

---

## Characteristics of Specialty Occupation Workers (H-1B)

May 1998 to July 1999

U.S. Immigration and Naturalization Service

February 2000

This report presents preliminary information on the characteristics of specialty occupation workers approved for H-1B nonimmigrant status during a 15-month period. The number of workers approved for H-1B status from May 11, 1998 through July 31, 1999 is approximately 134,400; all were for new employment, and all were potentially subject to the annual cap on H-1B approvals.<sup>1</sup>

The estimates are based on a sample of 4,217 approved H-1B workers and contain information comparable to that required by the American Competitiveness and Workforce Improvement Act of 1998 (ACWIA).<sup>2</sup> The results are subject to sampling and non-sampling error. See the appendix for a summary of the sampling procedures, data sources, and estimates of error.

### Country of Birth

INS estimates that nearly half of the H-1B petitions were granted to persons born in India, which far exceeded China, the next leading country.

Country of Birth	Percent		Total
	Estimate	95% Confidence Limits <sup>3</sup>	
All countries	100.0		134,400
India	47.5	(45.9 - 49.2)	63,900
China	9.3	(8.3 - 10.2)	12,400
United Kingdom	3.2	(2.6 - 3.8)	4,400
Canada	3.0	(2.4 - 3.5)	4,000
Philippines	2.7	(2.2 - 3.3)	3,700
Korea	2.3	(1.8 - 2.8)	3,100
Taiwan	2.1	(1.6 - 2.5)	2,800
Japan	2.0	(1.6 - 2.5)	2,700
Other countries	27.8	(26.4 - 29.3)	37,400

---

<sup>1</sup> The 134,400 approved petitions do not all apply against the annual H-1B cap of 115,000. The approved total is adjusted by subtracting (1) the number of petitions that have been approved for one individual beyond the initial occurrence, and (2) the number of petitions that have been revoked. The INS has announced that the 1999 H-1B cap may have been exceeded even after applying these adjustments and has contracted the firm of KPMG, Inc. to assist in developing the final 1999 count.

<sup>2</sup> Public Law 105-277, Division C, American Competitiveness and Workforce Improvement Act of 1998, Section 416(c)(2) requires the INS to submit an annual report with "information on the countries of origin and occupations of, educational levels attained by, and compensation paid to, aliens who were issued visas or otherwise provided nonimmigrant status under section 101(a)(15)(H)(i)(b) of the Immigration and Nationality Act during the previous fiscal year." The first report under this requirement will be submitted to Congress for those approved for H-1B status in Fiscal Year 2000.

<sup>3</sup> 95<sup>th</sup> percent confidence interval: with repeated sampling, the true population proportion will fall within the interval 95% of the time.

---

Note: Numbers and percents may not add to totals due to rounding.

### **Occupation**

The occupation code is provided by the petitioning employer on the Labor Condition Application (LCA). Approximately 53% of the approved petitions were for aliens with occupations in systems analysis or programming. All computer-related and engineering occupations accounted for 70% of the total H-1B petitions. Nearly 74% of the systems analysts and programmers were born in India compared to about 18% in all other occupations.

---

Occupation (LCA Code <sup>4</sup> )	Percent		Total
	Estimate	95% Confidence Limits	
Total	100.0		134,400
Occupations in systems analysis and programming (030)	53.3	(51.7 - 55.0)	71,700
Electrical/electronics engineering occupations (003)	4.9	(4.2 - 5.5)	6,500
Computer-related occupations (not elsewhere classified (N.E.C.)) (039)	3.4	(2.8 - 4.0)	4,600
Occupations in college and university education (090)	3.0	(2.5 - 3.5)	4,000
Accountants, auditors and related occupations (160)	2.8	(2.3 - 3.4)	3,800
Occupations in architecture, engineering, and surveying (N.E.C.) (019)	2.3	(1.8 - 2.7)	3,000
Other	30.3	(28.8 - 31.9)	40,800

---

Note: Numbers and percents may not add to totals due to rounding.

### **Degree Earned**

The reporting of a U.S. or foreign degree is not required in a standard format on any of the INS or DOL forms, but is almost always provided by the petitioning employer in supporting documentation. In cases where the degree was earned outside of the United States, the employer usually provides a credential evaluation stating that the foreign degree is “equivalent to” a particular U.S. degree. The degree cited by the employer was used in this analysis. Note that the degree may not necessarily be the highest degree attained.

