023 OEWS crosswalk matching counties to statistical areas. Because some zip codes can be split across multiple counties, we assign a single zip code to the county containing the highest portion of its population.

One of the innovations of this study over previous studies is the utilization of newly available data on the count of H-2Bs awarded, available through USCIS's H-2B Employer Data Hub. Previous studies have relied solely on the disclosure datasets released by the OFLC that track H-2B certifications but overcounts the true number of allocated H-2B visas as not all certified applications will be successful in the petitioning stage administered by USCIS. There are fewer H-2B visa approvals listed in the H-2B Employer Data Hub than certified H-2B PWDs each year. Unfortunately, the worksite location for visa approvals in the Employer Hub data cannot be determined reliably. We therefore impute the number of H-2B visa workers in an area by calculating a fraction of the certified H-2B workers in the area in the OFLC data discussed above.9 We assume that the number of H-2B visa workers in a specific area each year equals a constant fraction of the number of certified H-2B workers in the area during that year. This scaling factor equals the aggregate ratio of the number of new H-2B employment approvals in the H-2B Employer Data Hub to the total number of certified H-2B Workers in the OFLC data. In effect, we assume that the same fraction of certified PWDs, on average, are approved for H-2B visas in each labor market area. For example, because the total number of approved H-2B visas equaled 71% of total certified H-2B PWDs in 2023, we multiply the number of certified PWDs in each labor market area by 0.71 to impute the number of H-2B visa workers in the area in 2023. Equivalently, this approach can be thought of as geographically allocating the count of H-2B workers in the Employer Hub data in line with the allocation seen in the OFLC data. This method assumes that any difference between the actual number of H-2B visa workers and the imputed number of H-2B workers in an area is random and uncorrelated with the economic conditions in the area.

⁹ The inaccuracy of the geographic data fields for the Employer Data Hub in some years causes us to use this mixed approach that combines these data with the OFLC disclosure data. We adjust the reported distribution of certified H-2B PWDs across areas in each year proportionally so that the overall annual count nationally matches the count of visas in the Employer Hub data. By doing this we are assuming that petitioner success is random across areas.

AMERICAN COMMUNITY SURVEY

We rely on the Bureau of the Census's *American Community Survey* (ACS) one-year data files from 2015 to 2023 to measure total domestic employment both as a whole and in terms of relatively less educated and relatively more educated employed adults in each area and year. We use these employment estimates to identify which areas, on average, have been characterized by the largest concentration of H-2B visa workers, relative to domestic employment, and to measure the local impact of an increase in the number H-2B visas issued.

Each annual ACS data file contains information for a 1% representative sample of the U.S. population. Because the reliance on H-2B visas and the expected impact of the program varies widely across areas, a large sample of the U.S. population is necessary to evaluate the localized impact of the H-2B program. The ACS provides the best opportunity for measuring the local effects of the H-2B program on different segments of the domestic labor force. We use geographic information in the ACS to allocate individual survey respondents to the more than 500 areas used in the OEWS. ¹⁰ Estimates of total annual employment and employment among relatively more educated and relatively less educated adults in each area in the OEWS survey are generated using the population weights for each respondent in the ACS.

Because the seasonal jobs held by H-2B workers tend to be positions that require less formal education, we divide the workforce in each area into relatively more educated (at least some college education) and relatively less educated (a high school degree or less) adults. We group all employed adults between the ages of 25 and 67 into these two education groups.

¹⁰ The smallest geographic area recorded in the ACS is the Public Use Microdata Area (PUMA). ACS 1-year files from 2015 to 2022 use PUMAs based on the 2010 Census definition and the 2023 ACS 1-year file PUMAs are based on the 2020 Census definition. We use a crosswalk to map PUMAs to statistical areas identified in

the OEWS. We combine crosswalks mapping 2010 or 2020 PUMAs to counties using information from the Missouri Census Data Center and the 2023 OEWS crosswalk, mapping counties to labor market areas. Because a county may be split across multiple PUMAs, a single county is assigned to the PUMAs containing

the largest share of the county's population.

Our primary measure of local employment is the number of full-time equivalent (FTE) workers in each education group in each area. To calculate the number of FTE workers, we consider the baseline to be 50 weeks worked over the past year, at 35 hours per week, for a total of 1750 annual hours worked. We then construct FTE employment by dividing the product of the number of weeks worked in the past 12 months and usual hours worked per week to the baseline of 1750 hours per year. For example, an ACS respondent who reported working 25 weeks in the past 12 months an average of 21 hours per week, would have worked 525 hours in the past year and corresponds to .3 of an FTE employee. In addition to FTE employment, we also use the total number of full-time full-year employees in our calculated summary statistics. All adults who indicated that they worked at least 50 weeks in the past year and who worked an average of at least 35 hours per week are considered full-time.

We also calculate inflation-adjusted hourly wage rates for full-time private sector employees in the ACS by dividing inflation-adjusted total wage and salary earnings in the past 12 months by the total number of hours worked in the past 12 months. The calculated hourly wage rate is, at times, lower than the federal minimum wage due to possible measurement errors in the report values of survey respondents. Therefore, we replace calculated hourly wages below the minimum wage with the federal minimum wage when this occurs. We calculate the average wage rate in an area with a weighted average relying on the population weights for each ACS respondent.¹²

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¹¹ ACS data from 2015 to 2018 reports weeks worked in the past year as a categorical variable with a range of weeks worked within each category. In these years we assume weeks worked equals the midpoint of the minimum and maximum of the range. The number of full-time employees and the full-time equivalent for each statistical area, are aggregated to the area level using the sample weight variable in the ACS.

¹² The average wage rate for a particular area and education group is calculated for all adults age 25 to 67, and observations are weighted by their sampling weight in the ACS.

CURRENT EMPLOYMENT STATISTICS

As an alternative to measuring area-specific average wage rates using the ACS data, we also rely on data from the Current Employment Statistics (CES) survey to obtain data on the average wage rates and total employment in private businesses in metropolitan areas from 2015 to 2023. The CES is a monthly establishment survey that provides wage and employment estimates by metropolitan area but is not disaggregated by the education level or occupation of employees in an establishment. The CES data is also not available for the dozens of non-metropolitan areas identified in the OEWS. As a sensitivity check for our study of the impact of the H-2B program on the wages of U.S. workers in metropolitan areas we also analyze the impact of an increase in H-2B visa workers on overall average wages by metropolitan area and year using the CES data over the same period as we calculated using the ACS data.

