

Congress of the United States
U.S. House of Representatives
Committee on Small Business
2361 Rayburn House Office Building
Washington, DC 20515-6515

To: Members, Subcommittee on Contracting and Workforce
From: Committee Staff
RE: Hearing: "Help Wanted: The Small Business STEM Workforce Shortage and Immigration Reform"
Date: April 25, 2013

On April 25, 2013 at 10:00 a.m. in Room 2360 of the Rayburn House Office Building, the Subcommittee on Contracting and Workforce will meet for a hearing to learn how the science, technology, engineering and mathematics (STEM) workforce shortage is affecting the current and future economic health and viability of small businesses. The hearing also will examine whether changes to existing employment-based immigration laws for temporary and permanent legal resident aliens are necessary to help small businesses meet their STEM workforce needs.

I. The Changing Economy and Its Effects on Small Business Workforce Needs

It is widely acknowledged by business leaders, policymakers and academicians that the current and future competitiveness of many American small business firms, and the comparative advantage of United States' economy, will be derived from high technology industries.¹ Within our nation's innovation ecosystem, small businesses are widely recognized for their roles as early adopters of new technology in order to seek a competitive market advantage in their own industries.²

A skilled workforce is an essential foundation for economic growth and a key input to the knowledge economy.³ However, despite the rapid growth, lower overall unemployment rate, and higher wages paid in STEM-based occupations, reports indicate that the share of degrees in STEM fields awarded by American universities has been in decline and that a larger percentage of these degrees are earned by foreign students.⁴

¹ THE MANUFACTURING INSTITUTE, ROADMAP TO EDUCATION REFORM FOR MANUFACTURING 2 (2011), *available at* <http://www.themanufacturinginstitute.org/~media/736409933C084EECB2A307E0814DF757.ashx>

² *Id.*

³ NEIL RUIZ, JILL WATSON & SHYAMALI CHOURDHURY, THE SEARCH FOR SKILLS: DEMAND FOR H-1B IMMIGRANT WORKERS IN U.S. METROPOLITAN AREAS 2 (July 2012), *available at* <http://www.brookings.edu/~media/research/files/reports/2012/7/18%20h1b%20visas%20labor%20immigration/18%20h1b%20visas%20labor%20immigration.pdf>.

⁴ STAFF OF JOINT ECONOMIC COMM., 112TH CONG., STEM EDUCATION: PREPARING FOR THE JOBS OF THE FUTURE 4 Comm. Print April (2012) *available at* http://www.jec.senate.gov/public/index.cfm?a=Files.Serve&File_id=6aaa7e1f-9586-47bc-82e7-326f47658320. The memorandum would be remiss without acknowledging that some dispute the contention that too few United States residents seek educations or occupations in STEM-related fields and further claim that any apparent lack of interest on the part of Americans with STEM educations to seek employment in a STEM-related field could partially be explained by the effect of guest worker programs, like H-1B, on wages paid in these fields. *STEM the Tide: Should America Try and Prevent an Exodus of Foreign Graduates of U.S. Universities with Advanced Science Degrees?*, Hearing Before The Subcomm. on Immigration and Enforcement of the House Comm. on the Judiciary, 112th Cong. (2011) (statement of Lindsay Lowell), *available at* <http://judiciary.house.gov/hearings/pdf/Lowell%2010052011.pdf>.

As a consequence, a number of small businesses report difficulty in finding and recruiting employees with the requisite skills for the positions they have available.⁵ This workforce shortage is especially acute in STEM fields, where a good number of students earning advanced STEM degrees at United States universities are aliens in the United States on a temporary visa.⁶ These small business stakeholders have suggested that expanding programs for immigrant and non-immigrant temporary workers could be a viable strategy to help them meet pending workforce needs while the United States improves its STEM education pipeline. To understand the issues associated with the STEM-workforce, it is necessary to provide a brief overview of federal laws pertaining to immigrant and foreign guest-worker admissions.

II. Federal Laws Pertaining to the Admission of Foreign Nationals into the United States

The Immigration and Nationality Act (INA)⁷ is the primary federal law pertaining to the admission of foreign nationals into the United States. The law separates foreign admissions into two primary categories: guest worker (non-immigrant)⁸ and immigrant admissions.⁹ Guest workers are admitted for a limited period of time and for a specific purpose, including employment as a guest worker. Immigrants are persons seeking to establish permanent residence in the United States either as legal permanent residents or to eventually become United States citizens.