Approximately 57% of the H-1B workers were reported to have earned the equivalent of a Bachelor’s Degree; nearly 41% earned a Master’s Degree or higher; 10% earned a Professional Degree (MD, DDS, LLB, JD) or Doctorate Degree (PhD, EdD). Approximately 34% of systems analysts and programmers reported earning a Master’s Degree or higher, while nearly 90% of aliens with occupations in colleges and universities reported earning a Master’s Degree or higher.

---

<sup>4</sup> The 3-digit occupational group codes provided by the petitioning company on the Labor Condition Application (LCA) (ETA 9035) to the U.S. Department of Labor.

Degree Earned	Percent		Total
	Estimate	95% Confidence Limits	
Total	100.0		134,400
High school diploma	1.0	(0.6 - 1.3)	1,300
Associate's degree	.5	(0.3 - 0.7)	700
Bachelor's degree	56.8	(55.2 - 58.5)	76,400
Master's degree	30.7	(29.2 - 32.3)	41,300
Professional degree	2.5	(2.0 - 3.0)	3,400
Doctorate degree	7.6	(6.8 - 8.5)	10,300
Unknown or none	.8	(0.5 - 1.2)	1,100

Note: Numbers and percents may not add to totals due to rounding.

### **Annual Wage**

The median prospective annual wage reported by employers for all H-1B workers was \$45,000; half of the workers were expected to earn between \$38,900 and \$55,000. The highest median wage among the leading occupations was for electrical/electronics engineers (\$54,000) and the lowest was for college and university educators (\$35,000).

Occupation (LCA Code)	Annual Wage		
	Median 50 <sup>th</sup> Percentile	25 <sup>th</sup> Percentile	75 <sup>th</sup> Percentile
Total	\$45,000	\$38,900	\$55,000
Electrical/electronics engineering occupations (003)	54,000	47,875	63,420
Occupations in architecture, engineering, and surveying (N.E.C.) (019)	51,000	44,777	62,000
Computer-related occupations (not elsewhere classified (N.E.C.)) (039)	49,400	45,000	57,000
Occupations in systems analysis and programming (030)	47,000	42,000	54,500
Accountants, auditors and related occupations (160)	36,000	28,000	45,000
Occupations in college and university education (090)	35,000	27,000	45,000
Other and unknown	40,000	30,000	59,000

Note: Numbers and percents may not add to totals due to rounding.

Employers did not report prospective wages on an annual basis for approximately 9% of workers. These workers were excluded from the analysis due to possible problems in comparing compensation rates over different employment periods. Information on whether the employment was on other than a full-time basis was not collected. Forms of compensation other than wages, such as bonuses or benefits, were not included.

## Age

More than 83% of the workers granted H-1B status were between the ages of 20-34. The median age of all workers at the time their petition was received at the INS was 28 years.

Age at time of Application	Percent		Total
	Estimate	95% Confidence Limits	
Total	100.0		134,400
Under 20 years	0.1	(0.0 – 0.3)	200
20-24 years	18.6	(17.3 – 19.9)	25,000
25-29 years	42.4	(40.7 – 44.0)	56,900
30-34 years	22.1	(20.8 – 23.5)	29,800
35-39 years	9.2	(8.3 – 10.2)	12,400
40 years and over	6.6	(5.8 – 7.3)	8,800
Unknown age	1.0	(0.6 – 1.3)	1,300

Note: Numbers and percents may not add to totals due to rounding.

## Previous Status

An estimated 60% percent of the approved H-1B petitions for new employment were for aliens who were outside the United States at the time their petition was submitted to the INS. Of the estimated 53,300 aliens already in the United States in a nonimmigrant status, approximately 58% were here as F-1 academic students. Note that aliens outside of the United States may have been in the U.S. as a nonimmigrant at some earlier date.

Previous Status (Nonimmigrant code classification)	Percent		Total
	Estimate	95% Confidence Limits	
<b>Total</b>	<b>100.0</b>		<b>134,400</b>
<b>Outside the United States</b>	<b>60.3</b>	<b>(58.7 – 62.0)</b>	<b>81,100</b>
<b>Adjusting from a Nonimmigrant Status</b>	<b>39.7</b>	<b>(38.0 – 41.3)</b>	<b>53,300</b>
Academic students (F-1)	22.9	(21.5 – 24.3)	30,800
Spouses and children of temporary workers (H-4)	3.2	(2.6 – 3.8)	4,400
Exchange visitors (J-1)	3.1	(2.6 – 3.7)	4,200
Visitors for pleasure (B-2)	3.0	(2.4 – 3.6)	4,100
Professional workers, North American Free Trade Agreement (TN)	1.9	(1.5 – 2.3)	2,500
Visitors for business (B-1)	1.7	(1.2 – 2.1)	2,200
Other and unknown	3.8	(3.1 – 4.4)	5,100

---

Note: Numbers and percents may not add to totals due to rounding.

