

# The Foreign Born With Science and Engineering Degrees: 2010

Issued November 2011

## American Community Survey Briefs

ACSBR/10-06

### INTRODUCTION

Knowledge and application of science, engineering, and technology play an increasingly crucial role in the growth and stability of the U.S. economy. The U.S. Department of Commerce reports that over the past 10 years, growth in science and engineering (S&E) jobs was three times greater than that of other types of jobs.<sup>1</sup> In addition, science and engineering jobs are expected to continue to grow at a faster rate than other jobs. As a result, workers in S&E jobs are less likely to experience joblessness. Furthermore, S&E degree holders earn more than those who have degrees in other fields, regardless of whether or not they end up working in S&E occupations.

This brief will discuss patterns of science and engineering educational attainment within the foreign-born population living in the United States, using data from the 2010 American Community Survey (ACS). The analysis is restricted to the population aged 25 and older, and the results are presented on S&E degree attainment by place of birth and sex, as well as metropolitan statistical area. Science and engineering fields of degree, as defined

<sup>1</sup> Langdon, David, George McKittrick, David Beede, Beethika Khan, and Mark Doms. 2011. "STEM: Good Jobs Now and for the Future." U.S. Department of Commerce: Economic and Statistics Administration, Issue Brief #03-11. Available at <[www.esa.doc.gov/sites/default/files/reports/documents/stemfinaljuly14\\_1.pdf](http://www.esa.doc.gov/sites/default/files/reports/documents/stemfinaljuly14_1.pdf)>. Langdon et al. use the term "STEM" to refer to science, technology, engineering, and mathematics jobs and degrees. In this report, the science and engineering category includes such fields as biological sciences, physics, computer sciences, and social sciences, and is similar to, but not exactly the same as, the definition of STEM fields used by other researchers.

### DEFINING NATIVITY STATUS: WHO IS FOREIGN BORN?

Nativity status refers to whether a person is native or foreign born. The native-born population includes anyone who was a U.S. citizen at birth. Respondents who were born in the United States, Puerto Rico, a U.S. Island Area (U.S. Virgin Islands, Guam, American Samoa, or the Commonwealth of Northern Mariana Islands), or abroad of a U.S. citizen parent or parents, are defined as native born. The foreign-born population includes anyone who was not a U.S. citizen at birth, including those who have become U.S. citizens through naturalization.

by the U.S. Census Bureau, are divided into seven subcategories: 1) computers, mathematics, and statistics; 2) biological, agricultural, and environmental sciences; 3) physical and related sciences; 4) psychology; 5) social sciences; 6) engineering; and 7) multidisciplinary sciences.

Determination of field of degree is based on the respondent's answer to the 2010 ACS question: "What was the specific major or majors of any bachelor's degrees you have received?" Those with a bachelor's degree may or may not also have a higher degree; however, fields of degree for master's, doctoral, and professional

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Table 1.

**Educational Attainment for the Population Aged 25 and Older by Nativity: 2010**

(Numbers in thousands. Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [www.census.gov/acs/www](http://www.census.gov/acs/www))

Nativity	Total population aged 25 and older		With bachelor's degree or higher					
	Estimate	Margin of error <sup>1</sup> (+/-)	Total		Science and engineering fields <sup>2</sup>		All other fields <sup>2</sup>	
			Estimate	Margin of error <sup>1</sup> (+/-)	Estimate	Margin of error <sup>1</sup> (+/-)	Estimate	Margin of error <sup>1</sup> (+/-)
<b>NUMBER</b>								
<b>Total</b> .....	<b>204,289</b>	<b>73</b>	<b>57,578</b>	<b>169</b>	<b>19,922</b>	<b>88</b>	<b>37,656</b>	<b>131</b>
Native born .....	170,663	128	48,501	159	15,762	77	32,739	125
Foreign born .....	33,626	89	9,077	55	4,160	35	4,918	43
<b>PERCENT OF NATIVITY GROUP</b>								
<b>Total</b> .....	<b>100.0</b>	<b>(X)</b>	<b>28.2</b>	<b>0.1</b>	<b>9.8</b>	<b>-</b>	<b>18.4</b>	<b>0.1</b>
Native born .....	100.0	(X)	28.4	0.1	9.2	-	19.2	0.1
Foreign born .....	100.0	(X)	27.0	0.1	12.4	0.1	14.6	0.1
<b>PERCENT OF FIELD</b>								
<b>Total</b> .....	<b>100.0</b>	<b>(X)</b>	<b>100.0</b>	<b>(X)</b>	<b>100.0</b>	<b>(X)</b>	<b>100.0</b>	<b>(X)</b>
Native born .....	83.5	-	84.2	0.1	79.1	0.2	86.9	0.1
Foreign born .....	16.5	-	15.8	0.1	20.9	0.2	13.1	0.1