These primary admissions categories, which can be both employment and non-employment based, are further subdivided into numerous preference categories, each with its own limits, or caps, on admissions. For the purposes of the hearing, the memorandum will discuss the statutory provisions pertaining to employment-based non-immigrant and immigrant admissions for highly skilled workers.

a. The Admission of Highly Skilled Non-Immigrant Guest Workers

The H-1B visa program is available for workers coming to the United States to address workforce shortages in a specialty occupation.¹⁰ The H-1B visa authorizes admissions for up to 3 years, but admissions may be extended for up to 6 years or longer in cases where an H-1B visa holder has a pending application for an employment-based immigrant visa.

Most of the employment-related visa categories require employer sponsorship.¹¹ Employers seeking to hire temporary foreign workers under the H-1B visas program must file a labor condition application (LCA)¹² with the United States Department of Labor (DOL). The LCA must include certain attestations by the employer, including that the H-1B visa worker will not be used to displace a United States worker; a good faith effort was made

⁵ NATIONAL FEDERATION OF BUSINESS, SMALL BUSINESS ECONOMIC TRENDS 9 (March 2013), available at <http://www.nfib.com/Portals/0/PDF/sbet/sbet201303.pdf>.

⁶ INFORMATION TECHNOLOGY INDUSTRY COUNCIL, PARTNERSHIP FOR A NEW AMERICAN ECONOMY & U.S. CHAMBER OF COMMERCE, HELP WANTED: THE ROLE OF FOREIGN WORKERS IN THE INNOVATION ECONOMY 17 (November 2012), available at <http://www.uschamber.com/sites/default/files/reports/STEM%20Report%20901.pdf>.

⁷ 8 U.S.C. §§ 1101-1537.

⁸ *Id.* at § 1184.

⁹ *Id.* at § 1181. Immigrant admissions are also referred to as “legal permanent resident admissions.”

¹⁰ *Id.* at § 1101(a)(15)(H)(i). The law defines specialty occupation as one that requires a theoretical and practical application of a specific body of knowledge. These requirements can also be found at U.S. CITIZENSHIP AND IMMIGRATION SERVICES, H-1B SPECIALTY OCCUPATIONS, DOD COOPERATIVE RESEARCH AND DEVELOPMENT PROJECT WORKERS AND FASHION MODELS, available at <http://www.uscis.gov/portal/site/uscis/menuitem.eb1d4c2a3e5b9ac89243c6a7543f6d1a/?vgnextoid=73566811264a3210VgnVCM100000b92ca60aRCRD&vgnnextchannel=73566811264a3210VgnVCM100000b92ca60aRCRD>.

¹¹ SOCIETY FOR HUMAN RESOURCE MANAGEMENT / AMERICAN COUNCIL ON INTERNATIONAL PERSONNEL, NAVIGATING THE U.S. EMPLOYMENT-BASED IMMIGRATION SYSTEM 12 (2013), available at <http://www.acip.com/sites/default/files/2013-ACIP-Prime.pdf>.

¹² 8 U.S.C. § 1182(n)(1). The INA includes labor market tests and protections to help ensure that foreign workers do not displace or affect the working conditions of American employees.

to recruit United States workers (using industry-wide standards);¹³ and the H-1B visa worker shall be paid the actual wage level paid by the employer to all other individuals with similar experience and qualifications for the specific job in question.

In addition to meeting these attestation requirements, small employers are subject to a variety of fees for sponsoring H-1B workers,¹⁴ including a \$750 per alien fee that goes principally to fund scholarship assistance to STEM education and training for lower income workers and other federal job training programs, as well as to help cover administrative and enforcement expenses.¹⁵ Employers are also subject to a \$500 fraud prevention and detection fee.¹⁶

The DOL has responsibility for enforcing employer compliance with the program. Investigations of employer malfeasance are generally triggered by complaints filed by aggrieved persons or organizations or a determination by DOL that there is reasonable cause to believe the employer is not meeting program conditions. Employers found to have violated program conditions can be subject to monetary penalties, debarment from the H-1B program for a period of up to 3 years and back pay to injured employees.