H-2B VISA PROGRAM: SUMMARY STATISTICS

The H-2B program is especially important as a source of seasonal labor in certain occupations, industries, and areas. The most reliable way to document differences in the demand for H-2B visas by area and occupation for the period 2015-2024 is with the OFLC disclosure data described above. These data provide detailed geographic information about visa requests and certified PWDs each year Each year there are substantially more certified H-2B workers than there are H-2B visas issued. By comparing information from the OFLC and the Employer Data Hub, we find that between 2015 and 2024 the number of H-2B visas issued each year equaled about 72% of the H-2B certifications each year.

Table 5 shows the average number of certified H-2B PWDs per year by occupation, and the share of all PWDs attributable to each occupation, on average, over the period 2015-2024. For example, there were

¹³ CES data are reported by metropolitan areas but not by the non-metropolitan areas in the OEWS survey.

65,748 certified PWDs for H-2B workers for Landscaping and Groundskeeping Worker jobs, on average, each year. Landscaping and Groundskeeping Workers accounted for 41.1% of all certified PWDs, on average, over this period. The second and third most common occupations for H-2B visa requests were for Maids and Housekeeping Cleaners and Forest and Conservation Workers but they each account for substantially fewer of the H-2B visa requests than landscaping workers. The second and third most common occupations each account for about 7% of all certified PWDs, or about 11,000 certified PWDs per year. Overall, the top 20 occupations account for almost 86% of all certified PWDs for H-2B jobs.

TABLE 5
TOP 20 SOC CODES AMONG CERTIFIED H-2B WORKERS
2015-2024

SOC Code	Occupation	Mean Certified H-2B Workers per Year	Share of Total Certified H-2B Workers ¹
[a]	[b]	[c]	[d]
37-3011.00	Landscaping and Groundskeeping Workers	65,748	41.1%
37-2012.00	Maids and Housekeeping Cleaners	11,269	7.0%
45-4011.00	Forestry and Conservation Workers	10,976	6.9%
39-3091.00	Golf Course Attendant	9,064	5.7%
51-3022.00	Meat, Poultry, and Fish Cutters and Trimmers	8,279	5.2%
47-2061.00	Helpers, Construction Trades, All Other	4,783	3.0%
35-2014.00	Cooks, Restaurant	4,508	2.8%
35-3031.00	Waiters and Waitresses	4,230	2.6%
53-7062.00	Occupational Title Laborers and Freight, Stock and Materials Movers, Hand	2,556	1.6%
39-2021.00	Nonfarm Animal Caretakers	2,082	1.3%
37-2011.00	Janitors, and Cleaners, Except Maids and Housekeeping Cleaners	1,719	1.1%
53-7064.00	Packers and Packagers; Hand	1,641	1.0%
51-9198.00	Helpers-Production Workers	1,608	1.0%
35-3022.00	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	1,450	0.9%
47-2051.00	Cement Masons and Concrete Finishers	1,337	0.8%
35-9021.00	Dishwashers	1,276	0.8%
35-9011.00	Maids and Housekeeping Cleaners	1,255	0.8%
35-3023.00	Fast Food and Counter Workers	1,237	0.8%
47-3012.00	HelpersCarpenters	1,193	0.7%
35-2021.00	Food Preparation Workers	1,186	0.7%

Notes:

Sources:

OFLC H-2B Disclosure Data 2015-2024

Table 6 shows that businesses in certain industries account for a disproportionate share of H-2B visa requests. The landscaping industry accounts for almost 40% of certified PWDs, on average. The industries that account for the second, third, and fourth most certified H-2B PWDs are Hotels and Motels, Support

¹ Total certified H-2B workers for a particular SOC / Total H-2B workers across all years

Activities for Forestry, and Seafood Product Preparation and Packaging. Overall, the top 20 industries account for about 83% of all certified PWDs for H-2B jobs.

TABLE 6
TOP 20 NAICS SECTORS AMONG CERTIFIED H-2B WORKERS
2015-2024

NAICS Code	NAICS Title	Mean Certified H-2B Workers per Year	Share of Total Certified H-2B Workers ¹
[a]	[b]	[c]	[d]
56173	Landscaping Services	63502	39.66%
72111	Hotels (except Casino Hotels) and Motels	13884	8.67%
11531	Support Activities for Forestry	10083	6.30%
31171	Seafood Product Preparation and Packaging	9042	5.65%
71399	All Other Amusement and Recreation Industries	8889	5.55%
71391	Golf Courses and Country Clubs	6073	3.79%
23811	Poured Concrete Foundation and Structure Contractors	3126	1.95%
56172	Janitorial Services	2973	1.86%
72251	Restaurants and Other Eating Places	2118	1.32%
71119	Other Performing Arts Companies	1921	1.20%
71121	Spectator Sports	1842	1.15%
23816	Roofing Contractors	1454	0.91%
11411	Fishing	1418	0.89%
23899	All Other Specialty Trade Contractors	1205	0.75%
23622	Commercial and Institutional Building Construction	1026	0.64%
21231	Stone Mining and Quarrying	1020	0.64%
71311	Amusement and Theme Parks	994	0.62%
23813	Framing Contractors	900	0.56%
61162	Sports and Recreation Instruction	895	0.56%
32121	Veneer, Plywood, and Engineered Wood Product Manufacturing	884	0.55%

Notes:

Sources

OFLC H-2B Disclosure Data 2015-2024

Table 7 shows that many requests for H-2B visas are for jobs in some of the largest metropolitan areas in the U.S., such as New York City, Dallas, Houston, and Philadelphia. Note that the distribution of H-2B visa requests is dispersed across geographic areas; many non-metropolitan areas and smaller metropolitan areas request a disproportionate number of H-2B visas relative to the sizes of their labor markets. For example, the area with the third most certified H-2B PWDs, on average, is the Alaska nonmetropolitan area. The Alaska nonmetropolitan area accounts for 3.0% of all certified H-2B PWDs compared to New York's 3.7% share of H-2B PWDs. The New York metropolitan area accounts for only 22% more certified H-2B PWDs, on average, than nonmetropolitan Alaska even though, according to the most

 $^{^{\}rm 1}$ Total certified H-2B workers for a particular SOC / Total H-2B workers across all years

recent data, total employment in the New York metropolitan area is almost 88 times higher than employment in the Alaskan nonmetropolitan area.