- Represents or rounds to zero.

(X) Not applicable.

<sup>1</sup> Data are based on a sample and are subject to sampling variability. A margin of error is a measure of an estimate's variability. The larger the margin of error is in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90 percent confidence interval.

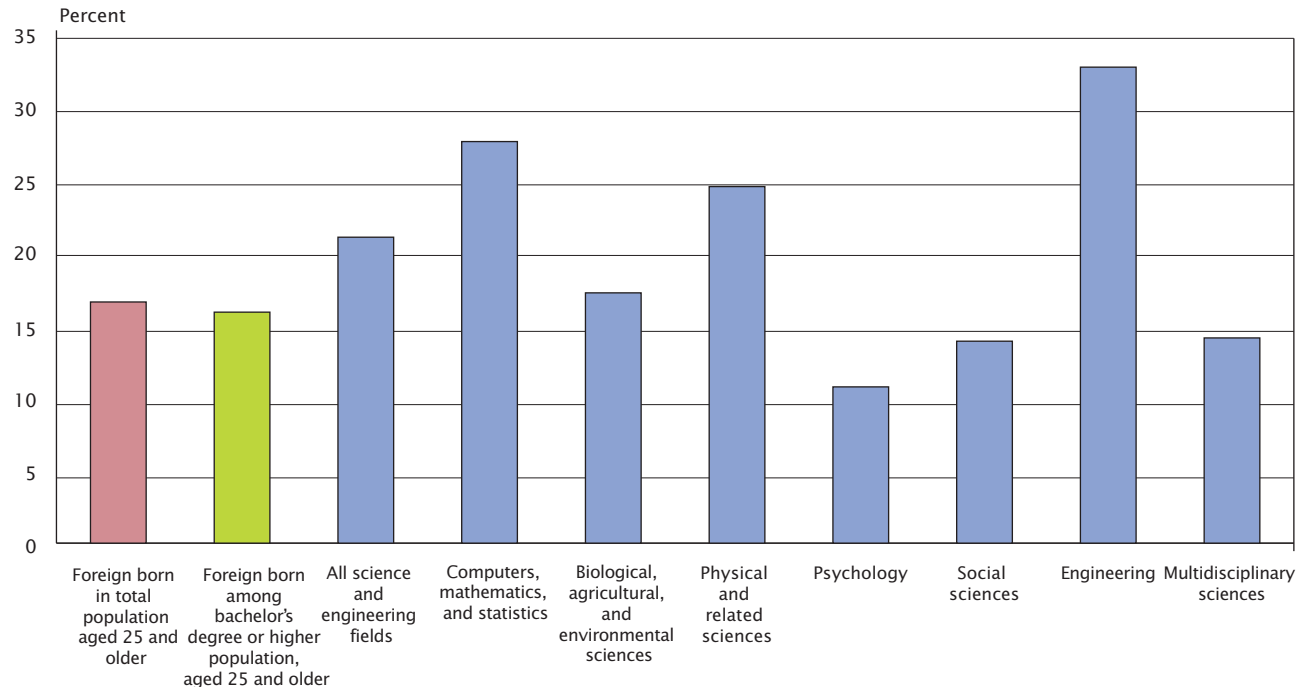
<sup>2</sup> Field of degree is for bachelor's degree.

