



## Research

# The Economic Value of Work Permits for H-4 Visa Holders

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## Executive Summary

- In 2015, the Obama Administration granted employment authorization to select H-4 visa holders, who are the spouses of high-skilled H-1B workers, yet the Trump Administration is considering a regulation to rescind this authorization.
- This analysis, using American Community Survey data, estimates that H-4 workers are more highly educated and have higher earning on average than the overall U.S. working population, and that they are concentrated in software developer occupations and in the professional, scientific, and technical services industries.
- Current H-4 workers contribute an estimated \$12.9 billion to the U.S. economy each year, and if every eligible H-4 visa holder were to obtain employment authorization, their economic contributions could increase to roughly \$41 billion per year.

## Introduction

Since taking office, President Trump has sought to overhaul the U.S. immigration system. The Trump Administration has increased the [enforcement of immigration laws](#) for both criminal and noncriminal immigrants, directly reduced [humanitarian immigration](#), proposed [decreases to family-based immigration](#), and made [regulatory changes](#) to discourage immigrant employment. One such regulatory change is a [proposal](#) by the Department of Homeland Security (DHS) to take away work authorization from the spouses of H-1B visa holders. This paper aims to estimate the impacts of this policy change and how it could affect the U.S. economy.

## Background

A draft proposed rule is currently [under review](#) at OIRA that could rescind an Obama-era policy giving employment authorization to the spouses of certain H-1B visa holders. DHS cited this proposal as a part of the president's [Buy American, Hire American](#) executive order, which called for reforms to current employment-based immigration programs to promote the employment of U.S.-born workers.

H-1B visas are employer-sponsored visas that enable qualified foreign workers with at least a bachelor's degree to work in the United States for three to six years. The information technology industry—businesses such as IBM, Google, and Microsoft—particularly uses them. The H-1B program has [multiple economic benefits](#), including expanding the pool of high-skilled labor available to U.S. employers, offsetting growing labor shortages, generating new economic activity and productivity gains, and fueling technological innovation.

H-4 derivative visas are available to the spouses and minor children of H-1B workers. They allow family members to live in the United States for the duration of time that their spouse or parent holds an H-1B visa. Generally, H-1B workers and their families can only remain in the United States for six years, but their stay may

be extended by either 1- or 3- year increments if the H-1B worker is in process of becoming a lawful permanent resident (LPR).

H-4 derivative visas are also available to the families of both H-2A and H-2B visa holders. These are low-skilled temporary workers that come to the United States on a seasonal basis. The H-2A visa is specifically for seasonal agricultural laborers, while H-2B visas are reserved for other low-skilled laborers working in industries such as tourism, construction, and landscaping.

Before 2015, H-4 spouses were legally prohibited from working in the United States. In 2015, however, the Obama Administration passed a rule granting employment authorization to the spouses of H-1B workers in the process of obtaining a green card. Since then, [over 90,000 H-4 visa holders](#) have entered the labor force. The Trump Administration's proposal would reverse this rule, taking employment authorization away from these and other potentially eligible spouses of H-1B immigrants.

### **Identifying the H-4 Population**

There is no established method for identifying the population of H-4 workers that this policy change would affect, namely the employed spouses of H-1B workers who are in the process of obtaining legal permanent residence. This analysis applies data from the 2017 American Community Survey (ACS), however, to estimate this population and, by extension, its economic output. In turn, this study estimates the economic loss the United States can expect from rescinding H-4 employment authorization.

For the purposes of this paper, "H-4 workers" will refer specifically to the employed spouses of H-1B workers currently in the process of becoming legal permanent residents. This category does not include the spouses of either H-2A or H-2B visa holders, or H-1B workers who are not pursuing permanent legal status.

H-4 workers have several specific characteristics that can be used to identify them. While the ACS does not ask questions about visa status, it does ask about citizenship, and H-4 workers are non-citizens. They are also married to H-1B workers, who are non-citizens with at least a bachelor's degree. Furthermore, H-1B is a temporary worker visa. These workers (and by association, their H-4 spouses) can generally only retain their status as an H-1B-visa holder for three to six years. After that, they must either obtain a different visa, such as an employment-based green card (allowing their spouses to obtain a family-based green card) or leave the country. Therefore, the sample was further restricted to those who entered the United States no earlier than 2011. [i] Finally, the identified H-4 visa holders are currently employed.

