



The H-1B Visa Program: A Primer on the Program and Its Impact on Jobs, Wages, and the Economy

Foreign workers fill a critical need in the U.S. labor market—particularly in the Science, Technology, Engineering, and Math (STEM) fields. Every year, U.S. employers seeking highly skilled foreign professionals submit their petitions for the pool of H-1B visa numbers for which U.S. Citizenship and Immigration Services (USCIS) controls the allocation.¹ With a low statutory limit of visa numbers available, demand for H-1B visa numbers has outstripped the supply in recent years, and the cap has been reached quickly. Research shows that H-1B workers complement U.S. workers, fill employment gaps in many STEM occupations, and expand job opportunities for all.

This fact sheet provides an overview of the H-1B visa category and petition process, addresses the myths perpetuated about the H-1B visa category, and highlights the key contributions H-1B workers make to the U.S. economy.

Overview of the H-1B Visa Category and the Petition Process

What is the H-1B Visa Category?

The H-1B is a temporary (nonimmigrant) visa category that allows employers to petition for highly educated foreign professionals to work in “specialty occupations” that require at least a bachelor’s degree or the equivalent.² Jobs in fields such as mathematics, engineering, technology, and medical sciences often qualify. Typically, the initial duration of an H-1B visa classification is three years, which may be extended for a maximum of six years.³

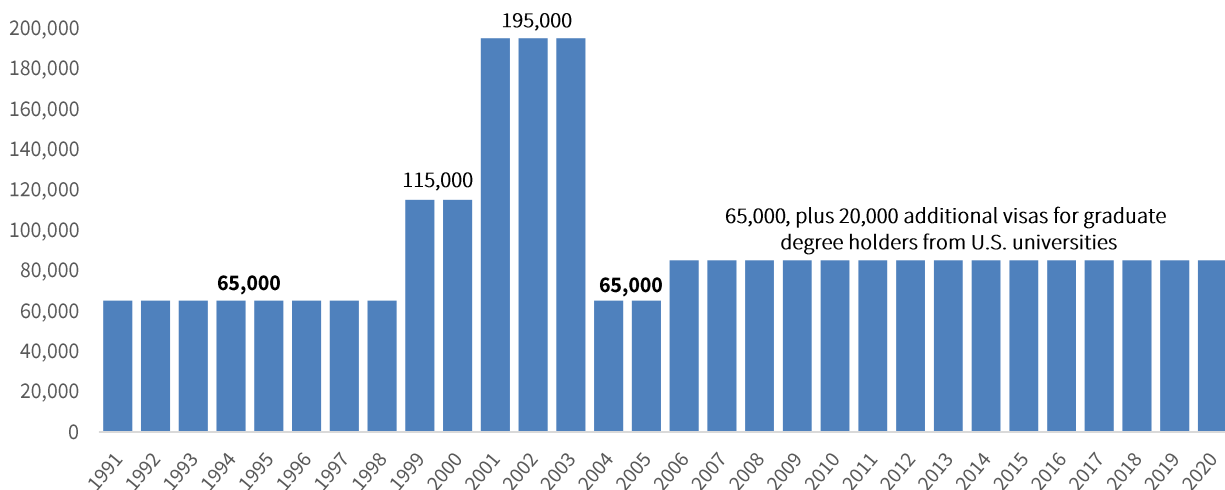
Before the employer can file a petition with USCIS, the employer must take steps to ensure that hiring the foreign worker will not harm U.S. workers.

- Employers first must attest, on a labor condition application (LCA) certified by the Department of Labor (DOL), that employment of the H-1B worker will not adversely affect the wages and working conditions of similarly employed U.S. workers.⁴
- Employers must also provide existing workers with notice of their intention to hire an H-1B worker.⁵

Since the category was created in 1990, Congress has limited the number of H-1Bs made available each year. The current annual statutory cap is 65,000 visas, with 20,000 additional visas for foreign professionals who graduate with a master’s degree or doctorate from a U.S. institution of higher learning (Figure 1).⁶ In recent years,

the limit has been reached well before the end of the fiscal year. In Fiscal Year (FY) 2021, the cap was reached on February 16, 2021.⁷