The number of H-1B visas available to foreign workers is capped at 65,000 H-1B visas for highly skilled workers.¹⁷ Subsequent legislation¹⁸ provided for an additional 20,000 H-1B visas for highly skilled workers who have obtained master's or higher degrees from United States colleges and universities, for a total of 85,000 H-1B visas.¹⁹

In recent years, employer demand for H-1B workers has exceeded the number of available visas. As the importance and prevalence of technology-based industries to the United States economy has risen, so have the needs of small business for highly skilled STEM workers. Since these positions cannot be filled with available American citizens, the caps have frequently been reached early in any given year and many small employers are unable to fill important positions with highly skilled foreign workers.

b. The Admission of Highly Skilled Immigrants Via Employment-Based Visas

Like the admission of foreign guest workers, the INA establishes preference categories and annual numerical limits on the number of immigrants who may be granted legal permanent resident (LPR) status (green cards). However, unlike temporary worker programs, the LPR immigrants are further divided into employment and family-based preference categories. Given the subject of the hearing, the memorandum will focus on employment categories only.

The aggregate limit for employment-based immigrant visas is set at approximately 140,000 a year (commonly referred to as the "worldwide level").²⁰ As in the H-1B program, these visas are issued under different preference categories, but unlike H-1B visas, immigrant visas are also subject to additional per-country limits from certain oversubscribed countries.²¹

¹³ *Id.* at § 1182(n)(2). In addition to taking good faith steps to recruit American workers, the law also requires employers to offer the job to any American worker who applies and is equally or better qualified than the guest worker.

¹⁴ *Id.* at § 1184(c)(9).

¹⁵ *Id.*

¹⁶ *Id.* at § 1184(c)(12). A special \$2,000 fee applies to petitions filed through September 30, 2014 for employers with 50 or more employees in the United States if more than 50 percent of their employees are on H-1B visas.

¹⁷ It should be noted that this cap does not apply to institutions of higher education, nonprofit research organizations, and government research organizations.

¹⁸ Consolidated Appropriations Act, 2005, Pub. L. No. 108-447, Div. J, Title IV, H-1B Visa Reform Act of 2004, §§ 421-30, 118 Stat. 2809, 3353-3361 (2004).

¹⁹ *Id.* at § 425, 118 Stat. at 3356.

²⁰ 8 U.S.C. § 1151(d). The INA provides for a total of 675,000 annual immigrant visas, of which 140,000 are employment-based.

²¹ 8 U.S.C. § 1152(a).

The five employment-based preference categories are organized as EB-1 through EB-5.²² Persons with STEM skills fall most commonly under preference EB-1-EB-3. The EB-1 preference is given to persons of extraordinary ability in the arts, science, education, business or athletics; outstanding professors and researchers; and certain multinational executives and managers.²³ The EB-2 preference is available to members of professions holding advanced degrees or persons of exceptional abilities in the arts, science or business. The EB-3 preference category covers skilled shortage workers with at least two of years training or experience, and professionals with bachelor's degrees in STEM disciplines. Although not specifically STEM-related, category EB-5 preferences involve investors creating businesses and employment under certain conditions in the United States; these businesses may in fact require STEM-field employees.

The number of available visas in each category is a percentage of the total number of visas available, plus any unused visas from other preference categories. For example, visas available under the EB-1 category are 28.6 percent of the worldwide level, plus any unused visas available under the EB-4 and EB-5 categories. Likewise, the number of EB-2 and EB-3 preference category visas are each limited to 28.6 percent of the worldwide level, plus any unused visas from preference category EB-1 and preference categories EB-4 and EB-5 respectively.²⁴

The complexity of the employment-based immigrant visa system is exacerbated further by the above-mentioned per-country caps that seek to limit the number of visas available to certain oversubscribed countries, generally countries with a large number of natives seeking immigration visas to the United States. This can limit the availability of immigrant visas to foreign citizens with advanced STEM skills and knowledge who seek to emigrate from large, populous countries like China and India.

The relatively small number of employment-based immigrant visas, combined with per-country limits on visas from certain oversubscribed nations, creates significant problems for small employers seeking to sponsor a highly skilled STEM worker on an immigrant visa. While the preference of many small business owners and policymakers is to fill domestic jobs with native workers, doing so will require a comprehensive and long-term effort to build up and fill the pipeline of American students with necessary postsecondary and advanced STEM degree educations and skills. In the meantime, small businesses need a reliable supply of skilled workers to meet their pressing workforce needs. To do so requires additional foreign workers which necessitates modification of existing INA restrictions. It is to this issue that we now turn.

