

# Origins and Destinations of Foreign Students in the United States

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Pew Research Center

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- Global attitudes and trends
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- Social and demographic trends
- Research methodology



## Main Data Source for Foreign Student Data



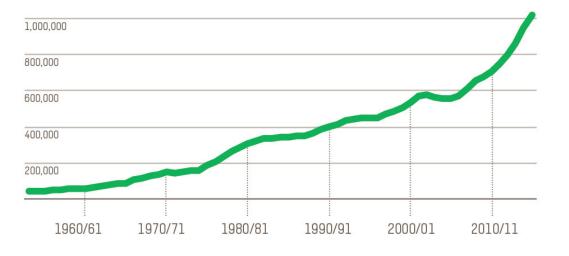
Student and Exchange Visitor Information System (SEVIS) data received via a FOIA request from U.S. Immigration and Customs Enforcement



# Over 1 million foreign students studying in the United States during 2015/16 school year

Number 1 destination of foreign students in the world [will hear more from IIE]

#### INTERNATIONAL STUDENTS IN THE U.S. 1953/54-2015/16



# In 2015/16 there was **an increase of 7%** over the prior year in the number of international students in the U.S.

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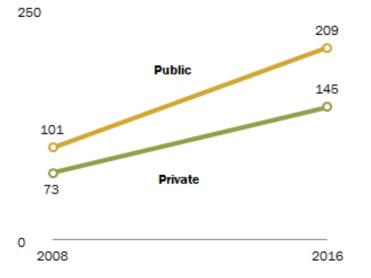
Open Doors is conducted by the Institute of International Education with the support of the Bureau of Educational and Cultural Affairs of the U.S. Department of State. **Online at: www.iie.org/opendoors**  open**doors**°

Source: Institute for International Education, Open Doors.

30 January, 2018

### Public colleges and universities saw faster growth in new foreign student enrollments between 2008 and 2016

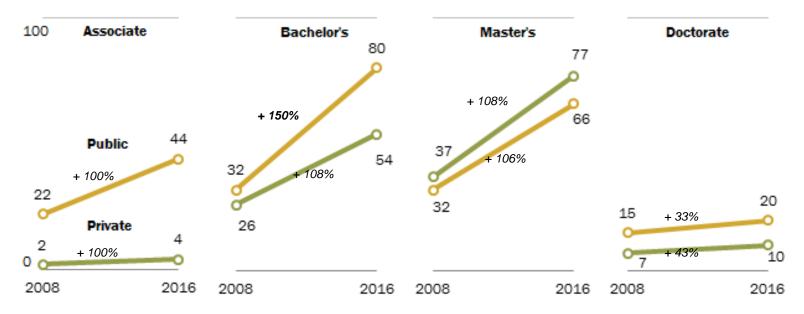
Number of foreign students with F-1 visas enrolled in associate, bachelors, master's or doctorate degree programs in U.S. (in thousands)



Note: Data based on calendar years. Public and private schools are defined by the Carnegie Classification of Institutions. This chart excludes students at schools not categorized in the Carnegie classification system. Students on F-1 visas are assumed to be enrolled for studies at their sponsoring school. Source: Pew Research Center analysis of U.S Immigration and Customs Enforcement data received March 16, 2017, through a Freedom of Information Act request.

### Public and private higher education enrollment of foreign students, 2008-2016

Number of foreign students with F-1 visas enrolled in degree programs in U.S., by degree type (in thousands)



Note: Data are based on calendar year. Public and private schools are defined by the Carnegie Classification of Institutions. This chart excludes students at schools not categorized in the Carnegie classification system. Students on F-1 visas are assumed to be enrolled for studies at their sponsoring school.

Source: Pew Research Center analysis of U.S Immigration and Customs Enforcement data received March 16, 2017, through a Freedom of Information Act request.