TABLE 7
TOP 20 STATISTICAL AREAS FOR CERTIFIED H-2B WORKERS
2015-2024

Statistical Area	Mean Number of Certified H-2B Workers per Year	Share of Total Certified H-2B Workers ¹
[a]	[b]	[c]
New York-Newark-Jersey City, NY-NJ-PA	5,786	3.7%
Dallas-Fort Worth-Arlington, TX	5,490	3.5%
Alaska nonmetropolitan area	4,727	3.0%
Denver-Aurora-Lakewood, CO	3,834	2.4%
Houston-The Woodlands-Sugar Land, TX	3,574	2.3%
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	3,543	2.2%
Washington-Arlington-Alexandria, DC-VA-MD-WV	3,424	2.2%
Austin-Round Rock, TX	3,411	2.2%
Miami-Fort Lauderdale-West Palm Beach, FL	3,394	2.1%
St. Louis, MO-IL	3,215	2.0%
Phoenix-Mesa-Scottsdale, AZ	3,177	2.0%
Medford, OR	2,166	1.4%
Barnstable Town, MA	2,056	1.3%
Chicago-Naperville-Elgin, IL-IN-WI	1,953	1.2%
Pittsburgh, PA	1,928	1.2%
Detroit-Warren-Dearborn, MI	1,772	1.1%
Cleveland-Elyria, OH	1,718	1.1%
Atlanta-Sandy Springs-Roswell, GA	1,711	1.1%
Baltimore-Columbia-Towson, MD	1,686	1.1%
Tampa-St. Petersburg-Clearwater, FL	1,628	1.0%

Notes

Sources:

OFLC H-2B Disclosure Data 2015-2024

Table 8 lists the metropolitan areas that have the most H-2B prevailing wage certifications, measured as a fraction of the area's FTE employment among adults with a high school degree or less according to the American Community Survey (ACS). ¹⁴ While many employed domestic workers with a high school degree or less would not apply for the seasonal jobs held by H-2B visa workers, measuring the number of H-2B visa workers relative to the size of this segment of an area's labor force indicates how small the visa program is relative to the number of domestic workers in the area who could conceivably fill these

¹⁴ The size of an area's workforce with a high school degree or less is measured in full-time equivalent units by adjusting for the number of weeks worked per year and the number of hours worked per week.

 $^{^1\,}$ Total certified H-2B workers for a particular SOC $\,$ / Total H-2B workers across all years

seasonal positions. Only two metropolitan areas, Medford, Oregon and Barnstable, Massachusetts, had enough certified H-2B PWDs each year, on average, to account for at least 5% of their relatively less educated workforces. Only one other metropolitan area, Coeur d'Alene, ID, had enough certified H-2B PWDs each year, on average, to represent at least 2% of their relatively less educated workforce.

TABLE 8
TOP 10 METROPOLITAN STATISTICAL AREAS FOR H-2B WORKERS
2015-2024

Statistical Area	Average Adjusted H-2B Workers per Year ¹ [b]	Average Low Skill Full Time Equivalent per Year 2 [c]	Number of H-2B Workers Relative to Low Skilled Employment [d] = [b]/[c]
[4]	[e]	[c]	[4] [5]/[4]
Medford, OR	1,513	29,865	5.1%
Barnstable Town, MA	1,477	29,568	5.0%
Coeur d'Alene, ID	579	22,064	2.6%
Crestview-Fort Walton Beach-Destin, FL	554	32,445	1.7%
Rapid City, SD	473	28,362	1.7%
Panama City, FL	619	42,400	1.5%
Myrtle Beach-Conway-North Myrtle Beach, SC-NC	1,023	73,982	1.4%
Hilton Head Island-Bluffton-Beaufort, SC	445	32,271	1.4%
Provo-Orem, UT	639	48,918	1.3%
Morristown, TN	336	26,954	1.2%

Notes:

Sources

OFLC H-2B Disclosure Data 2015-2024 H-2B Employer Data Hub 2015-2025 ACS 1-year Files 2015-2023

Table 9 lists the non-metropolitan areas that have the most certified H-2B PWDs, measured as a fraction of the relatively less educated labor force in their area. The Alaskan non-metropolitan area is an outlier with enough certified H-2B PWDs each year to account for about 12.6% of their relatively less educated workforce, on average. Only eight other non-metropolitan areas had enough certified H-2B PWDs each year, on average, to represent at least 2% of the less educated workforce in their non-metropolitan area.

It is worth noting for both Table 8 and Table 9 that the ratio of certified H-2B PWDs to the size of an area's workforce with a high school degree or less overstates the impact of the H-2B program on

¹ Data in the OFLC H-2B Disclosure Data is adjusted each year proportionally so that the overall annual count nationally matches that in the Employer Data Hub

 $^{^2\,}$ The ACS 1-year files only go up until 2023 so 2024 values are the same as 2023 values

employment in each area. This is because there are only about 72 H-2B visas are issued, on average, for each 100 certified H-2B PWDs.

TABLE 9
TOP 10 NON-METROPOLITAN STATISTICAL AREAS FOR H-2B WORKERS
2015-2024

Contrate A A	Average Adjusted H-2B	Average Low Skill Full Time	Number of H-2B Workers Relative to
Statistical Area	Workers per Year ¹	Equivalent per Year ²	Low Skilled Employment
[a]	[b]	[c]	$[\mathbf{d}] = [\mathbf{b}]/[\mathbf{c}]$
Alaska nonmetropolitan area	3,275	25,947	12.6%
Mountain North Carolina nonmetropolitan area	929	31,465	3.0%
Northwest Colorado nonmetropolitan area	1,054	36,054	2.9%
Massachusetts nonmetropolitan area	859	30,927	2.8%
Southeast-Central Idaho nonmetropolitan area	485	18,763	2.6%
Western Wyoming nonmetropolitan area	449	19,511	2.3%
Upper Peninsula of Michigan nonmetropolitan area	860	38,052	2.3%
Northeast South Carolina nonmetropolitan area	427	20,002	2.1%
Coast Oregon nonmetropolitan area	325	15,860	2.1%
Eastern Utah nonmetropolitan area	387	21,412	1.8%

Notes:

Sources:

OFLC H-2B Disclosure Data 2015-2024 H-2B Employer Data Hub

ACS 1-year Files 2015-2023

The key variable in our analysis of the impact of the H-2B program on outcomes in the domestic labor force is the percentage change in the number of H-2B workers in an area, measured as a share of relatively less educated workers in the area. We measure this change between the period 2015-2019 and the period 2022-2024. We exclude the years 2020 and 2021 due to the possible impact of COVID on both domestic employment and the number of H-2B visa workers. We average these H-2B workers across several years so that the key supply shift variable is the simple difference between the H-2B worker share before and after the COVID pandemic.