Figure 1: Annual Cap on H-1B Visas, 1991 to 2020



Source: U.S. Citizenship and Immigration Services.⁸

During the Trump administration, more H-1B petitions were initially being denied. But with a growing number of these denials being overturned, the denial rates decreased substantially during the last half of FY 2020. Denials of new H-1B petitions for initial employment rose from 6 percent in FY 2015 to a high of 24 percent in FY 2018 before dropping to 21 percent in FY 2019 and 13 percent in FY 2020.⁹ Denials of these initial employment petitions were even higher during the first half of FY 2020: 30 percent in the first quarter and 27 percent in the second quarter. However, denial rates dropped to 7 percent in the third quarter and 1.5 percent in the fourth quarter.¹⁰ The denial rate for petitions for continuing employment was 7 percent for FY 2020, down from 12 percent in FY 2019—but both up from just 3 percent in FY 2015.¹¹ But the USCIS Administrative Appeals Office overruled Service Center denials nearly 14 percent of the time in FY 2018 and FY 2019, compared to only 3 percent of the time between FY 2014 and FY 2017.¹² Moreover, a record number of H-1B petitioners challenged denials in federal court during the Trump administration, and a significant number have managed to get the denials reversed.¹³

H-1B Registration Process

Prior to 2020, employers were required to submit full H-1B petitions without knowing whether a visa number would be available, given that demand for visa numbers usually outstrips supply. In March 2020 (for FY 2021, beginning October 1, 2020), USCIS changed to a registration process for employers that occurs before a full petition is required.¹⁴ The purpose of this new process was to reduce the burden on U.S. employers, and the agency, caused by requiring employers to submit complete H-1B petitions and supporting documentation prior to knowing whether a visa number would even be available. Each year, USCIS will announce the next registration period,¹⁵ during which a U.S. employer must register electronically for each foreign national for whom the employer intends to file an H-1B petition.¹⁶

Before USCIS required registration, if the cap was hit during the first five business days, the agency conducted a lottery to determine which employers' petitions for H-1B workers would be processed.¹⁷ From FY 2008 to FY 2020, the annual H-1B cap was reached within the first five business days on eight occasions.¹⁸

Under the new registration process, the U.S. employer must pay a \$10 fee for each registration submitted.¹⁹ The registration includes limited information about the U.S. employer and the foreign national, in contrast to the details USCIS requires when the U.S. employer submits a full H-1B petition.²⁰ While USCIS has not placed any limit on the number of registrations a U.S. employer may file, the employer must attest that it intends to file an H-1B petition on the foreign national's behalf and cannot submit more than one registration per foreign national.²¹

If USCIS receives more registrations than there are visa numbers available, USCIS will run a lottery to determine who can file an H-1B petition.²² USCIS will select registrations for the 65,000 visa numbers first and then for the 20,000 master's exemption visa numbers.²³ USCIS will send notification electronically if it selects a registration.²⁴ USCIS also will give the U.S. employer at least 90 days to file its H-1B petition.²⁵ If those whose registrations are selected do not submit enough petitions to use the available visa numbers, USCIS has the option to make additional selections.²⁶

Understanding the Important Role that H-1B Workers Play in Our Economy

Foreign workers fill a critical need in the U.S. labor market—particularly in the Science, Technology, Engineering, and Math (STEM) fields. Many opponents of the H-1B visa seek to pit native-born workers against their foreign-born colleagues. In reality, workers do not necessarily compete against each other for a fixed number of jobs.

The United States has a dynamic and powerful economy. Foreign-born workers of all types and skills, from every corner of the globe, have joined with native-born workers to build it. Skilled immigrants' contributions to the U.S. economy help create new jobs and new opportunities for economic expansion. Indeed, H-1B workers **positively** impact our economy and the employment opportunities of native-born workers.

The skills that H-1B workers bring with them can be critical in responding to national emergencies. For instance, over the past decade (FY 2010-FY 2019), eight companies that were developing a coronavirus vaccine—Gilead Sciences, Moderna Therapeutics, GlaxoSmithKline, Inovio, Johnson and Johnson Pharmaceuticals, Regeneron, Vir Therapeutics, and Sanofi—received approvals for 3,310 biochemists, biophysicists, chemists, and other scientists through the H-1B program.²⁷ In addition, many doctors on the front lines of the coronavirus pandemic are present on H-1B visas.²⁸

How Do H-1B Visas Impact Wages?

