

# Estimates of the Size and Characteristics of the Resident Nonimmigrant Population in the United States: January 2011

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## INTRODUCTION

This report presents estimates of the size and characteristics of the resident nonimmigrant population in the United States. The estimates are daily averages for the 12-month period centered on January 1, 2011. The term *resident nonimmigrant* as used in this report refers to foreign nationals who are legally admitted into the United States for specific, temporary purposes and whose classes of admission are associated with residency (e.g., students and temporary workers, as opposed to tourists and business travelers). The characteristics analyzed include category of admission, country of citizenship, age, sex, and destination state. The estimates are derived from U.S. Department of Homeland Security (DHS) administrative records of nonimmigrant arrivals and departures.

The size of the resident nonimmigrant population was about 1.9 million on average during July 1, 2010–June 30, 2011. Approximately 45 percent of the population were temporary workers and their families, nearly 40 percent were students and their families, half were from Asian countries, and over 80 percent were ages 18 through 44.

## DATA AND METHOD

### Overview

The population size was estimated in three steps using arrival and departure data from nonimmigrant visits. In the first step, visit-length frequency tables were tabulated from nonimmigrant visit records that had been reconstructed by matching arrival records with departure records. In the second step, expected days of residence in the U.S. were calculated for each visit using the arrival date on the arrival record and the visit-length distributions calculated in the first step. Only days of residence that would have occurred during the 12-month period were counted. In the third step, the average daily expected population size was calculated by adding the expected days of residence together across all visits from the second step and then dividing the total by 365.<sup>1</sup>

<sup>1</sup> The method could also be used to estimate the population size on January 1, but because of seasonal fluctuation, the average population size of the course of the year was found to be a more meaningful concept.

Arrival and departure records were used because there are no national census or survey data that identify nonimmigrants separately from other foreign-born persons. The population was estimated, as opposed to measured, because departure records were not available for all visits. For example, some visits were ongoing, while others ended without generating a departure record. Presence in (or absence from) the U.S. could not be determined in the absence of a departure record. The data and methods are described in further detail in the following sections.

### Data

Nonimmigrant arrival and departure data were obtained from DHS Form I-94 *Nonimmigrant Arrival/Departure Record* and provided by U.S. Customs and Border Protection (CBP). Information collected on Form I-94 includes arrival date, departure date, port of entry, class of admission, country of citizenship, state of destination, age, and sex. Data were available for arrivals from October 1, 2001 through June 30, 2011 and for departures from October 1, 2004 through June 30, 2011.

The arrival and departure sections of form I-94 are submitted separately and come preprinted with identical tracking numbers. During the admission process, a CBP officer either collects the arrival section of the I-94 or updates a preexisting, electronic I-94 record to reflect a repeat arrival during the previously authorized admission period. The departure data, on the other hand, are less reliably collected and may be absent for a variety of



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reasons. For example, some visits might not have ended by the date the data are compiled, the nonimmigrant might adjust to LPR status, or the nonimmigrant might depart without submitting the departure section of the I-94. Based on recent trends, departure records are eventually collected for 75-80 percent of all resident nonimmigrant visits, but fewer than 50 percent are collected in the same year as the arrival.

Whenever possible, the arrival and departure sections were matched together to reconstruct the visit history. An arrival record was considered to be a match with a departure record if the preprinted tracking number, first initial of last name, and date of birth were identical on both sections. About 97 percent of departure records are successfully matched to an arrival record each year. Visit length was calculated from the arrival and departure dates for each of the reconstructed visit records.

Analysis was restricted to resident nonimmigrant classes of admission, i.e., classes characterized by visits lasting 2 months or longer on average.<sup>2</sup> The 2-month duration was chosen in order to be consistent with the residence definitions used in the U.S. Census Bureau's American Community Survey and DHS estimates of the size and characteristics of the unauthorized immigrant population (Hoefer et al, 2012). Because admission under a residence class does not guarantee residence in the U.S. for every individual admitted under that class, data were further restricted by omitting records clearly exhibiting commuter behavior (i.e., 7 or more visits in the same year).

## Method

The population size was estimated by taking the average of the expected number of days of presence during the 12-month period, July 1, 2010–June 30, 2011. The expected days of presence were calculated for each visit using the actual arrival date and the visit-length distribution estimated for the given class of admission and country of citizenship. Only days of presence that would have occurred during the 12-month period were counted toward the total.

**Step 1—Reconstruct Visit Records and Estimate Visit-length Distributions.** Visit records were reconstructed by matching arrival records with departure records. An arrival record was found to be a match with a departure record if the preprinted tracking number, first initial of last name, and date of birth were identical on both records. Visit length, or the number of days between arrival and departure, was calculated from the arrival and departure dates for each of the reconstructed visit records.