Table 10 presents summary information for the 10 metropolitan areas that experienced the largest increases in H-2B workers between the pre-COVID and post-COVID periods. For example, in the 2015-2019 period Medford OR had an average influx of H-2B visa workers per year that was equivalent to about 2.8% of their domestic workforce with a high school degree or less. In the 2022-2024 period, Medford OR had an

¹ Data in the OFLC H-2B Disclosure Data is adjusted each year proportionally so that the overall annual count nationally matches that in the Employer Data Hub

 $^{^{2}\,}$ The ACS 1-year files only go up until 2023 so 2024 values are the same as 2023 values

average influx of H-2B visa workers per year that was equivalent to about 9.0% of their domestic workforce with a high school degree or less. The increase in the number of H-2B visa workers in Medford OR, or the labor supply shift that occurred between the pre-COVID and post-COVID periods was equivalent to a 6.2% increase in the area's number of domestic workers with a high school degree or less. This is the largest increase in H-2B workers that we observe in any metropolitan area. Only one other metropolitan area, Panama City, FL, had an increase in the supply of H-2B workers that was at least 2% of the number of domestic workers in the area with a high school degree or less.

TABLE 10
TOP 10 METROPOLITAN STATISTICAL AREAS FOR % CHANGE IN SHARE OF H-2B WORKERS¹

2015-2020 TO 2022-2024

Statistical Area	Share in Pre-Covid Period ²	Share in Post-Covid Period ³	Change in Share
[a]	[b]	[c]	$[\mathbf{d}] = [\mathbf{c}] - [\mathbf{b}]$
Medford, OR	2.8%	9.0%	6.2%
Panama City, FL	0.9%	3.5%	2.6%
Daphne-Fairhope-Foley, AL	0.3%	2.0%	1.7%
Ames, IA	0.3%	1.6%	1.3%
Fargo, ND-MN	0.6%	1.8%	1.2%
Provo-Orem, UT	0.9%	2.0%	1.1%
Naples-Immokalee-Marco Island, FL	0.7%	1.8%	1.1%
Columbia, MO	0.3%	1.4%	1.1%
Barnstable Town, MA	5.1%	6.1%	1.0%
Rapid City, SD	1.2%	2.2%	1.0%

Notes:

Sources:

OFLC H-2B Disclosure Data 2015-2024 H-2B Employer Data Hub

ACS 1-year Files 2015-2023

Table 11 presents the same summary information as Table 10, but for non-metropolitan areas. The Alaska non-metropolitan area experienced the largest increase in H-2B visa workers between the pre-COVID and post-COVID periods, equivalent to 4.1% of the area's domestic workforce with a high school degree or less. Four other non-metropolitan areas experienced an increase in H-2B visa workers equivalent to between 3.0% and 3.5% of the area's domestic workforce with a high school degree or less. Another four other non-

¹ Number of H-2B Workers Relative to Low Skilled Employment

² 2015-2020

^{3 2022-2024}

metropolitan areas experienced an increase in H-2B visa workers equivalent to between 2.0% and 2.7% of the area's domestic workforce with a high school degree or less.

TABLE 11
TOP 10 NON-METROPOLITAN STATISTICAL AREAS FOR % CHANGE IN H-2B WORKERS¹

2015-2020 TO 2022-2024

Statistical Area	Share in Pre-Covid Period ²	Share in Post-Covid Period ³	Change in Share
[a]	[b]	[c]	[d] = [c]-[b]
Alaska nonmetropolitan area	8.8%	12.9%	4.1%
Northwest Colorado nonmetropolitan area	2.1%	5.5%	3.5%
Southeast-Central Idaho nonmetropolitan area	1.8%	5.1%	3.3%
Western Wyoming nonmetropolitan area	1.5%	4.6%	3.1%
Southwest Montana nonmetropolitan area	0.6%	3.6%	3.0%
Coast Oregon nonmetropolitan area	0.7%	3.4%	2.7%
South Arkansas nonmetropolitan area	1.4%	3.7%	2.3%
Eastern Utah nonmetropolitan area	1.2%	3.2%	2.0%
Mountain North Carolina nonmetropolitan area	2.5%	4.4%	2.0%
Southern Vermont nonmetropolitan area	0.8%	2.5%	1.8%

Notes:

H-2B Employer Data Hub ACS 1-year Files 2015-2023

Because there is likely to be measurement error and noise in the labor supply shift measures summarized in Tables 10 and 11, our preferred measure of the shift in H-2B workers between the pre-COVID and post-COVID periods is whether or not an area's change in the ratio of H-2B workers to the relatively less educated workforce would rank in the top half of all areas (above the median area in terms of difference in growth rates). Areas with measured supply shifts above the median area, in the hop half of the distribution, are considered to have a large shift in the supply of H-2B workers in their area. The bottom half of areas with the lowest increases in the relative supply of H-2B workers should be viewed as benchmark areas.

Table 12 shows that when considering all areas, both metropolitan and non-metropolitan areas, the average benchmark area experienced almost no increase in H-2B visa workers. The average benchmark area, in the bottom half of the distribution of the relative change in H-2B visa workers, experienced an increase equal to .013 of one percent of their domestic workforce with a high school degree or less. The average large

¹ Percent change in the number of H-2B Workers Relative to Low Skilled Employment

² 2015-2020

^{3 2022-2024}

supply shift area, in the top half of the distribution of the relative change in H-2B visa workers, experienced an increase equal to .488 of one percent of their domestic workforce with a high school degree or less. This means that the difference in the increase in H-2B workers experienced by large supply shift and benchmark areas equals about .475 of one percent of the area's domestic workforce with a high school degree or less. For metropolitan areas, the difference between the increase in H-2B workers experienced by large supply shift and benchmark areas is equal to an increase of about .447 of one percent of domestic workers with a high school degree or less.