Despite suggestions to the contrary, overwhelming evidence shows that H-1B workers **do not** drive down wages of native-born workers, with some studies showing a positive impact on wages overall.²⁹

- From the creation of the H-1B program in 1990 to 2010, H-1B-driven increases in STEM workers were associated with a significant increase in wages for college-educated, U.S.-born workers in 219 U.S. cities. A

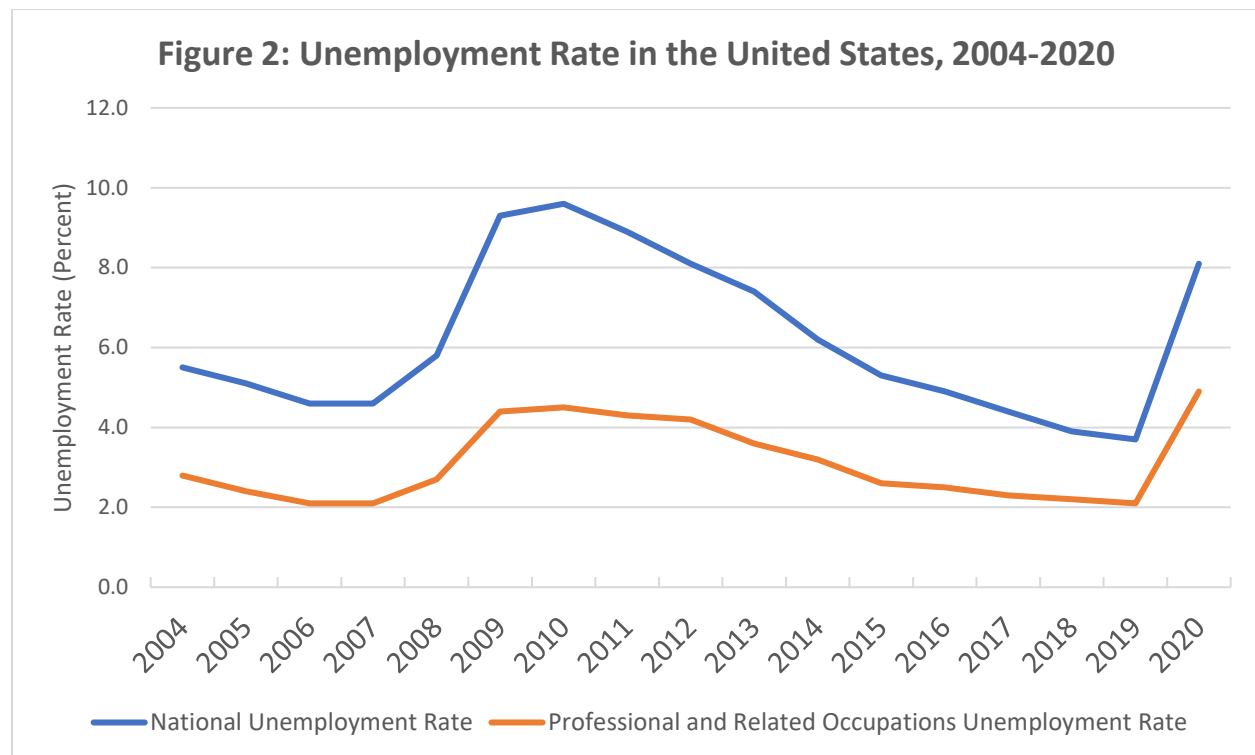
1 percentage point increase in foreign STEM workers' share of a city's total employment was associated with increases in wages of 7 to 8 percentage points paid to both STEM and non-STEM college-educated natives, while non-college educated workers saw an increase of 3 to 4 percentage points.³⁰

- From 2009 to 2011, wage growth for U.S.-born workers with at least a bachelor's degree was nominal, but wage growth for workers in occupations with large numbers of H-1B petitions was substantially higher.³¹ For example, in the Computer Systems Design and Related Services category, there was 5.5 percent wage growth since 1990 and 7 percent wage growth since 2009. In comparison, wage growth across all industries was 0.8 percent since 1990 and 1.6 percent since 2009.³²
- The median salary of H-1B workers (as measured in 2016 dollars) rose from \$69,455 in FY 2007 to \$80,000 in FY 2016. The median salary of all computer and mathematical workers (foreign-born and native-born) grew from \$73,979 to \$75,036 during the same period.³³
- Factors such as gender, marital status, and ethnicity play a much larger role than citizenship or immigration status for wages in the tech and finance industries. A worker's geographic region also accounts for significant differences in wages.³⁴

How Do H-1B Workers Impact U.S. Employment Rates?