Next, visit-length frequency tables for each class of admission and country of citizenship were tabulated from the reconstructed visit records. Only visits with a departure during the 12-month period were included in the tabulations. The frequency tables were then converted into probability distributions by dividing by the number of visits.

The visits used for the frequency tables were limited to those with departures during the 12-month period in order to avoid selection bias. Without such a restriction, longer visits would be

<sup>2</sup> See Appendix I for a list of resident nonimmigrant classes of admission.

disproportionately excluded because they are less likely to have ended by the date on which the data were compiled. The resulting visit-length distributions were assumed to be representative of all visits, but were not representative of either the matched or unmatched visits alone. As a result, days of presence had to be estimated for all arrivals, not just those without matching departure records.

**Step 2—Calculate the Expected Number of Days of Presence during the 12-month Period for Each Visit.** In the second step, the expected number of days of presence in the U.S. during the 12-month period is calculated for each visit by applying the visit-length distribution (estimated in Step 1 for each class of admission and country of citizenship) to the actual arrival date on the arrival section of the I-94. The calculation is performed by taking the sum across all possible visit lengths ( $D = 1$  day, 2 days, 3 days, ..., max) of the product of the number of days that would have occurred during the 12-month period if the visit lasted  $D$  days and the probability that the visit lasted  $D$  days.

**Step 3—Calculate Total and Convert to Daily Average.** The average daily expected number of days of presence (i.e., the estimated population size) is calculated taking the sum of all of the expected days of presence from Step 2 (overall or within a specific group) and dividing the total by 365.

## LIMITATIONS

The accuracy and precision of the population estimates depend on how well the reconstructed visits with a departure during the 12-month period represent all visits within each class of admission and country of citizenship. Some of the more apparent or important limitations are discussed below.

### Adjustment to LPR status

Limited departure data are available for nonimmigrants who adjust to legal permanent resident status. The impact on estimated visit-length and nonimmigrant population size is expected to be small, in general, because relatively few visits result in adjustment to LPR status. For example, fewer than 250,000 resident nonimmigrants adjusted to LPR status in fiscal year 2010, despite more than 5.4 million resident nonimmigrant admissions. The impact may be greater among classes and countries with higher adjustment rates. For example, the number of adjustments per admission in FY 2010 was 1 in 5 for H4 dependents, 1 in 9 for H-1B workers, and only 1 in 60 for seasonal workers. Results are presented only for broad categories of classes because of the clustering of adjustments.

### Effect of visit length on probability of Form I-94 loss or damage

If the probability that a nonimmigrant will lose the departure stub prior to departure increases with visit length, then longer visits may be underrepresented in the observed visit-length probability distributions, and the population size may be underestimated as a result.

### Choice of classification variables

Visit length is known to vary with class of admission and country of citizenship, but may also change with additional classification

variables within some subgroups. For example, student visits that begin with the start of the fall semester may be more likely to end after 9 months than student visits that start in January. Similarly, Canadian workers in Texas may tend to take fewer trips home than Canadian workers in Michigan. Restricting the method to the two primary classification variables limited complexity and ensured that many data points were available at most levels, but did so at the possible expense of a more robust model.

### Increasing arrival volume

The observed visit-length distributions are based on completed visits with an arrival between Oct. 1, 2000 and June 30, 2011 and a departure recorded between July 1, 2010 and June 30, 2011. Because arrival flow tends to increase slightly each year, departures in the most recent year disproportionately reflect more recent arrivals. Therefore the visit-length distributions, and the resulting population estimates, are likely to be slightly biased downwards.

### Stability of visit length across time

It is implicitly assumed that the visit length distribution is constant across time. This assumption is supported by data showing little variation in average visit lengths and distributions of arrival dates from 2007 through 2010.

## RESULTS

### Category of admission

There were approximately 1.9 million nonimmigrants residing in the U.S. during the 12-month period centered on January 1, 2011. Temporary workers<sup>3</sup> and students comprised the largest admission categories, making up 45 and 38 percent of the total, respectively (see Table 1). Exchange visitors made up another 13 percent, followed by diplomats and other representatives (5 percent). Estimates for students and exchange visitor principals are consistent with counts of “active” students from the DHS Student and Exchange Visitor Information System (SEVIS) (see Appendix 2).