In the ACS, the "reference person" is usually the individual in whose name the home is owned or rented. In reality, this reference person may be anyone who identifies themselves as "person 1" on the survey questionnaire. This ambiguity creates a methodological issue in which it is impossible to identify whether the reference person in a household is an H-1B visa holder or their H-4 dependent spouse. Data on the [gender of H-4 workers](#), however, indicates that the vast majority are female. Given the breakdown of individuals identified in the ACS, the best way to approach the data is to classify an H-1B recipient as the reference person and an H-4 visa holder as the spouse. By using this methodology, 81 percent of identified H-1B visa holders are male and over 72 percent of identified H-4 visa holders are female. This figure for female visa holders is lower than the true proportion of female H-4 visa holders, but it is the best approximation available.

Using these criteria and the ACS national population weight, this analysis identified approximately 150,000 individuals that could possibly be H-4 workers in 2017. The true number of H-4 workers in that year was not

this high: from the time of the Obama Administration’s original rule in 2015 to the end of 2017, USCIS approved a total of 90,946 applications for H-4 work authorization. The overestimation may be due to several factors.

First, the ACS does not include a question identifying legal permanent residence, only citizenship. This study may therefore be classifying individuals with permanent green cards as either H-1B or H-4 recipients. It may also be capturing individuals with temporary worker visas other than H-4, such as H-1B visa holders married to other H-1B visa holders. Finally, and the most likely reason, there is no way to determine which individuals on temporary visas are currently in the process of becoming legal permanent residents. This analysis may therefore be including individuals not in the process of obtaining green cards and thus not qualified for work authorization.

Regardless of whether the criteria utilized here captures individuals that will not be directly impacted by the rule, namely those already with green cards or not in the process of becoming legal permanent residents, this analysis still sheds light on the characteristics of the target population. Generally speaking, foreign-born individuals with the same education levels tend to have similar labor market characteristics. The accuracy of this analysis can therefore be shown by comparing select findings of this study to what real-world data we have.

Table 1 below shows that the education levels of H-1B recipients identified by this analysis closely mirrors actual education data for H-1B workers. In the absence of reliable data on the H-4 working population, it stands to reason that the spouses of these individuals would also have similar characteristics to true H-4 spouses.

*Table 1: Educational Distribution of H-1B Workers, 2017*<sup>[ii]</sup>

| Education Level     | ACS Estimates (Percent) | Actual Distribution (Percent) |
|---------------------|-------------------------|-------------------------------|
| Bachelor’s Degree   | 48                      | 44                            |
| Master’s Degree     | 39                      | 43                            |
| Doctorate Degree    | 6                       | 8                             |
| Professional Degree | 8                       | 4                             |

## **Characteristics of the H-4 Labor Force**

### *Education*

To learn more about the H-4 working population, it is useful to identify their labor market characteristics. Education is one of the most important of these indicators. Based on the criteria outlined above, approximately 75 percent of identified H-4 visa recipients hold either a bachelor’s or master’s degree, with the remaining 25 percent split fairly evenly between holding more than a master’s degree and holding less than a bachelor’s degree. The full educational distribution of H-4 workers is outlined in Table 2, below.

Table 2: Educational Distribution of H-4 Workers, 2017<sup>[iii]</sup>

| Education Level     | ACS Estimates (Percent) |
|---------------------|-------------------------|
| High School or Less | 8                       |
| Some College        | 5                       |
| Bachelor's Degree   | 41                      |
| Master's Degree     | 34                      |
| Doctorate Degree    | 6                       |
| Professional Degree | 7                       |

Compared to the overall U.S. working population, H-4 workers are more educated on average. ACS estimates indicate that approximately 65 percent of employed workers in the United States hold less than a bachelor's degree, 21 percent hold a bachelor's degree, 9 percent hold a master's degree, and 4 percent hold more than a master's degree.

### *Earnings*

The earnings of H-4 workers are roughly in line with the earnings of the overall population. Including both wages or salaries and self-employment income, the mean earnings for H-4 workers in 2017 was \$57,077 and the median earnings was \$35,000. Among the entire working U.S. population, these figures were \$51,812 and \$36,000, respectively.

### *Occupations*

The individuals identified as potential H-4 workers in this analysis work in a variety of occupations, with by far the most common occupation being software developer. After that, the most common occupations (as defined by the ACS) consist of miscellaneous managers; postsecondary teachers; retail salespersons; physicians and surgeons; nursing, psychiatric, and home health aides; and elementary and middle school teachers.

### *Industries*

The most vital labor market characteristic to this analysis is the industries of employment for H-4 workers. By identifying a worker's industry of employment, it is possible to estimate that individual's contribution to gross domestic product (GDP). This calculation assumes that each worker in an industry has generally the same productivity level and contributes roughly the same amount to the economy.

Table 3 below lists the estimated industries of employment for H-4 workers identified by this analysis. H-4

workers exist across all industries, with the greatest proportion in professional, scientific, and technical services. The next most popular industry is health care and social assistance, followed by educational services.