Research shows that H-1B workers complement U.S. workers, fill employment gaps in many STEM occupations, and expand job opportunities for all. The United States faces challenges in meeting the growing needs of an expanding knowledge-based innovation economy. Arguments that highly skilled, temporary foreign workers are freezing out native-born workers are rebutted by the best available empirical evidence.³⁵

- Unemployment rates are relatively low for occupations that use large numbers of H-1B visas (Figure 2). For example, many STEM occupations have very low unemployment compared to the overall national unemployment rate.³⁶ These low unemployment rates signal a demand for labor that exceeds the supply. Even during the pandemic, unemployment in STEM industries remained below the national average (see Figure 2).



- Research indicates that an increase in H-1B visas could create an estimated 1.3 million new jobs and add around \$158 billion to gross domestic product in the United States by 2045.³⁸
- Conversely, research shows that the United States has missed out on the opportunity to create new jobs by limiting the number of H-1B visas to 65,000 per year. For example, estimates show that, had the U.S. government not rejected 178,000 H-1B visa petitions in computer-related fields in the 2007 and 2008 visa lotteries, U.S. metropolitan areas could have created as many as 231,224 tech jobs for U.S.-born workers in the two years that followed.³⁹
- One study found that U.S.-based multinational corporations responded to restrictions on H-1B visas (such as rising denial rates) by increasing employment at their existing foreign affiliates and opening new foreign affiliates—particularly in India, China, and Canada.⁴⁰

Are the Economic Benefits of H-1B Visas Limited to Silicon Valley or the Tech Sector?

Simply put, no. H-1B visas bolster innovation in the U.S. economy across America’s heartland and far beyond the technology firms in Silicon Valley. Although much research explores H-1Bs from a national perspective, there is a “geography of demand” across the United States, meaning that demand for workers in particular geographic areas often outweighs the supply of qualified workers in those areas. Moreover, although the use of H-1B visas in the high-tech industry garners substantial public attention, high-skilled immigrants play other crucial roles in the U.S. economy.

- 106 metropolitan areas across the United States had at least 250 requests for H-1B workers in 2010-2011.⁴¹ From FY 2010-2016, more than 1,000 H-1B visas were approved in 57 different metro areas, with the New York metro region and the Dallas metro region having the highest numbers of approvals.⁴² Demand for high-skilled workers is generally higher in metro areas where innovation industries flourish.⁴³
 - For example, H-1B demand was high in places like Columbus, IN; Durham-Chapel Hill, NC; Trenton-Ewing, NJ; Bloomington-Normal, IL; Ann Arbor, MI; Peoria, IL; Boulder, CO; and Fayetteville-Springdale-Rogers, AR.⁴⁴
 - Although the presence of research universities accounts for H-1B demand in some of these places, private industry accounts for the intensity of demand in other areas. HTC Global, Walmart, Merrill Lynch, Educational Testing Service, Caterpillar Inc., Credit Suisse, JPMorgan Chase & Co., Bank of America, Wells Fargo Bank, and the Mayo Clinic have been top H-1B employers.⁴⁵
- Nearly two-thirds of requests for H-1B workers are for STEM occupations. There is also high demand for workers in healthcare, business, finance, and life sciences industries.⁴⁶
- From FY 2010 to FY 2016, the largest numbers of H-1B recipients were in the New York City metropolitan area (247,900 H-1B visa petition approvals, or 29 percent of all H-1B visa petition approvals in the country); followed by Dallas (74,000); Washington, DC (64,800); and Boston (38,300).⁴⁷
 - However, the highest concentration of H-1B workers was in College Station, Texas (32 H-1B approvals per 100 workers). San Jose, California—home of Silicon Valley—was a distant second (two approvals per 100 workers).⁴⁸