TABLE 12 % CHANGE IN H-2B WORKER SHARE¹ 2015-2020 TO 2022-2024

Geographic Area	Mean Below Median	Mean Above Median	
[a]	[b]	[c]	
All	0.013%	0.488%	
MSA	0.005%	0.452%	

Notes:

Sources:

OFLC H-2B Disclosure Data 2015-2024 H-2B Employer Data Hub ACS 1-year Files 2015-2023

REGRESSION SPECIFICATION

In the next section of the study, we estimate the impact of the relative change in the number of H-2B visa workers in an area that resulted from the substantial increase in the effective cap on H-2B visas in the past few years on the area's employment and average wages. We measure the relative change in H-2B workers in an area as the change in the ratio of H-2B workers in an area to the workforce with a high school degree or less in the area. For example, if an area attracted an average of 500 H-2B workers each year from 2015 to 2019, and in 2023 800 H-2B visa workers were employed in the area, the change in H-2B workers due to the increase in the effective cap would be 300. If this area included 50,000 FTE employees with a high

Percent change in the number of H-2B Workers Relative to Low Skilled Employment.

school degree or less, the relative change in H-2B workers in the area would be 300/50,000 or 6/10 of one percent. This measure of the relative increase in the supply of H-2B workers is used to assess the possible impact of the H-2B visa program on employment outcomes in the area.

Whether there is empirical evidence of possible adverse effects of the H-2B program on the labor market outcomes of domestic workers can be assessed through the empirical relationship between the increase in employment H-2B workers in an area, as described above, and changes in the employment and pay rates of the domestic workforce in the area. While previous studies have estimated the possible impact of the H-2B program at the state level, the most immediate impact of a change in the number of H-2B workers will be within the area in which they work. Our regressions are therefore run at the level of metropolitan and non-metropolitan areas as defined in the OEWS survey.

The analyses in this study are more reliable than previous assessments of the effects of the H-2B program because of the large percentage increase in the number of H-2B visas issued in recent years. Historically there have been relatively small changes to the number of H-2B visas that were requested, making it more difficult to identify the possible impact of the H-2B program on domestic workers. Because the effective cap on H-2B visas remained roughly constant until the past few years, observed fluctuations in the number of visa requests from year to year were likely driven by changes in economic conditions in the U.S. economy. Time series variation in the number of certified H-2B PWDs in this previous period will be correlated with changes in general economic conditions which in turn would reflect the impact of a change in the demand for H-2B workers. It is therefore not ideal for identifying the impact of an increase in the supply of workers through the H-2B program on the employment and wages of domestic workers. Previous studies also relied on differences in the number of H-2B visa workers across states. However, because the demand for seasonal workers also varies considerably across areas it would again be difficult to identify the impact of the H-2B program on the wages and employment of U.S. workers using cross-section variation in the number of H-2B workers across states. Relying on differences in H-2B employment across areas to estimate the effects of the H-2B program conflates several factors that also explain why one local area tends to rely more heavily on seasonal workers, including H-2B workers, than another area.

The policy changes relied upon in this study are the changes since 2017 that have provided supplemental caps and allowed for more exemptions from the mandated cap. We identify the impact of a change in the number of H-2B workers in an area by relying on employment changes over time within the same local area. Our approach, that relies on changes in H-2B visa workers over time within an area, may be confounded by the impact of the lockdowns and recovery from the COVID-19 pandemic for the period 2020-2022. To mitigate the impact of the pandemic on our results, our analyses focus on changes in employment and wages between the pre-pandemic period 2015-2019, and the post-pandemic period in 2023.

As explained in the previous section, the primary regressions estimate the impact of a "large" increase in the relative number of H-2B workers (an increase equivalent to about a one-half of one percent increase domestic workers with a high school degree or less) relative to the outcomes in the average benchmark area (which experienced almost no increase in H-2B visa workers). The impact of this change on employment and average wages in an area is estimated after including controls for other factors.

The regression specification used for estimating the impact on employment is specified:

$$\frac{\Delta n_i}{n_{i,0}} - \frac{\Delta p_i}{p_{i,0}} = \beta_0 D_i + BX_i + \varepsilon_i$$

The dependent variable in this regression (the left-hand side of the equation) equals the difference between the percentage growth in employment and the percentage growth in the population aged 25 to 67 in an area between 2015-2019 and 2023. D_i is an indicator, equal to 1 if the area's increase in H-2B employment relative to the area's less-educated workforce exceeds the median across areas and 0 otherwise. X_i is a vector of control variables including region indicator variables, the share of less-educated workers in local domestic employment, and indicators for the population size of the area. ¹⁶ This regression specification recognizes that employment growth in an area is determined by population growth in the area and factors other than H-

¹⁵ As explained in the previous section we consider a shift in the number of H-2B workers to be large, relative to the less educated labor force, if it is above the median change calculated across all areas.

¹⁶ The area size control indicators are based on four equal sized quartiles of size in terms of population.

2B employment. The estimate of the coefficient β_0 measures the impact of a "large" increase in H-2B workers on employment growth while recognizing that an area's employment growth is related to other characteristics of the area. Stated otherwise, the coefficient β_0 measures the difference between expected employment growth in areas experiencing a large increase in H-2B workers and the growth that would have been expected but for the policy changes that allowed for an additional increase in H-2B workers equal to about one half of one percent of the area's domestic workforce with a high school degree or less.

The regression model specification used for analyzing the impact on pay is:

$$\frac{\Delta w_i}{w_{i,0}} = \beta_0 D_i + BX_i + \varepsilon_i$$

Where the dependent variable is the average percentage growth in hourly wages in the area, and the independent variables are the same as specified in the employment regression.

The use of an H-2B impact variable that reflects a discrete difference between a large increase and other smaller increases in the number of H-2B workers in an area recognizes the potential noise and measurement error in our estimate of the relevant increase in seasonal workers in an area. While the regressions reported in this study are based on a discrete difference between two equal size sets of areas, we also estimated regression sensitivities to examine the robustness of our findings. These supplemental regressions include an impact variable equal to the actual change in H-2B workers in an area relative to the number of FTE workers in an area with a high school degree or less. The sensitivity regressions also show that there are no negative effects of a larger increase in H-2B workers in an area on the employment and wages of domestic workers.

The H-2B program facilitates the hiring of seasonal guest workers who typically are hired for positions that require relatively less formal education. This suggests that there will be different effects of the program on relatively more educated and relatively less educated U.S. workers. For this reason, we estimate the regression specifications described above on the overall workforce in an area and additional regressions

estimated using data for two different education groups within each area, workers with a high school degree or less and workers who completed some college or more.

REGRESSION RESULTS

This section presents results for each regression specification described above, including measures of the statistical significance of the key regression coefficients and the average implied marginal impact of an increase in the number of H-2B visa workers on domestic employment.