### Region and country of citizenship

About half of the resident nonimmigrants (946,000) were citizens of Asian countries, including India (22 percent), China (9 percent), South Korea (8 percent), Japan (5 percent), and Taiwan (2 percent) (see Table 2). Europe and North America comprised another 29 percent, led by Canada (8 percent) and Mexico (6 percent). The five leading countries accounted for over 50 percent of the total.

Temporary workers made up much larger portions of the nonimmigrant populations from India (73 percent) and Mexico (72 percent) than from all countries (45 percent) (see Table 3). Nonimmigrants from Canada also tended to be temporary workers (55 percent). Nonimmigrants from China and Korea, on the other hand, were more likely to be in the U.S. on student visas (70 and 68 percent, respectively, as compared to the average of 38 percent).

<sup>3</sup> Each category of admission includes both principal nonimmigrants and dependent (non-principal) family members.

**Table 1.**

### Resident Nonimmigrant Population by Category of Admission: January 2011

| Category of admission                                    | Number    | Percent |
|--|-----------|---------|
| Total . . . . .  | 1,910,000 | 100     |
| Temporary workers and families . . . . .                 | 850,000   | 45      |
| Students and families . . . . .                          | 720,000   | 38      |
| Exchange visitors and families . . . . .                 | 250,000   | 13      |
| Diplomats, other representatives, and families . . . . . | 90,000    | 5       |

Note: Detail may not sum to totals because of rounding.

Source: U.S. Department of Homeland Security.

**Table 2.**

### Resident Nonimmigrant Population by Region and Country of Citizenship: January 2011

| Region                   | Number    | Percent |
|--------------------------|-----------|---------|
| Total . . . . .          | 1,910,000 | 100     |
| Asia . . . . .           | 950,000   | 50      |
| India . . . . .          | 420,000   | 22      |
| China . . . . .          | 180,000   | 9       |
| Korea, South . . . . .   | 150,000   | 8       |
| Japan . . . . .          | 90,000    | 5       |
| Taiwan . . . . .         | 40,000    | 2       |
| All others . . . . .     | 80,000    | 4       |
| North America . . . . .  | 300,000   | 16      |
| Canada . . . . .         | 150,000   | 8       |
| Mexico . . . . .         | 110,000   | 6       |
| All others . . . . .     | 40,000    | 2       |
| Europe . . . . .         | 260,000   | 14      |
| United Kingdom . . . . . | 60,000    | 3       |
| Germany . . . . .        | 50,000    | 2       |
| France . . . . .         | 40,000    | 2       |
| All others . . . . .     | 120,000   | 6       |
| South America . . . . .  | 100,000   | 5       |
| All others . . . . .     | 310,000   | 16      |

Note: Detail may not sum to totals because of rounding.

Source: U.S. Department of Homeland Security.

### State of destination

California was the leading destination state, making up 14 percent of the total population of resident nonimmigrants (see Table 4). The next leading destination states were New York (12 percent), Texas (8 percent), Florida (5 percent), and New Jersey (5 percent). The top 5 destination states accounted for 44 percent of the total, and the top 10 accounted for more than 60 percent.

The state rankings varied by country of citizenship and category of admission. Disproportionately many Indians went to New Jersey (11 percent), disproportionately many Koreans went to California (21 percent), and Canadians were more likely to reside in New York (17 percent). Twenty-six percent of Mexicans went to Texas, 8 percent went to California, and 6 percent went to Florida.

Diplomats and other representatives were concentrated in New York (22 percent) and Virginia (13 percent) (see Table 5). Compared to the general population, students and exchange visitors were more likely to reside in Massachusetts and less likely to reside in New Jersey or Texas.

## Age and sex

One third of the population was under the age of 25, 40 percent was 25-34, and 27 percent was 35 or older, but there was considerable variation among the top 5 countries (see Table 6 and Figure 1). For example, 65 percent of Indian nationals were 25-34, Chinese and Korean nationals tended to be younger (54 and 44 percent under 25), and Canadians and Mexicans tended to be older (42 and 39 percent were 35 and older, as compared to 27 percent overall). Although the age distributions for males and females closely resembled the overall age distribution, males

tended to be older; 31 percent were 35 or older, as compared to 22 percent of females (see Figure 2).

Slightly more than half of the total population was male (55 percent) (see Table 7). The percentages that were male were higher for nationals of India, Canada, and Mexico (58, 56, and 73 percent) and lower than 50 percent for nationals of China and Korea. Temporary workers and diplomats were disproportionately likely to be male (60 and 62 percent), 54 percent of students were male, and fewer than half of exchange visitors were male (48 percent) (See Figure 3).