III. Legislative Proposals to Expand Immigrant and Guest Worker Visas for Highly Skilled and Educated STEM Workers

During the 112th Congress, the House of Representatives passed H.R. 6429, the STEM Jobs Act.²⁵ This legislation sought to reallocate 55,000 immigrant visas from the diversity visa lottery²⁶ and provide them to foreign graduates of United States universities with advanced STEM degrees.²⁷ A similar bill has yet to be reintroduced in the 113th Congress.

²² *Id.* at § 1153(b)(1)-(5).

²³ *Id.* at § 1153(b)(1)(A).

²⁴ *Id.* at § 1153(b).

²⁵ STEM Jobs Act, H.R. 6429, 112th Cong. (2nd Sess. 2012).

²⁶ *Id.* at §3. While not specifically addressed in the memorandum, the INA provides a preference that provides significant advantage for immigrant visas of family members of permanent legal residents. As a consequence, persons from certain nations and regions that have not historically been a source of immigration often cannot obtain visas. The purpose of the visa lottery is to encourage immigration from these undersubscribed countries.

²⁷ *Id.* at §2(c)(6),(7) The immigrant visas would first be made available to foreign graduates of United States universities with doctorates in STEM disciplines, and the remainder would be made available to foreign graduates with masters' degrees.

In the 113th Congress, a bipartisan group of Senators has introduced S. 169, the Immigration Innovation Act, also known as I-Squared.²⁸ This legislation would increase the annual H-1B visa cap to 115,000 with provisions for up to 300,000 visas depending on labor market conditions,²⁹ uncap the existing 20,000 visa exception for foreign graduates of United States universities with advanced degrees,³⁰ authorize employment for dependent spouses of H-1B visa holders,³¹ and make it easier for H-1B visa holders to change jobs.³² The bill would also make it easier for foreign students at United States universities to file dual intent,³³ so that they may more easily transition into H-1B status upon completion of their studies.³⁴

This legislation also would exempt certain categories of persons from employment-based immigrant visa caps, including advanced degree STEM graduates from United States universities³⁵ (EB-2 preferences), persons with extraordinary ability and outstanding professors and researchers³⁶ (EB-1 preferences). The bill also eliminates per-country caps on employment-based immigrant visas³⁷ and automatically awards immigrant visas to the dependents of employment-based immigrants, thus improving small business access to highly skilled foreign workers.

IV. Conclusion

As has been examined at a previous September 8, 2011 Committee on Small Business hearing titled, *Innovative Approaches to Meeting the Workforce Needs of Small Businesses*, the inability of small businesses to find adequately skilled and qualified workers for even entry-level positions requiring at least some STEM skill sets is having a negative effect on the economic health and well-being of these firms. According to the United States Department of Commerce, by the year 2018, the United States is expected to have 230,000 jobs requiring graduate-level STEM training that it will not be able to fill with American workers.³⁸

However, it will take a great deal of time and resources to improve the number of American students and workers with these skills and educations. In the meantime, reforming our nation's guest worker and immigrant visa laws could be an effective way in helping meet these workforce needs without displacing opportunities for American workers.

²⁸ The Immigration Innovation Act, S. 169, 113th Cong. (1st Sess. 2013).

²⁹ *Id.* at §101.

³⁰ *Id.*

³¹ *Id.* at § 102.

³² *Id.* at § 103.

³³ Dual Intent allows a guest worker to enter the United States on a temporary visa while simultaneously pursuing permanent legal resident status.

³⁴ *Id.* at § 201.

³⁵ *Id.* at § 303.

³⁶ *Id.*

³⁷ *Id.* at § 301.

³⁸ PARTNERSHIP FOR A NEW AMERICAN ECONOMY & THE PARTNERSHIP FOR NEW YORK CITY, NOT COMING TO AMERICA: WHY THE U.S. IS FALLING BEHIND IN THE GLOBAL RACE FOR TALENT 2 (May 2012), available at <http://www.renewoureconomy.org/sites/all/themes/pnae/not-coming-to-america.pdf>.