# Cost of U.S. higher education increased significantly among public schools

## **U.S. Higher Education Cost Breakdowns for Foreign Students**

In nominal \$US, 2008 and 2016

				2008		2016	
		Growth of <b>Total</b> Cost	Growth of <b>Average</b> Cost	Total Cost	Average Cost	Total Cost	Average Cost
All Higher Education Levels	Public	214%	51%	2,480,000,000	24,568	7,780,000,000	37,187
	Private	190%	46%	2,590,000,000	35,549	7,520,000,000	51,999
Bachelor's	Public	312%	64%	811,000,000	25,534	3,340,000,000	41,808
Dachelor S	Private	217%	22%	876,000,000	33,266	2,780,000,000	40,454
Master's	Public	209%	52%	858,000,000	26,667	2,650,000,000	40,454
Waster s	Private	201%	46%	1,350,000,000	36,189	4,060,000,000	52,810
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## Most "Popular" Universities 2016

## Public

1	University of Illinois at Urbana- Champaign
2	Pennsylvania State University- Main Campus
3	Arizona State University-Tempe
4	Purdue University-Main Campus
5	University of California-San Diego
6	CUNY Bernard M Baruch College
7	The University of Texas at Dallas
8	University of California-Los Angeles
9	University of Michigan-Ann Arbor
10	Indiana University-Bloomington

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## Private

1 New York University Columbia University in the City of				
2 New York				
3 University of Southern California				
4 Northeastern University				
5 Boston University				
6 Carnegie Mellon University				
7 Cornell University				
<ul> <li>8 Johns Hopkins University</li> <li>Harrisburg University of Science</li> <li>9 and Technology</li> </ul>				
10 University of Pennsylvania				
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# **Work Authorization for Foreign Student Graduates**

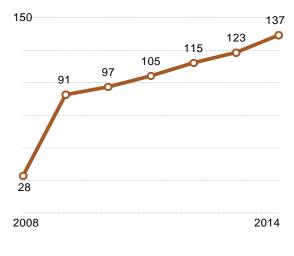


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## The OPT program has grown rapidly in recent years

## Number of foreign students approved for OPT approvals, 2008 to 2014

In thousands



Notes: Numbers rounded to nearest thousands. Numbers are for each fiscal year.

Source: Congressional Research Service presentation of data from U.S. Citizenship and Immigration Services, as cited in Ruth Ellen Wasem, "Temporary Professional, Managerial, and Skilled Foreign Workers: Policy and Trends" (Washington, DC: Congressional Research Service, January 13, 2016)

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Source: Congressional Research Service presentation of data from U.S. Citizenship and Immigration Services, as cited in Ruth Ellen Wasem, "Temporary Professional, Managerial, and Skilled Foreign Workers: Policy and Trends" (Washington, DC: January 13, 2016).

<sup>30 January, 2018</sup> www.pewresearch.org <sup>10</sup>

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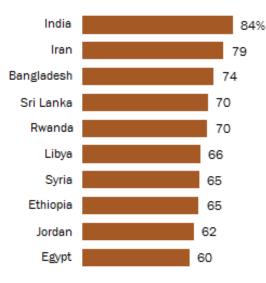
# Foreign students from India and China accounted for more than half of all OPT approvals from 2012 to 2015

Of those applying for OPT:

STEM Majors had 75% employment rate compared to Non-STEM Majors (53%)

### India and Iran have highest shares of OPT employees with STEM degrees

% of STEM OPT employment by country of origin, 2012-2015

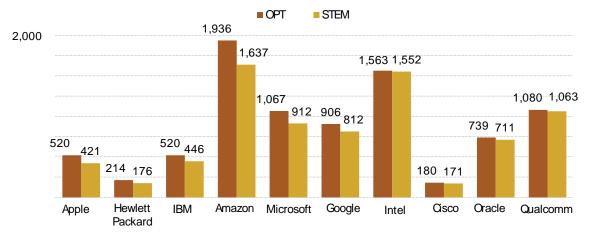


Note: Dates are for calendaryears 2012-15. Source: Pew Research Center analysis of U.S. Immigration and Customs Enforcement data received through a Freedom of Information Act request.

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# Ten tech companies in the Fortune 500 with the highest market valuation employed 8,725 or 3.5% of workers under the OPT program

#### Top 10 Fortune 500 companies with employed OPT students, including STEM



Number that technology companies hired...