Endnotes

1. A U.S. employer may file an H-1B petition at any time, without being subject to the numerical limitations if it is within certain “cap exempt” categories, such as an “institution of higher education” or if the employer is petitioning for an H-1B worker who has already been counted against the numerical limitations within six years of the agency’s approval of the petition the employer files. See 8 U.S.C. §§ 1184(g)(5)(A)-(B), 1184 (g)(7).
2. U.S. Citizenship and Immigration Services, “H-1B Specialty Occupations, DOD Cooperative Research and Development Project Workers and Fashion Models,” updated March 2016, <https://www.uscis.gov/working-united-states/temporary-workers/h-1b-specialty-occupations-dod-cooperative-research-and-development-project-workers-and-fashion-models>.
3. See 8 U.S.C. § 1184(g)(4); 8 C.F.R. §§ 214.2(h)(9)(iii)(A)(1), (h)(13)(iii)(A). Certain H-1B workers who face delays in the green card process are eligible for extensions beyond the six-year maximum. See 8 C.F.R. § 214.2(h)(13)(iii)(D).
4. See 8 U.S.C. § 1182(n); 20 C.F.R. §§ 655.730(c)(2), 655.730(d). American Immigration Council, “Employment-Based Visa Categories in the United States,” September 2016, <http://www.americanimmigrationcouncil.org/research/employment-based-visa-categories-united-states>.
5. See 20 C.F.R. § 655.734.
6. 8 U.S.C. §§ 1184(g)(1)(A)(vii) & (g)(5)(C). The advanced degree must be earned from a U.S. “institution of higher education,” as defined in 20 U.S.C. § 1001(a).
7. U.S. Citizenship and Immigration Services, “USCIS Reaches Fiscal Year 2021 H-1B Cap,” February 16, 2021, <https://www.uscis.gov/news/alerts/uscis-reaches-fiscal-year-2021-h-1b-cap>.
8. For FY 1991 to FY 1998 the limit is 65,000, see 8 U.S.C. § 1184(g)(1)(A)(i); for FY 1999 and FY 2000 the limit is 115,000, see 8 U.S.C. § 1184(g)(1)(A)(ii)-(iii); for FY 2001 to FY 2003 the limit is 195,000, see 8 U.S.C. § 1184(g)(1)(A)(iv)-(vi); for FY 2004 and later the limit is 65,000, see 8 U.S.C. § 1184(g)(1)(A)(vii); for FY 2006 and later, there are an additional 20,000 visas available for foreign professionals who graduate with a master’s degree or doctorate from a U.S. university, see 8 U.S.C. § 1184(g)(5)(C).
9. National Foundation for American Policy, *H-1B Denial Rates For FY 2020 and the Impact of Court Decisions* (Arlington, VA: January 2021), p. 2, <https://nfap.com/wp-content/uploads/2021/01/H-1B-Denial-Rates-For-FY-2020-and-the-Impact-of-Court-Decisions.NFAP-Policy-Brief-January-2021-2.pdf>.
10. National Foundation for American Policy, *H-1B Denial Rates For FY 2020 and the Impact of Court Decisions* (Arlington, VA: January 2021), p. 8, <https://nfap.com/wp-content/uploads/2021/01/H-1B-Denial-Rates-For-FY-2020-and-the-Impact-of-Court-Decisions.NFAP-Policy-Brief-January-2021-2.pdf>.
11. National Foundation for American Policy, *H-1B Denial Rates For FY 2020 and the Impact of Court Decisions* (Arlington, VA: January 2021), p. 10, <https://nfap.com/wp-content/uploads/2021/01/H-1B-Denial-Rates-For-FY-2020-and-the-Impact-of-Court-Decisions.NFAP-Policy-Brief-January-2021-2.pdf>.
12. Sinduja Rangarajan, “Trump Has Built a Wall of Bureaucracy to Keep Out the Very Immigrants He Says He Wants,” *Mother Jones*, December 2, 2019, <https://www.motherjones.com/politics/2019/12/trump-h1b-visa-immigration-restrictions/>.
13. Hun Lee and Stephen Yale-Loehr, “Challenging H-1B Denials in Federal Courts: Trends and Strategies,” ILW.com, December 4, 2019, <http://discuss.ilw.com/articles/articles/392213-article-challenging-h-1b-denials-in-federal-courts-trends-and-strategies-by-by-hun-lee-and-stephen-yale-loehr-1>.
14. See Registration Requirement for Petitioners Seeking to File H-1B Petitions on Behalf of Cap-Subject Aliens, 85 Fed. Reg. 1176, 1176 (Jan. 9, 2020). See also Registration Requirement for Petitioners Seeking to File H-1B Petitions on Behalf of Cap-Subject Aliens, 84 Fed. Reg. 888, 888 (Jan. 31, 2019).
15. USCIS will announce the registration period on its website at least 30 days in advance. 8 C.F.R. § 214.2(h)(8)(iii)(A)(3). USCIS must start the registration period at least 14 calendar days before the date on which H-1B petitions may be filed for the particular fiscal year and accept registrations for at least 14 calendar days. *Id.*
16. 8 C.F.R. § 214.2(h)(8)(iii)(A)(1)-(2).
17. See 8 C.F.R. § 214.2(h)(8)(ii)(B) (2018).
18. USCIS, “USCIS Reaches FY 2008 H-1B Cap,” April 3, 2007, available at <https://www.aila.org/infonet/uscis-announces-h-1b-cap-reached>; USCIS, “USCIS Reaches FY 2009 H-1B Cap,” April 8, 2008, https://www.uscis.gov/sites/default/files/files/article/H-1B_8Apr08.pdf; USCIS, “USCIS Reaches FY 2010 H-1B Cap,” December 22, 2009, <http://www.uscis.gov/archive/archive-news/uscis-reaches-fy-2010-h-1b-cap>; USCIS, “USCIS Reaches FY 2011 H-1B Cap,” January 27, 2011, <http://www.uscis.gov/news/uscis-reaches-fy-2011-h-1b-cap>; USCIS, “USCIS Reaches Fiscal Year 2012 H-1B Cap,” November 23, 2011, <https://www.uscis.gov/news/uscis-reaches-fiscal-year-2012-h-1b-cap>; USCIS, “USCIS Reaches Fiscal Year 2013 H-1B Cap,” June 12, 2012, <https://www.uscis.gov/news/uscis-reaches-fiscal-year-2013-h-1b-cap>; USCIS, “USCIS Reaches FY 2014 H-1B Cap,” April 5, 2013, <http://www.uscis.gov/news/alerts/uscis-reaches-fy-2014-h-1b-cap>; USCIS, “USCIS Reaches FY