Table 13 presents results for the impact of a "large" increase in H-2B workers on FTE employment in an area. For the results estimated across all areas, including both metropolitan and non-metropolitan areas, the impact of a large increase in H-2B workers is positive and nearly significant at the 5% level.¹⁷ When estimation is restricted to metropolitan areas the results for total employment are positive and statistically significant. These results indicate that areas that experienced a large increase in H-2B employment saw FTE employment growth that was approximately 0.5 to 0.8 percentage point faster, relative to their population growth, compared to areas that did not experience a large increase in H-2B visa workers. This can be translated into an approximate marginal relationship on domestic employment that means that each additional H-2B worker in an area, associated with approximately 2.71 or 4.92 full-time equivalent jobs, on average, in all areas and metropolitan areas respectively.

A similar positive impact of the H-2B program is found when estimating the difference in average pay of domestic workers between areas which experienced a large increase in H-2B workers and areas that did not. Table 14 presents these results for regressions estimated across all areas and metropolitan areas. The table shows a positive relationship for both geographic regressions and the impact on average pay is

¹⁸ Appendix tables A1 & A2 show summary statistics for wage data.

¹⁷ A 5% level of significance requites a t-statistic of 1.96.

statistically significant for the all-areas regression. The positive and significant result for all areas indicates that areas which experienced a large increase in H-2B workers saw pay increases that were 1.62% higher, on average, relative to areas that did not experience a large increase in H-2B workers.¹⁹

TABLE 13 EMPLOYMENT REGRESSION RESULTS

2015-2023

Statistic	All Areas	Metropolitan Areas	
[a]	[b]	[c]	
β¹	0.48%	0.79%**	
t-stat.	(1.946)	(3.074)	
Marginal Impact on Domestic Employment ²	2.71	4.92	

Notes:

- One star indicates an estimate with a 95% confidence level, two stars indicate a 99% confidence level, and three stars indicate 99.9% confidence level.
- Due to the difficulties inherent in calculating the marginal impact of a level change in employment on the change in the ratio of H-2B employment to domestic employment, the average impact is calculated and used.

Sources: Estimates are made using regressions analysis of data from the American Community Survey, Office of Foreign Labor Certification disclosure data, and USCIS Employer Datahub data.

TABLE 14 PAY REGRESSION RESULTS

2015-2023

Statistic	All Areas	Metropolitan Areas
[a]	[b]	[c]
β^1	1.62%**	0.8%
t-stat.	(2.686)	(1.249)

Notes:

One star indicates an estimate with a 95% confidence level, two stars indicate a 99% confidence level, and three stars indicate 99.9% confidence level.

Sources: Estimates are made using regressions analysis of data from the American Community Survey, Office of Foreign Labor Certification disclosure data, and USCIS Employer Datahub data.

¹⁹ Appendix table A3 shows sensitivity results using wage data from the CES.

The relationships shown in Table 13 and Table 14 for all U.S. workers in each area can be separated into the effects on relatively more educated and relatively less educated workers in each area. The empirical results presented in Table 15 show that the primary impact of a large increase in H-2B workers is a significant increase in the employment of relatively more educated workers. For regressions estimated for both metropolitan areas and all areas, there were positive and significant increases to the wages and employment opportunities of relatively more educated workers. This evidence supports the hypothesis that relatively more educated workers are complementary with seasonal H-2B workers. If the H-2B visa program enables businesses to more efficiently adjust to periods of peak demand for their products and services, this appears to benefit more highly educated workers within these businesses and throughout the area. Areas that experienced a large increase in H-2B visa workers saw employment growth for relatively more experienced workers that was almost 1 percentage point more than in other areas. These empirical estimates translate to approximately 3.5 to 4 additional more highly educated FTE domestic workers for each additional H-2B worker. In areas that saw large increases in H-2B workers the average pay of relatively more educated workers increased by between 1.5% and 2% more than in other areas.

TABLE 15 SKILL-BASED REGRESSION RESULTS

2015-2023

		All Areas		Metropolitan Areas	
Outcome Variable	Statistic	High-Skilled	Low-Skilled	High-Skilled	Low-Skilled
[a]	[b]	[c]	[d]	[e]	[f]
	β^1	0.91%*	-0.45%	0.93%*	0.33%
Employment	t-stat.	(2.294)	(-0.713)	(2.278)	(0.477)
Employment	Marginal Impact on Domestic Employment	3.50	-0.79	4.08	0.61
Pay	β^1	2.03%**	0.81%	1.46%*	-0.34%
	t-stat.	(3.017)	(1.157)	(2.039)	(-0.451)

Notes:

Sources: Estimates are made using regressions analysis of data from the American Community Survey, Office of Foreign Labor Certification disclosure data, and USCIS Employer Datahub data.

One star indicates an estimate with a 95% confidence level, two stars indicate a 99% confidence level, and three stars indicate 99.9% confidence level.

Due to the difficulties inherent in calculating the marginal impact of a level change in employment on change in the ratio of H-2B employment, the average impact is calculated and used.

In contrast, no significant relationship is found for the pay or employment opportunities of relatively less educated workers, either in metropolitan areas or across all areas. This is consistent with the view that while H-2B workers are substitutes for relatively less educated U.S. workers, H-2B workers tend to be hired for jobs in areas facing labor shortages during peak seasons. Given that no negative and significant empirical relationship is found for relatively less educated workers, this provides strong evidence that H-2B workers may be hired by employers to address seasonal labor shortages that U.S. workers cannot. The empirical evidence presented in Tables 13-15 challenge the view that an increase in the number of H-2B workers in an area will have a negative impact on U.S. workers in the area.

H-2B PREVAILING WAGES ARE HIGHER THAN MARKET WAGES

As explained above, the OEWS survey is used to set H-2B prevailing wages. The prevailing wage for an H-2B visa application equals the most recent OEWS estimate of the mean wage for the detailed occupation and area in which the work will be conducted. The prevailing wage is an effective minimum wage for H-2B workers and domestic workers in corresponding employment. The supposed purpose of the H-2B prevailing wage is to limit the possible adverse effects of the H-2B visa program on the wages and employment opportunities of domestic workers performing similar work. However, as explained above the cap on H-2B visas is so small relative to the size of the domestic workforce that it is unlikely that a minimum wage for H-2B visa workers equal to the applicable local, state, or federal minimum wage could depress the wages of domestic workers in comparable jobs. Furthermore, the bureaucratic burden of the application process makes it unlikely that H-2B employers would turn to the program except in situations where they face no other alternative.