*Table 3: Estimated Distribution of H-4 workers, by Industry*

| Industry   | Percentage of H-4 Workers |
|--|---------------------------|
| Professional, Scientific, and Technical Services     | 21.2                      |
| Health Care and Social Assistance                    | 13.4                      |
| Educational Services                                 | 11.4                      |
| Manufacturing  | 9.6                       |
| Retail trade   | 8.5                       |
| Finance and Insurance                                | 7.1                       |
| Accommodation and Food Services                      | 6.5                       |
| Administrative Support and Waste Management Services | 3.5                       |
| Information  | 3.4                       |
| Transportation and Warehousing                       | 3.2                       |
| Other Services, Except Public Administration         | 3.0                       |
| Wholesale trade                                      | 2.2                       |
| Construction   | 1.6                       |
| Public Administration                                | 1.6                       |
| Arts, Entertainment, and Recreation                  | 1.4                       |

|   |     |
|---|-----|
| Real Estate and Rental and Leasing          | 1.3 |
| Mining, Quarrying, Oil and Gas Extraction   | 0.5 |
| Utilities                                   | 0.3 |
| Management of Companies and Enterprises     | 0.1 |
| Agriculture, Forestry, Fishing, and Hunting | 0.1 |

In the following section, the average economic outputs of these industries are used to estimate the overall economic contributions of H-4 workers.

### Estimating the Economic Contributions of H-4 Workers

H-4 workers represented 0.06 percent of the overall labor force in 2017. This number is not large, but, as a working population of over 90,000, their economic contributions must be greater than zero. Using the industry breakdown estimated above and data on the average economic contributions of workers in each industry taken from the Bureau of Economic Analysis, the following analysis estimates the economic impact of H-4 workers.

The average economic contribution per worker in each industry was found by dividing each industry's [value added](#) (contribution to GDP) by the [number of workers](#) (full-time and part-time) in that industry. By weighting full-time and part-time workers equally, this analysis likely underestimates the average economic contributions of H-4 workers and therefore their total economic output as well.<sup>[iv]</sup>

This analysis finds that H-4 workers contribute nearly \$13 billion to the U.S. economy each year. The largest contributions come from individuals in the professional, scientific, or technical services industry, in which this analysis estimates over 20 percent of current H-4 workers are employed. Individuals in the manufacturing and finance and insurance industries also make relatively high contributions to the economy, both due to the large number of H-4 workers and the relatively high average output that can be attributed to workers in those fields. The following table displays these estimates in full, broken down by industry.

*Table 4: Current Economic Output of H-4 Workers by Industry, 2017*

| Industry                           | Value Added Per Worker | Number of H-4 Workers | Contributions to GDP (Millions) |
|------------------------------------|------------------------|-----------------------|---------------------------------|
| <b>Total</b>                       | <b>N/A</b>             | <b>90,946</b>         | <b>\$12,869</b>                 |
| Industry Breakdown                 |                        |                       |                                 |
| Real Estate and Rental and Leasing | \$1,167,207            | 1,173                 | \$1,369                         |

|  |           |        |         |
|--|-----------|--------|---------|
| Utilities  | \$556,058 | 255    | \$142   |
| Mining, Quarrying, Oil and Gas Extraction            | \$432,528 | 418    | \$181   |
| Information  | \$372,624 | 3,065  | \$1,142 |
| Finance and Insurance                                | \$233,610 | 6,494  | \$1,517 |
| Wholesale trade                                      | \$197,793 | 2,028  | \$401   |
| Manufacturing  | \$175,068 | 8,731  | \$1,528 |
| Management of Companies and Enterprises              | \$161,805 | 127    | \$21    |
| Professional, Scientific, and Technical Services     | \$159,674 | 19,235 | \$3,071 |
| Agriculture, Forestry, Fishing, and Hunting          | \$119,576 | 118    | \$14    |
| Transportation and Warehousing                       | \$117,035 | 2,865  | \$335   |
| Construction   | \$109,963 | 1,492  | \$164   |
| Public Administration                                | \$99,364  | 1,455  | \$145   |
| Arts, Entertainment, and Recreation                  | \$91,301  | 1,301  | \$119   |
| Health Care and Social Assistance                    | \$74,219  | 12,187 | \$904   |
| Retail trade   | \$67,986  | 7,730  | \$526   |
| Educational Services                                 | \$67,177  | 10,359 | \$696   |
| Administrative Support and Waste Management Services | \$66,361  | 3,192  | \$212   |
| Other Services, Except Public Administration         | \$59,248  | 2,756  | \$163   |

|                                 |          |       |       |
|---------------------------------|----------|-------|-------|
| Accommodation and Food Services | \$43,122 | 5,948 | \$256 |
|---------------------------------|----------|-------|-------|

In addition to estimating the economic contributions of current H-4 workers, it is also useful to identify their potential economic contributions if every eligible individual were to obtain work authorization. After the Obama Administration issued the rule granting spouses of H-1B workers employment authorization, DHS estimated that 179,600 H-4 dependent spouses would be eligible to apply in the first year of implementation. After that, up to 55,000 new H-4 dependent spouses would become eligible to apply each year. These estimates suggest that, from 2015 to 2017, approximately 289,600 H-4 spouses would be eligible to obtain work authorization.