- 2015 H-1B Cap,” April 7, 2014, <https://www.uscis.gov/news/uscis-reaches-fy-2015-h-1b-cap>; USCIS, “USCIS Reaches FY 2016 H-1B Cap,” April 7, 2015, <https://www.uscis.gov/news/news-releases/uscis-reaches-fy-2016-h-1b-cap>; USCIS, “USCIS Reaches FY 2017 H-1B Cap,” April 7, 2016, <https://www.uscis.gov/news/news-releases/uscis-reaches-fy-2017-h-1b-cap>; USCIS, “USCIS Reaches FY 2018 H-1B Cap,” April 7, 2017, <https://www.uscis.gov/news/news-releases/uscis-reaches-fy-2018-h-1b-cap>; USCIS, “USCIS Reaches FY 2019 H-1B Cap,” April 6, 2018, <https://www.uscis.gov/news/alerts/uscis-reaches-fy-2019-h-1b-cap>; USCIS, “USCIS Reaches FY 2020 H-1B Regular Cap,” April 5, 2019, <https://www.uscis.gov/news/alerts/uscis-reaches-fy-2020-h-1b-regular-cap>; USCIS, “USCIS Completes the H-1B Cap Random Selection Process for FY 2020 and Reaches the Advanced Degree Exemption Cap,” April 11, 2019, <https://www.uscis.gov/news/alerts/uscis-completes-h-1b-cap-random-selection-process-fy-2020-and-reaches-advanced-degree-exemption-cap>.
19. 8 C.F.R. § 103.7(b)(1)(i)(NNN).
 20. Compare “USCIS H-1B Online Registration for Registrants,” slides 13-19 (Feb. 6, 2020), https://www.uscis.gov/sites/default/files/files/nativedocuments/Overview_of_the_H-1B_Electronic_Registration_Process_-_A_Webinar_for_Registrants.pdf with Form I-129, Petition for a Nonimmigrant Worker, <https://www.uscis.gov/i-129>.
 21. 8 C.F.R. § 214.2(h)(8)(iii)(A)(1) (citing 8 C.F.R. § 103.2(a)(1) (“Every . . . benefit request must be submitted . . . and executed in accordance with the form instructions . . .”)); 84 Fed. Reg. at 906 and “USCIS H-1B Online Registration for Registrants,” slide 26 (Feb. 6, 2020), https://www.uscis.gov/sites/default/files/files/nativedocuments/Overview_of_the_H-1B_Electronic_Registration_Process_-_A_Webinar_for_Registrants.pdf (attestation); 8 C.F.R. § 214.2(h)(8)(iii)(A)(2) (one registration per beneficiary).
 22. 8 C.F.R. §§ 214.2(h)(8)(iii)(A)(5)(ii), (iii)(A)(6)(ii). When USCIS decides it has received enough registrations, it will “notify the public of the final registration date” and then run the lottery. *Id.* If at the end of the announced registration period, USCIS receives fewer registrations than needed, it will notify all U.S. employers with registrations that meet the agency’s requirements (i.e., “properly submitted”) that the agency selected their registrations. 8 C.F.R. §§ 214.2(h)(8)(iii)(A)(5)(i), (iii)(A)(6)(i). USCIS will keep the registration period open, will monitor additional registrations, and if it receives sufficient registrations, announce another final registration date (which could be earlier than the announcement date). *Id.* If necessary, USCIS will hold another lottery of the registrations “properly submitted” on the final registration date. *Id.*
 23. 8 C.F.R. §§ 214.2(h)(8)(iii)(A)(5)(ii), (iii)(A)(6)(ii).
 24. 8 C.F.R. § 214.2(h)(8)(iii)(B).
 25. 8 C.F.R. §§ 214.2(h)(8)(iii)(C), (iii)(D)(1)-(2). For petitions subject to the numerical limitations, the U.S. employer may file for an H-1B worker only if USCIS selected the registration for that worker and only within the filing period USCIS specifies in the selection notice. 8 C.F.R. §§ 214.2(h)(8)(iii)(A)(1), (iii)(D)(1).