Source: U.S. Census Bureau, 2010 American Community Survey.

Figure 1.

**Percent Foreign Born of the Population Aged 25 and Older, by Educational Attainment and Field of Degree: 2010**

(Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [www.census.gov/acs/www](http://www.census.gov/acs/www))



Source: U.S. Census Bureau, 2010 American Community Survey.

degrees are not analyzed in this report because field of degree is only assessed at the bachelor's degree level in the American Community Survey.

## FINDINGS

In 2010, 48.5 million (28 percent) of the 170.7 million native-born population aged 25 and older, and 9.1 million (27 percent) of the 33.6 million foreign-born population aged 25 and older, had a bachelor's degree or higher (Table 1). Nationwide, the foreign born made up 16 percent of the resident population holding a bachelor's degree or higher, and a larger proportion (21 percent) of the population whose bachelor's degree was in an S&E field (Figure 1). The foreign born represented 33 percent of all bachelor's degree holders in engineering fields,

27 percent in computers, mathematics, and statistics, 24 percent in physical sciences, and 17 percent in biological, agricultural, and environmental sciences.

Compared by nativity, a higher proportion of the foreign born had bachelor's degrees in S&E fields than the native born (Figure 2). Of those with bachelor's degrees or higher, 33 percent of native born had a degree in an S&E field, while 46 percent of foreign born had a degree in an S&E field. This difference was also pronounced in certain degree fields, such as engineering, computers, mathematics, statistics, and physical sciences.

Of the 4.2 million foreign-born S&E bachelor's degree holders in the United States, 57 percent were born in Asia, 18 percent in Europe, 16 percent in Latin America

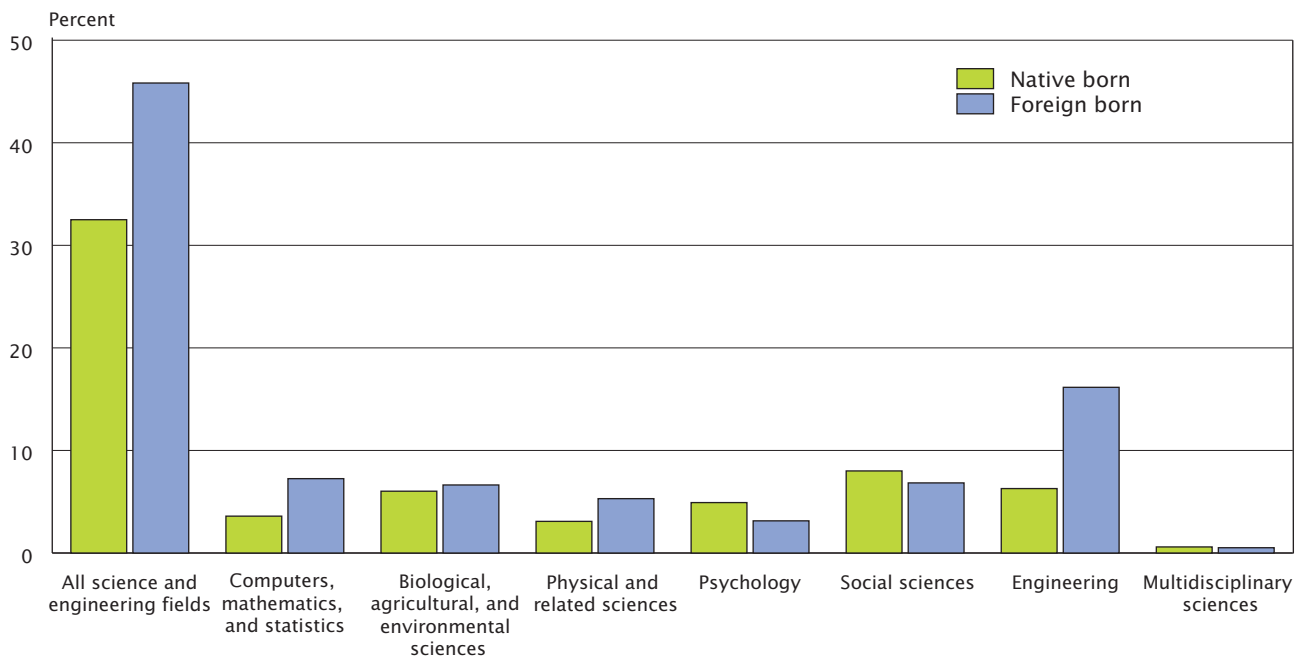
and the Caribbean,<sup>2</sup> 5 percent in Africa, 3 percent in Northern America, and less than 1 percent in Oceania (Table 2 and Figure 3). The country of birth with the largest number of S&E degree holders was India with 747,000, accounting for 18 percent of the foreign-born population with S&E degrees. China was the next largest country-of-birth group at 516,000, representing over 12 percent of the foreign-born population with S&E degrees. The other country-of-birth groups with over 100,000 foreign born with S&E degrees were the Philippines, Korea, Mexico, Vietnam, Canada, and Iran.