Notes: Companies are listed from top to bottom in order of ranking. Data collected for the years 2012 to 2015

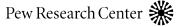
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## Main Pathway for Retention in US: Temporary Employment-Based Visa System

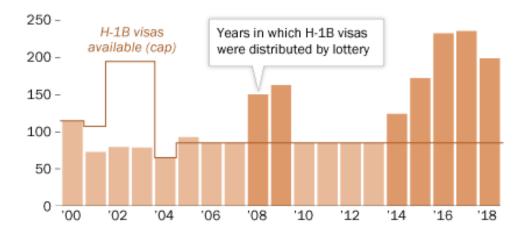


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# H-1B visa applications have exceeded supply for the past five years

## H-1B visa applications have exceeded supply for the past five years

Number of capped H-1B applications, by fiscal year, in thousands



Notes: Due to rollover from previous fiscal years, some application totals may exceed the cap. Beginning in fiscal 2005, an additional 20,000 H-1B visas were added to the cap for foreign advanced degree graduates of U.S. universities. For fiscal years 2004, 2006-07 and 2010-13, the cap was reached but total applications were not published. Data not available for fiscal years 1990 to 1999. Source: Pew Research Center analysis of U.S. Citizenship and Immigration Services data.

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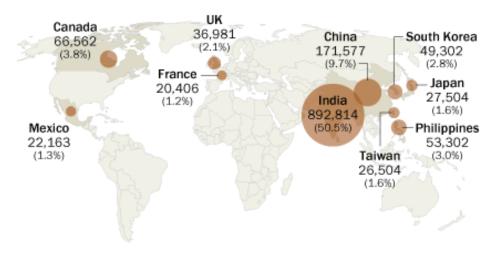
Source: Pew Research Center analysis of U.S. Citizenship and Immigration Services data.



# Since 2001, half of H-1B visas have been awarded to Indian nationals

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*H-1B petitions approved, by country of birth (initial employment), fiscal years 2001-2015* 



Notes: Fiscal year begins Oct. 1 and ends Sept. 30. Top 10 countries of birth by approved H-1Bs for initial employment only. Source: U.S. Citizenship and Immigration Services annual reports to Congress on H-1B petitions.

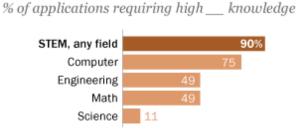
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Source: U.S. Citizenship and Immigration Services annual reports to Congress on H-1B petitions.

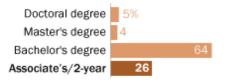


# Most H-1B applications seek STEM knowledge, but 1 in 4 don't require a bachelor's degree

### Most H-1B applications seek STEM knowledge, but one-in-four don't require a bachelor's degree



% of applications requiring ...



Note: Does not include Post-Secondary Certificate, Some College Courses, Less than a High School Diploma, or High School Diploma (or GED or High School Equivalence Certificate). Source: Pew Research Center analysis of data from U.S. Labor Department's Labor Condition Applications for 2011 and 0\*NET.

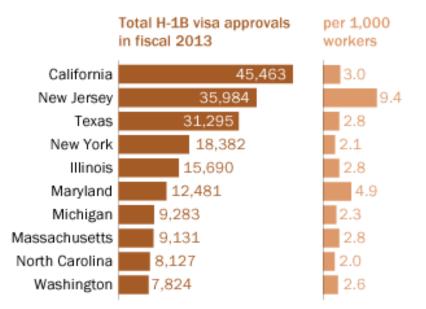
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Source: Pew Research Center analysis of data from U.S. Labor Department's Labor Conditions Applications for 2011 and O\*NET.



# More than half of all H-1B visa approvals in fiscal 2013 went to employers in four states

# California, New Jersey and Texas are top states for H-1B visa approvals

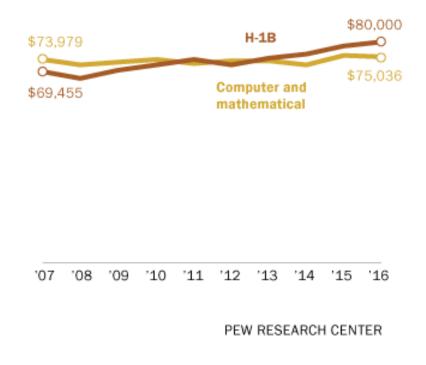


Source: U.S. Citizenship and Immigration Services. H-1B visa approvals rate calculated using U.S. Bureau of Labor Statistics annual average employment data.