 26. USCIS will keep the other registrations in “reserve” for the remainder of the FY and may select additional registrations as needed to allocate all of the H-1B visa numbers. 8 C.F.R. § 214.2(h)(8)(iii)(A)(7). If USCIS selects all of the “reserve” registrations but has not used all of the H-1B visa numbers allocated, the agency will announce on its website a reopened registration period. *Id.* USCIS will monitor the new registrations, and if it receives sufficient registrations, announce another final registration date (which could be earlier than the announcement date). *Id.* If necessary, USCIS will hold another lottery of the registrations “properly submitted” on the final registration date. *Id.*
 27. David J. Bier, “Skilled Immigrants Searching for Coronavirus Cures at U.S. Companies” (Washington, DC: Cato Institute, March 12, 2020), <https://www.cato.org/blog/skilled-immigrants-searching-coronavirus-cures-us-companies>.
 28. Benji K. Mathews and Manpreet Malik, “Immigrant Physicians Fill a Critical Need in COVID-19 Response,” August 2020, *Journal of Hospital Medicine*, <https://www.journalofhospitalmedicine.com/jhospmed/article/225380/hospital-medicine/immigrant-physicians-fill-critical-need-covid-19-response>.
 29. Nicole Kreisberg, “H-1B Visas: No Impact on Wages,” American Institute for Economic Research, October 2014, <https://www.aier.org/research/h-1b-visas-no-impact-wages>; Giovanni Peri, et al., *Closing Economic Windows: How H-1B Visa Denials Cost U.S.-Born Tech Workers Jobs and Wages During the Great Recession* (New York, NY: Partnership for a New American Economy, 2014), http://www.renewoureconomy.org/wp-content/uploads/2014/06/pnae_h1b.pdf; Giovanni Peri, et al., “Foreign STEM Workers and Native Wages and Unemployment in U.S. Cities,” *NBER Working Paper No. 20093* (Cambridge, MA: National Bureau of Economic Research, 2014), <http://www.nber.org/papers/w20093>; Jonathan Rothwell and Neil G. Ruiz, *H-1B Visas and the STEM Shortage* (Washington, DC: The Brookings Institution, 2013), <http://www.brookings.edu/research/papers/2013/05/10-h1b-visas-stem-rothwell-ruiz>; Jennifer Hunt, “Which Immigrants are Most Innovative and Entrepreneurial? Distinctions by Entry Visa,” *Journal of Labor Economics* 29, no. 3 (2011), 417-457, <http://ftp.iza.org/dp4745.pdf>; Magnus Lofstrom and Joseph Hayes, “H-1Bs: How Do They Stack Up to US Born Workers?” *IZA Discussion Paper Series No. 6259* (Bonn, Germany: IZA, 2011), <http://ftp.iza.org/dp6259.pdf>; Sunil Mithas and Henry C. Lucas, Jr., “Are Foreign IT Workers Cheaper? U.S. Visa Policies and Compensation of Information Technology Professionals,” *Management Science* 56, no. 5 (2010), 745-765, <http://www.terpconnect.umd.edu/~smithas/papers/mithaslucas2010ms.pdf>; Mark C. Regets, “Research Issues in the International Migration of Highly Skilled Workers: A Perspective with Data from the United States,” *Working Paper SRS 07-203* (Arlington, VA: National Science Foundation, 2007), <https://nbn-resolving.org/urn:nbn:de:0168-ssaar-312665>; Madeline Zavodny, “The H-1B Program and its Effects on Information Technology Workers,” *Federal Reserve Bank of Atlanta Economic Review* (2003), https://www.frbatlanta.org/research/publications/economic-review/2003/q3/vol88no3_H-1B-program-and-effects-on-information-