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²⁰ This is true when the OEWS reports a mean wage at this level of geographic disaggregation. There are cases where the OEWS does not provide such an estimate at which point the Department of Labor uses the mean of a wider geographic aggregation, such as the state-wide mean, for the prevailing wage.

Prevailing wages for H-2B workers are largely unnecessary because of the relatively low cap on the number of H-2B visas issued each year. By contrast, inaccurately high prevailing wage rates in some areas for some occupations will deter the use of H-2B visas for those jobs. In this section we explain why OEWS-based prevailing wages are typically higher than the market wage for the seasonal jobs held by H-2B workers, and why the methods used to generate estimates of mean wages by occupation and area in the OEWS contain a substantial amount of statistical noise. The current system of inaccurate minimum wages for H-2B workers harms the businesses that rely on the program to address seasonal labor shortages, reduces the efficiency of these businesses, and indirectly harms U.S. workers who are complementary to seasonal guest workers.

The methods used to generate prevailing wages for thousands of detailed occupation and area combinations from OEWS data are flawed because: (i) the mean wage for an occupation and area is typically more than the wages earned by more than half of the workers in the jobs being surveyed and therefore does not represent the market wage for seasonal or temporary work, and (ii) prevailing wage rates differ across areas and occupations in ways that are inconsistent with a common set of area-specific or occupation-specific pay differentials that are used in the federal pay system and pay systems of large organizations. This causes percentage changes in prevailing wage rates from one year to the next to vary widely across occupations and areas and makes it more difficult for businesses to forecast changes in their labor costs attributable to seasonal workers.

The purpose of the OEWS survey, whose results were first published in 1997, is to generate annual employment and wage estimates by labor market area and occupation. We calculate that the OEWS receives information from about 2% of the establishments in the U.S.²¹

There are 522 areas delineated in the 2023 survey and wages are surveyed for 831 detailed Standard Occupation Codes. In 2023 the OEWS survey reported estimates of average wages for 173,675 different

²¹ The OEWS is distributed to about 180,000 to 190,000 establishments each May and November. 65% of establishments responded to the most recent OEWS survey, and the Quarterly Census of Employment and Wages indicates there are about 11.5 million establishments in the U.S.

combinations of detailed occupation and areas.²² These 2023 survey results were used by the OFLC to set H-2B prevailing wages effective July 1, 2024.

The OEWS reports considerable wage variation across workers in the same detailed occupation and area for the jobs typically held by H-2B workers. This suggests that productivity differences between workers account for some of the differences in estimated mean wages across areas and occupations. The wide variation in wage rates across occupations and areas in the OEWS survey, even for common H-2B jobs, does not simply represent different labor market conditions across areas and occupations, holding constant worker skills. Higher average wages in some areas for a given occupation indicates that they are relatively more skilled and experienced workers in this occupation and area. For example, a higher mean wage for landscaping workers in an area reflects, in part, a higher proportion of skilled and experienced landscaping workers in the area who earn higher wage rates because they are more productive. It makes little economic sense to mandate higher prevailing wages for seasonal landscaping workers in this area simply because the area contains relatively more skilled and experienced landscaping workers than other areas.

The wages earned by workers at the upper percentiles of the wage distribution are typically much higher than the wages earned by entry-level workers regardless of occupation. For landscaping workers, the most common H-2B job, in the average area workers at the 90th percentile of the pay distribution earn 75.6% more than workers at the 10th percentile of the distribution. For maids and housekeeping cleaners, the second most common H-2B job, workers at the 90th percentile of the distribution earn 50.0% more, on average (across areas), than workers at the 10th percentile of the distribution.²³ While the OEWS survey reports no information about the skills or experiences of the workers being surveyed, much of the reason for the pay dispersion reported in the OEWS is because more productive and experienced workers earn more than less productive and experienced workers even in H-2B jobs. For landscaping workers and housekeeping

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 $^{^{22}}$ For almost all these area-occupation combinations, the OEWS also reports the 10th, 25th, 50th, 75th and 90th percentiles of the wage distribution

²³ In the 2023 survey the OEWS reported mean wages and percentiles of the wage distributions for 522 areas for landscaping and groundskeeping workers and for 521 areas for maids and housekeeping cleaners.

cleaners, and for other common H-2B jobs, wage dispersion within the same area and occupation indicates substantial differences in the skills and experiences of workers within the same area and occupation. The substantial wage dispersion reported in the OEWS casts doubt on the use of a mean wage as the single prevailing wage for seasonal jobs.²⁴

The wage distribution within an occupation and area tends to be skewed to the right, so that the mean wage is generally higher than the wage at the 50th percentile (median) of the distribution. For example, the mean wage exceeds the median wage in 84% of areas for landscaping workers and in 85% of areas for housekeeping cleaners. Using the distribution of wages by occupation and area reported in the OEWS, we also find that in the average area the mean wage for landscaping workers is higher than the wages earned by 55% of landscaping workers in the same area and the mean wage for housekeeping cleaners is higher than the wages earned by 57% of housekeeping cleaners in the same occupation and area.

Together these calculations show that for landscaping workers, housekeeping cleaners, and other common H-2B occupations, the effective minimum wage for H-2B workers likely exceeds the market wage rate for the seasonal jobs that they will hold. The pay for seasonal and temporary jobs is generally expected to be lower than the median pay in the relevant occupation and area. In contrast, the effective minimum wage for H-2B workers is higher than the wages earned by more than half of all employees in the same occupation and area.

PAY DIFFERENCES ACROSS OCCUPATIONS CAN VARY SUBSTANTIALLY ACROSS AREAS IN THE OEWS

Because the OEWS estimates different average wage rates across each area-occupation combination, the wage of one occupation relative to another occupation can differ substantially across labor

²⁴ For the H-1B visa program the DOL recognizes that there are skill and experience differences for workers in, for example, IT jobs and sets four levels of prevailing wages based on different percentiles of the wage distribution within an area and occupation because of the absence of information about workers' education and experience.

market areas. This is in stark contrast to pay systems such as the Federal General Pay Schedule in which the percentage difference between level one of GS-10 and the level one of a GS-11 position is the same in all areas in the U.S.²⁵ Below we present two examples of the substantial variation in relative wage rates across areas in the 2023 OEWS.