## **Appendix: Sampling Description and Procedures**

### **H-1B Procedures**

Petitions for obtaining H-1B nonimmigrant status for alien workers are submitted by their prospective employers on INS form I-129 (Petition for a Nonimmigrant Worker). The petitions are mailed to one of four INS Service Centers depending on the location of the employer. The centers are located in St Albans, VT; Lincoln, NE; Dallas, TX; and Laguna Niguel, CA.

Approved petitions submitted by the employer (petitioner) allow the employee (beneficiary) to work in the United States up to 3 years initially. Employment can be extended for another 3 years for an overall total of 6 years. Only one worker is named on each petition; however, a particular worker may be petitioned for by more than one company.

Selected information from the I-129 is entered into the Computer Linked Application Information Management Systems (CLAIMS3) case tracking system. Adjudicators in the Service Centers decide whether to approve or deny the petition and enter the decision into CLAIMS3. Each Service Center operates its own Local Area Network (LAN) and uploads information to a national mainframe version of CLAIMS3 daily.

The I-129 petition and other supporting documentation such as the Labor Condition Application (LCA) (ETA Form 9035) are placed in a file identified by receipt number. The physical files are forwarded for storage to the INS records center in Harrisonburg, VA, approximately 90 days after adjudication.

### **Description of the Population and Sample**

**Population:** The population consists of 134,411 H-1B petitions approved during the period from May 11, 1998 through July 31, 1999. All of the applications were for new employment and were potentially recorded against the annual FY 1999 cap. The numbers of petitions by Service Center are: Vermont—61,191; Texas—25,261; Nebraska—17,926; and California—30,033. The CLAIMS3 mainframe was used to identify the population and to select the sample.

**Sample:** Random samples of 1,100 petitions were selected in each of the 4 service centers providing for an overall total of 4,400. Only 4.2% of the files were not located in Harrisonburg, VA or one of the Service Centers. The final sample size is 4,217; Vermont—1,035; Texas—1,076; Nebraska—1,041; and California—1,065. The petitions were identified by receipt number and pulled for coding at Harrisonburg, VA. A group of coders from INS Headquarters examined each file and recorded the information on a data collection form.

### **Data Sources and Variables**

The source documents for the sample were:

1. INS Form I-129, Petition for a Nonimmigrant Worker
2. ETA Form 9035, Labor Condition Application (LCA)
3. Supporting Documentation attached to the I-129 petition

Variable	Source	Notes and Non-Sampling Error
Country of Birth	INS Form I-129, Part 3, Country of Birth	Country was provided on all the records.
Occupation	ETA Form 9035, Job Code	The Department of Labor (DOL) considers the entry of the 3-digit code on the LCA to be a self-service action by the petitioning employer. It is important to note that the job code is based upon reporting directly from the employer and not upon INS or governmental assessment and analysis. The DOL does not perform a quality review of this data element and does not correct employer error. The occupation code was provided on all the records.
Degree Earned	Supporting documentation to INS Form I-129	The degree was not available on the INS or DOL standard forms. It is important to note that the degree earned is based upon reporting directly from the employer and not upon INS or governmental assessment and analysis. Determination was made by searching through a credential evaluation from the employer; the standard terminology “equivalent to” was usually available when a foreign degree was cited and served as the basis of determination of degree earned. Copies of diplomas and certificates were usually available in the file but were seldom used by coders in determination. Degree earned is missing on 0.8% of the records.
Annual Wage	INS Form I-129, Part 5, Wages per week or per year	Approximately 9% of the employers reported wages other than on an annual basis or did not report any wages. Coders sometimes converted from hourly to weekly wages and some interpretation was made when the reporting period was not indicated. Petitions with information other than on an annual basis were excluded from the analysis due to possible problems in comparing compensation rates over different employment periods. The annual wages exclude other forms of compensation.
Age	INS Form I-129, Part 3, Date of birth and date of application receipt as stamped on the petition	Age was calculated by subtracting the date of birth from the date the petition was received. The calculated age is missing on 1.0% of the records.
Nonimmigrant Status	INS Form I-129, Part 3, Current Status and INS Form I-129, Part 2, Question 4, Requested Action	I-129 information keyed into CLAIMS3 was used to determine if a worker was abroad or in the United States at time of application. Part 2, 4a indicates alien was abroad; Part 2, 4b indicates alien was in the United States. The nonimmigrant status for those checking 4b was copied onto coding sheets by coders. The nonimmigrant status is missing on 0.9% of the records.