**Table 3.**

### Resident Nonimmigrant Population by Category of Admission and Country of Citizenship: January 2011

| Category of admission                                    | Number    | Percent |       |       |       |        |        |            |
|--|-----------|---------|-------|-------|-------|--------|--------|------------|
|  |           | Total   | India | China | Korea | Canada | Mexico | All others |
| Total . . . . .  | 1,910,000 | 100     | 100   | 100   | 100   | 100    | 100    | 100        |
| Temporary workers and families . . . . .                 | 850,000   | 45      | 73    | 14    | 19    | 55     | 72     | 36         |
| Students and families . . . . .                          | 720,000   | 38      | 24    | 70    | 68    | 32     | 17     | 37         |
| Exchange visitors and families . . . . .                 | 250,000   | 13      | 2     | 14    | 12    | 9      | 8      | 19         |
| Diplomats, other representatives, and families . . . . . | 90,000    | 5       | —     | —     | —     | 4      | —      | 8          |

— Represents less than 5,000.

Note: Detail may not sum to totals because of rounding.

Source: U.S. Department of Homeland Security.

**Table 4.**

### Resident Nonimmigrant Population by State of Destination and Country of Citizenship: January 2011

(Ranked by state of destination)

| State of destination       | Total     |         | India   |         | China   |         | Korea   |         | Canada  |         | Mexico  |         | All other countries |         |
|----------------------------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------|---------|
|                            | Number    | Percent | Number  | Percent | Number  | Percent | Number  | Percent | Number  | Percent | Number  | Percent | Number              | Percent |
| Total . . . . .            | 1,910,000 | 100     | 420,000 | 100     | 180,000 | 100     | 150,000 | 100     | 150,000 | 100     | 110,000 | 100     | 900,000             | 100     |
| California . . . . .       | 270,000   | 14      | 70,000  | 16      | 30,000  | 17      | 30,000  | 21      | 20,000  | 11      | 10,000  | 8       | 120,000             | 13      |
| New York . . . . .         | 230,000   | 12      | 30,000  | 7       | 20,000  | 10      | 20,000  | 11      | 20,000  | 17      | —       | —       | 130,000             | 15      |
| Texas . . . . .            | 150,000   | 8       | 40,000  | 9       | 10,000  | 4       | 10,000  | 5       | 10,000  | 6       | 30,000  | 26      | 60,000              | 6       |
| Florida . . . . .          | 100,000   | 5       | 10,000  | 3       | —       | —       | —       | —       | 10,000  | 4       | 10,000  | 6       | 70,000              | 7       |
| New Jersey . . . . .       | 90,000    | 5       | 50,000  | 11      | —       | —       | 10,000  | 5       | —       | —       | —       | —       | 30,000              | 3       |
| Massachusetts . . . . .    | 90,000    | 5       | 20,000  | 4       | 10,000  | 5       | 10,000  | 5       | 10,000  | 5       | —       | —       | 50,000              | 5       |
| Illinois . . . . .         | 70,000    | 4       | 30,000  | 6       | 10,000  | 4       | 10,000  | 4       | —       | —       | —       | —       | 30,000              | 3       |
| Pennsylvania . . . . .     | 60,000    | 3       | 20,000  | 4       | 10,000  | 4       | 10,000  | 4       | 10,000  | 3       | —       | —       | 30,000              | 3       |
| Virginia . . . . .         | 60,000    | 3       | 10,000  | 3       | —       | —       | —       | —       | —       | —       | —       | —       | 30,000              | 3       |
| Michigan . . . . .         | 60,000    | 3       | 10,000  | 3       | 10,000  | 4       | —       | —       | 10,000  | 6       | —       | —       | 20,000              | 2       |
| All other states . . . . . | 730,000   | 38      | 150,000 | 35      | 80,000  | 44      | 50,000  | 37      | 60,000  | 40      | 50,000  | 45      | 340,000             | 38      |

— Represents less than 5,000.

Note: Detail may not sum to totals because of rounding.

Source: U.S. Department of Homeland Security.