In addition to landscaping workers and housekeeping cleaners, construction laborers and fast food and counter workers are common H-2B jobs and the OEWS reports mean wages for these jobs in all 522 areas. On average across all areas, housekeeping cleaners are paid 11.72% more than fast food and counter workers. However, 10% of workers in these jobs are in areas where the pay differential is 4.87% or less and another 10% are in locations where the pay differential is at least 24.15%. Similarly, construction laborers earn 23.83% more, on average, than landscaping workers. In addition, 10% of workers in these jobs are in areas where the pay differential is 7.93% or less and another 10% are in locations where the pay differential is at least 49.98%. OEWS mean wages, which are the H-2B prevailing wages, are characterized by widely different pay differentials between occupations depending on the local area. Pay ratios between the same two occupations, that vary widely across areas, are inconsistent with the pay systems used by large institutions such as the federal government.

In addition, the OEWS methodology for determining the prevailing wages for H-2B workers does not result in a common area pay differential, as there is in the Federal General Schedule pay system and other pay systems used by large organizations. For example, in the 2023 survey we consider the top 30 H-2B visa occupations and three smaller geographic areas: Enid, OK, Lewiston, ID-WA, and Midland MI. H-2B visa requests in these three areas are higher relative to the size of their relatively less educated workforce than in other metro areas. These areas illustrate that there is no common area-specific pay differential, but instead the pay differential between two areas depends on the specific occupation in question. For example, for the same common H-2B occupation the prevailing wage (OEWS average wage):

²⁵ https://www.opm.gov/policy-data-oversight/pay-leave/pay-systems/general-schedule/

- in Lewiston ranges from 15.09% to 64.54% higher than in Enid, depending on the H-2B occupation.
- in Midland ranges from 4.77% to 82.46% higher than in Enid, depending on the H-2B occupation.
- in Midland ranges from 8.97% below the average wage in Lewiston to 10.89% above the average wage in Lewiston, depending on the H-2B occupation.

The OEWS wage data results in widely varying area pay differentials for H-2B workers depending on the occupation being considered. Some of the reasons why the pay differential between H-2B jobs in Midland and Enid can range from 4.77% to 82.46%, depending on the detailed occupation, are differences in the skills and experiences of the workers being compared across areas. There is no economic rationale for such a wide range of area pay differentials among the seasonal and temporary jobs for which H-2B workers are hired.

The wide range of area pay differentials is in stark contrast with, for example, the federal pay system. The federal system relies on common locality pay factors, regardless of occupation, to adjust pay grades for employees performing the same job in different geographic areas. For example, based on the most recent locality pay adjustments, federal employees in the New York City metro area receive a 37.95% locality adjustment, regardless of their occupation, and in Pittsburgh the corresponding adjustment is 21.03% for all occupations.

YEAR TO YEAR CHANGES IN PREVAILING WAGES CAN VARY WIDELY

The method used to calculate prevailing wages that are specific to a combination of areas and occupations in the OEWS leads to substantially different wage changes from one year to the next among common H-2B occupations. For example, we examined the prevailing wages for landscaping workers in 521 areas and for housekeeping cleaners in 519 areas, for prevailing wages effective July 1, 2024, to the corresponding prevailing wages for the same occupations and areas effective July 1, 2023.

Our comparison of prevailing wages (across areas) for the two most common H-2B occupations indicates the average wage change for landscaping workers was 6.32% and the average wage change for housekeeping cleaners was 7.00%. There was also substantial variation in wage changes across areas within each occupation. The percentage wage change among landscaping workers was less than 2.79% in one out of ten areas, and more than 9.72% in another one out of ten areas. The percentage wage change among housekeeping cleaners was less than 3.70% in one out of ten areas, and more than 10.02% in another one out of ten areas.

In addition, a higher average percentage wage increase for landscaping workers in an area need not correspond to a higher wage increase for housekeeping cleaners in the same area. In one out of 10 areas the percentage wage change for landscaping workers was at least 1.77 times higher than the percentage increase for housekeeping cleaners. At the other extreme in another one out of 10 areas the percentage wage change for housekeeping cleaners was at least 2.72 times higher than the percentage increase for landscaping workers. Finally, in more than half of areas the difference in percentage wage changes for these two common H-2B occupations within the same area was at least two percentage points and in more than one quarter of areas the difference in percentage wage changes is at least four percentage points. These substantially different year-over-year percentage changes in prevailing wages in the same area, for seasonal jobs that involve largely manual labor, are again inconsistent with the federal pay system and other systems used by large organizations. The lack of consistency in annual percentage changes in H-2B prevailing wages makes it more difficult for businesses to forecast and anticipate their seasonal labor costs.

TABLE A1 AVERAGE HOURLY RATE¹ FULL TIME WORKERS IN PRIVATE SECTOR

2015-2020 TO 2022-2024

Skill Level	Pre-Covid Period ²	Post-Covid Period ³	Average Share of Popu Aged 25-67	lation
[a]	[b]	[c]	[d]	
All	\$24.96	\$32.09		
High Skill	\$28.03	\$35.97		64%
Low Skill	\$18.70	\$23.49		36%

Notes:

Sources:

ACS 1-year Files 2015-2023

TABLE A2 DISTRIBUTION OF % CHANGE IN HOURLY PAY ACROSS STATISTICAL AREAS FULL TIME WORKERS IN PRIVATE SECTOR

2015-2020 TO 2022-2024

Skill Level	Mean 1	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile
[a]	[b]	[c]	[d]	[e]	[f]	[g]
All	28.4%	17.7%	22.3%	27.6%	34.0%	40.3%
High Skill	28.3%	15.3%	21.5%	27.3%	34.3%	42.1%
Low Skill	25.8%	13.0%	18.8%	25.5%	31.8%	39.6%

Notes:

Sources:

ACS 1-year Files 2015-2023

¹ Unweighted average across all statistical areas

² 2015-2020

^{3 2022-2024}

 $^{^{1}\,}$ Unweighted average across all statistical areas

TABLE A3 EMPLOYMENT REGRESSION RESULTS USING CPS DATA

2015-2023

Statistic	Employment	Pay	
[a]	[b]	[c]	
β^1	0.63%	1.84%**	
t-stat.	(0.754)	(2.63)	
Marginal Impact on Domestic Employment ²	0.00		

Notes:

- One star indicates an estimate with a 95% confidence level, two stars indicate a 99% confidence level, and three stars indicate 99.9% confidence level.
- Due to the difficulties inherent in calculating the marginal impact of a level change in employment on the change in the ratio of H-2B employment to domestic employment, the average impact is calculated and used.

Sources: Estimates are made using regressions analysis of data from the Current Population Survey, Office of Foreign Labor Certification disclosure data, and USCIS Employer Datahub data.