## Median salary for H-1B workers has increased to \$80,000 over the past decade

Median salary (2016 dollars) on H-1B visa applications and for U.S. workers, fiscal years 2007 to 2016



Source: Pew Research Center analysis of U.S. Citizenship and Immigration Services data and Current Population Survey data from U.S. Bureau of Labor Statistics.

30 January, 2018

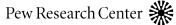
#### Top prospective employers of foreign workers with H-1B visas

Companies with the highest number of approved H-1B visa applications and average annual salary, fiscal year 2016

Employer	Approved applications	Average salary
Cognizant Tech Solutions	21,459	\$84,303
Infosys	12,780	\$84,344
Tata Consultancy Services	11,295	\$71,819
Accenture	6,831	\$79,416
Wipro	6,819	\$73,937
IBM	3,569 📕	\$79,275
Microsoft	3,556	\$126,096
HCL America	3,492	\$83,980
Tech Mahindra Americas	3,344	\$76,737
Deloitte Consulting	3,114	\$102,558
Amazon	2,739	\$115,257
Google	2,517	\$131,882
Syntel Consulting	2,286	\$67,145
Capgemini America	2,024	\$71,667
Apple	1,992 📕	\$138,563
Intel	1,873 📕	\$101,025
Larsen & Toubro Infotech	1,558	\$76,643
Ernst & Young	1,552	\$96,316
Cisco Sys	1,529	\$121,372
JP Morgan Chase & Co.	1,467	\$111,469
Oracle America	1,448	\$118,507
Qualcomm Technologies	1,254	\$118,155
Capgemini America	1,252	\$84,274
L & T Tech Services	1,143	\$65,246
UST	1,136	\$71,371
Facebook	1,107	\$140,758
Mindtree	1,103	\$73,691
PricewaterhouseCoopers	1,050	\$82,363
Capgemini Financial Service	s 1,048	\$91,068
Mphasis	1,016	\$81,750

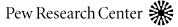
Note: Data is of applications approved by U.S. Citizenship and Immigration Services; includes first-time and renewal applications, and applications subject to an annual cap and those not subject to one. Capgemini America appears multiple times because it has several tax ID numbers where H-1B visa applications were filed.

Source: Pew Research Center analysis of U.S. Citizenship and Immigration Services data.



## From Temporary to Permanent Residency: The Green Card System

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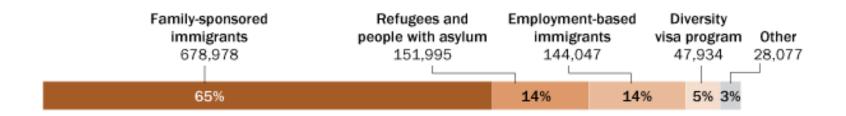
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## U.S. Green Card system is majority family-based

One million immigrants receive lawful permanent resident status each year – also known as a green card – that puts them on a path to citizenship, and most are sponsored by family members

## About two-thirds of new green cards went to family members of U.S. lawful immigrants in 2015

Admission categories for 2015 lawful permanent residents



Note: "Other" includes parolees. Source: U.S. Department of Homeland Security.

Key Challenges for Understanding where U.S. foreign students end up after they graduate

- Data are not linkable: F-1 & Optional Practical Training (OPT) are only linkable data to understand those staying in the U.S. post-graduation
- Need to FOIA detailed data on H-1B visas from US Citizenship and Immigration Services (USCIS) if they release those previously on F-1 visas
- No linkage between H-1B visas and Green Cards (EB-1 / EB-2 / EB-3)
- No exit/entry system so U.S. government has no understanding of all the various visas an individual had while in the United States



# **Contact Information**

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