**Table 5.**

### Resident Nonimmigrant Population by State of Destination and Category of Admission: January 2011

(Ranked by state of destination)

| State of destination       | Total     |         | Temporary workers |         | Students and families |         | Exchange visitors |         | Diplomats and other representatives |         |
|----------------------------|-----------|---------|-------------------|---------|-----------------------|---------|-------------------|---------|-------------------------------------|---------|
|                            | Number    | Percent | Number            | Percent | Number                | Percent | Number            | Percent | Number                              | Percent |
| Total . . . . .            | 1,910,000 | 100     | 850,000           | 100     | 720,000               | 100     | 250,000           | 100     | 90,000                              | 100     |
| California . . . . .       | 270,000   | 14      | 130,000           | 15      | 110,000               | 15      | 30,000            | 12      | —                                   | —       |
| New York . . . . .         | 230,000   | 12      | 90,000            | 11      | 90,000                | 12      | 30,000            | 11      | 20,000                              | 22      |
| Texas . . . . .            | 150,000   | 8       | 90,000            | 10      | 50,000                | 6       | 10,000            | 4       | —                                   | —       |
| Florida . . . . .          | 100,000   | 5       | 50,000            | 6       | 30,000                | 5       | 10,000            | 4       | —                                   | —       |
| New Jersey . . . . .       | 90,000    | 5       | 60,000            | 7       | 20,000                | 3       | 10,000            | 4       | —                                   | —       |
| Massachusetts . . . . .    | 90,000    | 5       | 30,000            | 3       | 50,000                | 6       | 20,000            | 7       | —                                   | —       |
| Illinois . . . . .         | 70,000    | 4       | 40,000            | 4       | 30,000                | 4       | 10,000            | 3       | —                                   | —       |
| Pennsylvania . . . . .     | 60,000    | 3       | 20,000            | 3       | 30,000                | 4       | 10,000            | 4       | —                                   | —       |
| Virginia . . . . .         | 60,000    | 3       | 20,000            | 3       | 20,000                | 2       | 10,000            | 3       | 10,000                              | 13      |
| Michigan . . . . .         | 60,000    | 3       | 30,000            | 3       | 20,000                | 3       | 10,000            | 3       | —                                   | —       |
| All other states . . . . . | 730,000   | 38      | 300,000           | 35      | 280,000               | 39      | 110,000           | 44      | 40,000                              | 46      |

— Represents less than 5,000.

Note: Detail may not sum to totals because of rounding. Categories include both principals and dependents.

Source: U.S. Department of Homeland Security.

**Table 6.**

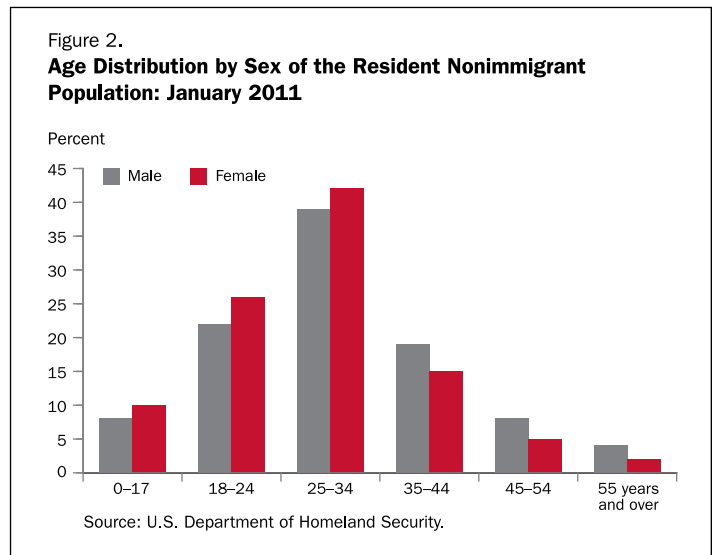
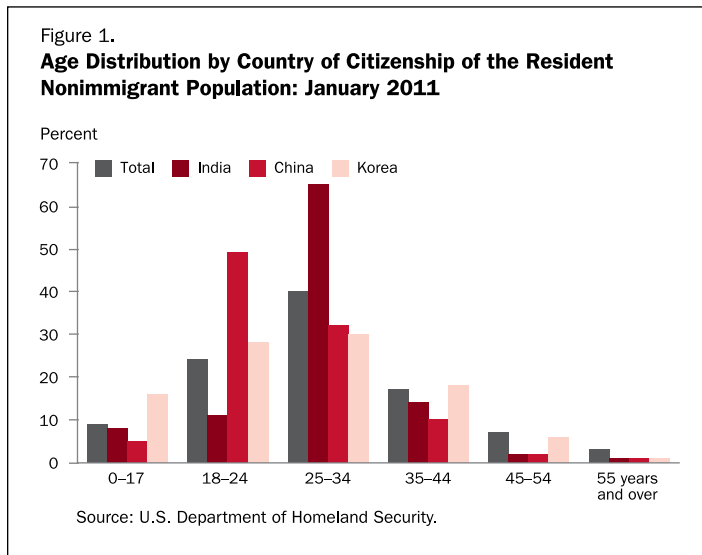
**Resident Nonimmigrant Population by Age and Country of Citizenship: January 2011**