[technology-workers.aspx](#).

30. Giovanni Peri, et al., "STEM Workers, H-1B Visas, and Productivity in US Cities" *Journal of Labor Economics* 33, no. 3 (2015), S225-S255.
31. Jonathan T. Rothwell and Neil G. Ruiz, *H-1B Visas and the Stem Shortage: A Research Brief* (Washington, DC: The Brookings Institution, 2013), <http://www.brookings.edu/research/papers/2013/05/10-h1b-visas-stem-rothwell-ruiz>.
32. Ibid., 8-9.
33. Neil G. Ruiz and Jens Manuel Krogstad, "Salaries have risen for high-skilled foreign workers in U.S. on H-1B visas," Pew Research Center, August 16, 2017, <http://www.pewresearch.org/fact-tank/2017/08/16/salaries-have-risen-for-high-skilled-foreign-workers-in-u-s-on-h-1b-visas/>.
34. Nicole Kreisberg, "H-1B Visas: No Impact on Wages."
35. Giovanni Peri, et al., *Closing Economic Windows*; Giovanni Peri, et al., "Foreign STEM Workers and Native Wages..."; Jonathan Rothwell and Neil G. Ruiz, *H-1B Visas and the STEM Shortage*; Jennifer Hunt, "Which Immigrants are Most Innovative and Entrepreneurial?" 417-457; Magnus Lofstrom and Joseph Hayes, "H-1Bs: How Do They Stack Up to US Born Workers?"; Sunil Mithas and Henry C. Lucas Jr., "Are Foreign IT Workers Cheaper?" 745-765; Mark C. Regets, "Research Issues in the International Migration of Highly Skilled Workers"; Madeline Zavodny, "The H-1B Program and its Effects on Information Technology Workers."
36. Information Technology Industry Council, the Partnership for a New American Economy, and the U.S. Chamber of Commerce, *Help Wanted: The Role of Foreign Workers in the Innovation Economy* (Washington, DC: December 2012), 2-3, <http://www.renewoureconomy.org/sites/all/themes/pnae/stem-report.pdf>.
37. Bureau of Labor Statistics, Labor Force Statistics from the Current Population Survey, <https://www.bls.gov/webapps/legacy/cpsatab13.htm>. Many occupations for which H-1Bs are routinely requested are found within the broader category of Professional and Related Occupations. Data represent the annual unemployment rate for each year.
38. Frederick R. Treyz, Corey Stottlemeyer, and Rod Motamedi, *Key Components of Immigration Reform: An Analysis of the Economic Effects of Creating a Pathway to Legal Status, Expanding High-Skilled Visas, and Reforming Lesser-Skilled Visas* (Amherst, MA: Regional Economic Models, Inc., 2013), 1, <http://www.remi.com/wp-content/uploads/2017/10/50-Key-Components-of-Immigration-Reform.pdf>.
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