The following table displays the potential economic output if every eligible individual with a H-4 visa were to obtain work authorization. Assuming the distribution of H-4 workers across industries would not change, this analysis estimates that H-4 workers have the potential to contribute over \$40 billion to the economy each year.

*Table 5: Potential Economic Output of H-4 Workers by Industry, 2017*

| Industry   | Value Added Per Worker | Number of H-4 Workers | Contributions to GDP (Millions) |
|--|------------------------|-----------------------|---------------------------------|
| <b>Total</b>                                     | <b>N/A</b>             | <b>289,600</b>        | <b>\$40,979</b>                 |
| Industry Breakdown                               |                        |                       |                                 |
| Real Estate and Rental and Leasing               | \$1,167,207            | 3,736                 | \$4,360                         |
| Utilities  | \$556,058              | 840                   | \$467                           |
| Mining, Quarrying, Oil and Gas Extraction        | \$432,528              | 1,332                 | \$576                           |
| Information                                      | \$372,624              | 9,760                 | \$3,637                         |
| Finance and Insurance                            | \$233,610              | 20,677                | \$4,830                         |
| Wholesale trade                                  | \$197,793              | 6,458                 | \$1,277                         |
| Manufacturing                                    | \$175,068              | 27,831                | \$4,872                         |
| Management of Companies and Enterprises          | \$161,805              | 405                   | \$66                            |
| Professional, Scientific, and Technical Services | \$159,674              | 61,250                | \$9,780                         |
| Agriculture, Forestry, Fishing, and Hunting      | \$119,576              | 376                   | \$45                            |

|  |           |        |         |
|--|-----------|--------|---------|
| Transportation and Warehousing                       | \$117,035 | 9,122  | \$1,068 |
| Construction   | \$109,963 | 4,749  | \$522   |
| Public Administration                                | \$99,364  | 4,634  | \$460   |
| Arts, Entertainment, and Recreation                  | \$91,301  | 4,141  | \$378   |
| Health Care and Social Assistance                    | \$74,219  | 38,806 | \$2,880 |
| Retail trade   | \$67,986  | 24,616 | \$1,674 |
| Educational Services                                 | \$67,177  | 32,985 | \$2,216 |
| Administrative Support and Waste Management Services | \$66,361  | 10,165 | \$675   |
| Other Services, Except Public Administration         | \$59,248  | 8,775  | \$520   |
| Accommodation and Food Services                      | \$43,122  | 18,940 | \$817   |

## Conclusion

Allowing the spouses of high-skilled H-1B workers to contribute to the U.S. economy is good policy. By using the ACS to identify labor market characteristics of current H-4 workers, this analysis finds that H-4 visa holders are higher skilled on average than the overall U.S. working population and contribute an estimated \$12.9 billion to GDP each year. The alternative, disallowing a population of individuals already living in the United States the opportunity to work, would have significant negative ramifications. With a current unemployment rate of only [2.2 percent](#) for individuals with a bachelor's degree or higher, it is unlikely that there are enough U.S. workers available to fill the jobs left open. Therefore, it is possible that removing H-4 visa holders from the labor market could reduce current GDP by up to \$13 billion and potential GDP by up to \$41 billion per year.

[\[i\]](#) Restricting the sample to recent nonimmigrants, i.e. individuals that entered the United States within the last six years, is similar to the [methodology employed](#) by Ayoung Kim, Brigitte S. Waldorf, Natasha T. Duncan of Purdue University (August 2017).

[\[ii\]](#) H-1B visa holders identified within the 2017 ACS were those who entered the United States between 2011 and 2017. Therefore, the education data used for comparison only applied to individuals with H-1B petitions approved between the years of 2011 and 2017. Data was taken from [U.S. Citizenship and Immigration Services](#). Totals may not add to 100 due to rounding.

[iii] Totals may not add to 100 due to rounding.

[iv] The likely H-4 workers identified by this analysis are largely full-time workers, with a mean of 38 hours worked per week and a median of 40 hours worked per week.