| Age                | Total     |         | India   |         | China   |         | Korea   |         | Canada  |         | Mexico  |         | All other countries |         |
|--------------------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------|---------|
|                    | Number    | Percent | Number  | Percent | Number  | Percent | Number  | Percent | Number  | Percent | Number  | Percent | Number              | Percent |
| Total . . . . .    | 1,910,000 | 100     | 420,000 | 100     | 180,000 | 100     | 150,000 | 100     | 150,000 | 100     | 110,000 | 100     | 900,000             | 100     |
| 0–17 years . . . . | 170,000   | 9       | 30,000  | 8       | 10,000  | 5       | 20,000  | 16      | 10,000  | 8       | 10,000  | 8       | 80,000              | 9       |
| 18–24 years . . .  | 450,000   | 24      | 50,000  | 11      | 90,000  | 49      | 40,000  | 28      | 20,000  | 16      | 20,000  | 18      | 240,000             | 26      |
| 25–34 years . . .  | 770,000   | 40      | 280,000 | 65      | 60,000  | 32      | 40,000  | 30      | 50,000  | 34      | 40,000  | 34      | 300,000             | 34      |
| 35–44 years . . .  | 320,000   | 17      | 60,000  | 14      | 20,000  | 10      | 30,000  | 18      | 30,000  | 22      | 30,000  | 25      | 160,000             | 18      |
| 45–54 years . . .  | 130,000   | 7       | 10,000  | 2       | —       | —       | 10,000  | 6       | 20,000  | 13      | 10,000  | 11      | 80,000              | 8       |
| 55 years and over  | 60,000    | 3       | —       | —       | —       | —       | —       | —       | 10,000  | 7       | —       | —       | 40,000              | 4       |

— Represents less than 5,000.

Note: Detail may not sum to totals because of rounding or exclusion of unknown values; age is unknown for 10,000.

Source: U.S. Department of Homeland Security.



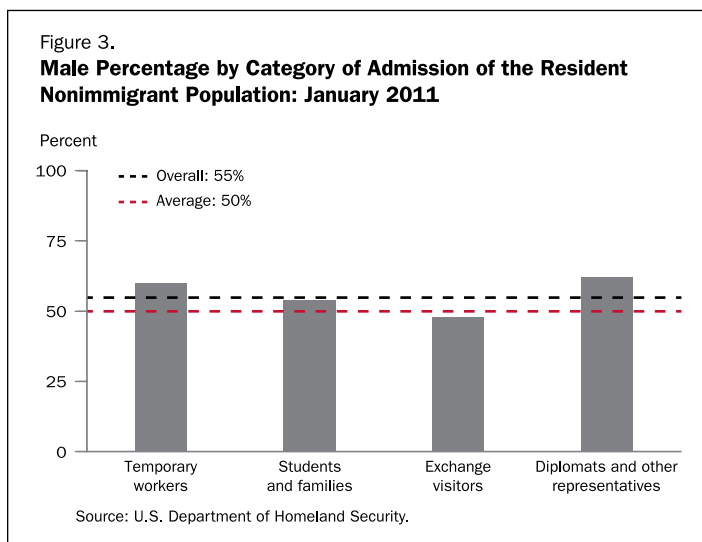
**Table 7.**

**Resident Nonimmigrant Population by Sex and Country of Citizenship: January 2011**

| Sex              | Total     |         | India   |         | China   |         | Korea   |         | Canada  |         | Mexico  |         | All other countries |         |
|------------------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------|---------|
|                  | Number    | Percent | Number  | Percent | Number  | Percent | Number  | Percent | Number  | Percent | Number  | Percent | Number              | Percent |
| Total . . . . .  | 1,910,000 | 100     | 420,000 | 100     | 180,000 | 100     | 150,000 | 100     | 150,000 | 100     | 110,000 | 100     | 900,000             | 100     |
| Male . . . . .   | 1,050,000 | 55      | 250,000 | 58      | 80,000  | 47      | 70,000  | 48      | 80,000  | 56      | 80,000  | 73      | 480,000             | 54      |
| Female . . . . . | 820,000   | 43      | 170,000 | 39      | 90,000  | 51      | 70,000  | 50      | 60,000  | 42      | 30,000  | 25      | 390,000             | 44      |

Note: Detail may not sum to totals because of rounding or exclusion of unknown values; sex is unknown for 40,000 persons.

Source: U.S. Department of Homeland Security.



**FOR MORE INFORMATION**

For more information about immigration and immigration statistics, visit the Office of Immigration Statistics Web site at [www.dhs.gov/immigrationstatistics](http://www.dhs.gov/immigrationstatistics).

## APPENDIX 1

**Table A1**

### Nonimmigrant Classes of Admission Associated with Residency

| Class  | Description  |
|--|--|
| Temporary workers and families               |  |
| Temporary workers and trainees               |  |
| H1B . . . . .                                | Workers in specialty occupations   |
| H1B1 . . . . .                               | Chile and Singapore Free Trade Agreement aliens  |
| H1C . . . . .                                | Registered nurses participating in the Nursing Relief for Disadvantaged Areas            |
| H2A . . . . .                                | Seasonal agricultural workers  |
| H2B . . . . .                                | Seasonal nonagricultural workers   |
| H2R . . . . .                                | Returning H2B workers  |
| H3 . . . . .                                 | Trainees   |
| H4 . . . . .                                 | Spouses and children of H1, H2, or H3  |
| O1 . . . . .                                 | Workers with extraordinary ability or achievement  |
| O2 . . . . .                                 | Workers accompanying and assisting in performance of O1 workers                          |
| O3 . . . . .                                 | Spouses and children of O1 and O2  |
| P1. . . . .                                  | Internationally recognized athletes or entertainers                                      |
| P2. . . . .                                  | Artists or entertainers in reciprocal exchange programs                                  |
| P3. . . . .                                  | Artists or entertainers in culturally unique programs                                    |
| P4. . . . .                                  | Spouses and children of P1, P2, or P3  |
| Q1 . . . . .                                 | Workers in international cultural exchange programs                                      |
| R1 . . . . .                                 | Workers in religious occupations   |
| R2 . . . . .                                 | Spouses and children of R1   |
| TN. . . . .                                  | North American Free Trade Agreement (NAFTA) professional workers                         |
| TD. . . . .                                  | Spouses and children of TN   |
| Intracompany transferees                     |  |
| L1. . . . .                                  | Intracompany transferees   |
| L2. . . . .                                  | Spouses and children of L1   |
| Treaty traders and investors                 |  |
| E1. . . . .                                  | Treaty traders and their spouses and children  |
| E2. . . . .                                  | Treaty investors and their spouses and children  |
| E3. . . . .                                  | Australian Free Trade Agreement principals, spouses and children                         |
| Representatives of foreign information media |  |
| I1 . . . . .                                 | Representatives of foreign information media and spouses and children                    |
| Students                                     |  |
| F1. . . . .                                  | Academic students  |
| F2. . . . .                                  | Spouses and children of F1   |
| M1 . . . . .                                 | Vocational students  |
| M2 . . . . .                                 | Spouses and children of M1   |
| Exchange visitors                            |  |
| J1. . . . .                                  | Exchange visitors  |
| J2. . . . .                                  | Spouses and children of J1   |
| Diplomats and other representatives          |  |
| A1. . . . .                                  | Ambassadors, public ministers, career diplomatic or consular officers and their families |
| A2. . . . .                                  | Other foreign government officials or employees and their families                       |
| A3. . . . .                                  | Attendants, servants, or personal employees of A1 and A2 and their families              |
| G1 . . . . .                                 | Principals of recognized foreign governments   |
| G2 . . . . .                                 | Other representatives of recognized foreign governments                                  |
| G3 . . . . .                                 | Representatives of nonrecognized or nonmember foreign governments                        |
| G4 . . . . .                                 | International organization officers or employees   |
| G5 . . . . .                                 | Attendants, servants, or personal employees of representatives                           |
| N1 to N7 . . . . .                           | North Atlantic Treaty Organization (NATO) officials, spouses, and children               |
| Other categories                             |  |
| Q2 . . . . .                                 | Irish Peace Process Cultural and Training Program aliens                                 |
| Q3 . . . . .                                 | Spouses and children of Q2   |

Source: U.S. Department of Homeland Security.

Note: All class categories include both principals and dependents.

## APPENDIX 2

Counts of active students and exchange visitors and estimates of nonimmigrant academic enrollments are available from other sources and are presented here for comparison with the I-94-based estimates of the population residing in the U.S. Average population sizes for active students, exchange visitors, and dependents were calculated from quarterly program statistics tabulated from the Student and Exchange Visitor Information System (see SEVIS By the Numbers). Survey-based estimates of academic-year enrollments for international students were obtained from the Institute of International Education (see Open Doors). The alternative estimates differ from the Office of Immigration Statistics (OIS) estimates because they measure types of enrollments as opposed to residence and, in the case of Open Doors, define students differently. Further, because the activity status of dependents in SEVIS is determined by the status of the principal, dependents may be included in the SEVIS counts without presence in, or entry into, the U.S. All differences are smaller than observed for the 2008 estimates (Baker, 2010).

The number of active students estimated from quarterly SEVIS data was 810,000, which exceeds the estimated size of the population in residence by 18 percent; the active student estimate exceeds the size of the residential population because students may retain active status while abroad between semesters. Open Doors estimated 720,000 international student enrollments for the 2010/2011 academic year (see Table A2-1). The enrollment estimate exceeds the residential population size because students may not be enrolled for the entire year or may spend part of the year abroad, and because the estimate includes nonimmigrant visa classes other than students. Open Doors excludes some students because the survey is limited to accredited institutions of higher education.

**Table A2-1**

### Comparison against Alternative Data Sources

| Class of admission |                      | SEVIS   | Open Doors | OIS     |
|--------------------|----------------------|---------|------------|---------|
| Students           | Principals . . . . . | 810,000 | 720,000    | 670,000 |
|                    | Dependents . . . . . | 80,000  | N/A        | 50,000  |
| Exchange visitors  | Principals . . . . . | 190,000 | N/A        | 210,000 |
|                    | Dependents . . . . . | 50,000  | N/A        | 40,000  |

Sources: U.S. Department of Homeland Security; Institute of International Education.

Note: Open Doors student estimates are not restricted to nonimmigrants with F-1 or M-1 visas.

The number of registered dependents of active students estimated from quarterly SEVIS data was 80,000, which exceeds the estimated residential population size by 66 percent; registered dependents of active students are included in SEVIS counts regardless of presence in the U.S. Open Doors does not provide estimates of student dependents.

The numbers of active exchange visitors and dependents estimated from quarterly SEVIS data were 190,000 and 50,000 respectively. The estimate for active principals was 6 percent below the estimated residential population size, and the estimate for active dependents exceeded the residents estimate by 24 percent.

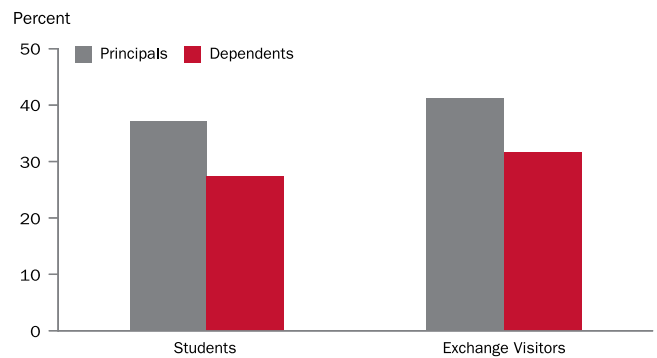
## APPENDIX 3

### Days of presence measured directly from reconstructed visit records

As noted previously, only slightly more than half of departures occur in the same year as the arrival. By definition, those same-year matches exclude visits that last a full year or longer. As a result, visit records reconstructed from matched arrival and departure records account for only a fraction of the total number of days of presence during that year. On the other hand, the population measurable from matched records is useful because the measurements serve as a concrete lower bound for the estimates.

The size of the population with matched arrival and departure records was about 700,000, or 37 percent of the estimated total size when counting all visits. The measurable percentage did not vary greatly across categories of admission but varied substantially between principals and dependents within the student and exchange visitor categories (see Figure A3-1 and Table A3-1).

Figure A3-1.  
**Percentage of the Resident Nonimmigrant Population Estimate that Can Be Directly Measured from Reconstructed (Matched) Visit Records: Student and Exchange Visitor Principals vs. Dependents**



Source: U.S. Department of Homeland Security.

**Table A3-1.****Category of Admission of the Resident Nonimmigrant Population: January 2011**

Estimates and Measurements

| Category of admission                                    | Estimates (all visits) |         | Measurements (complete visits only) |         | Proportion measured |
|--|------------------------|---------|-------------------------------------|---------|---------------------|
|  | Number                 | Percent | Number                              | Percent | Percent             |
| Total . . . . .  | 1,910,000              | 100     | 700,000                             | 100     | 37                  |
| Temporary workers and families . . . . .                 | 850,000                | 45      | 300,000                             | 43      | 36                  |
| Students and families. . . . .                           | 720,000                | 38      | 270,000                             | 38      | 37                  |
| Exchange visitors and families . . . . .                 | 250,000                | 13      | 100,000                             | 14      | 40                  |
| Diplomats, other representatives, and families . . . . . | 90,000                 | 5       | 30,000                              | 5       | 38                  |

Note: Detail may not sum to totals because of rounding.

Source: U.S. Department of Homeland Security.

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