<sup>2</sup> The term Latin America and the Caribbean includes countries in Central and South America and the Caribbean. Throughout the remainder of this report, the term Latin America refers to all of these areas.

Figure 2.

### Percent of the Population Aged 25 and Older With a Bachelor's Degree or Higher by Nativity and Field of Degree: 2010

(Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [www.census.gov/acs/www](http://www.census.gov/acs/www))

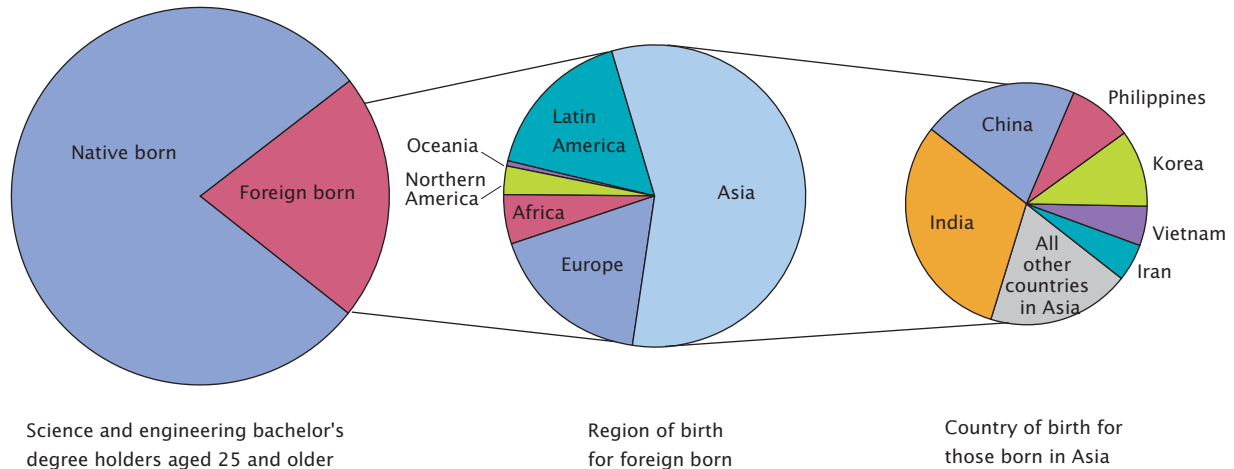


Source: U.S. Census Bureau, 2010 American Community Survey.

Figure 3.

### Nativity and Place of Birth of the Population Aged 25 and Older With a Science and Engineering Bachelor's Degree: 2010

(Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [www.census.gov/acs/www](http://www.census.gov/acs/www))



Source: U.S. Census Bureau, 2010 American Community Survey.

#### Computers, Mathematics, and Statistics

The majority (64 percent) of foreign born with degrees in computers, mathematics, and statistics were born in Asia, including 24 percent who were born in India and 14 percent who were born in China (Table 2). Asia and Oceania (18 percent each) were among the world regions of birth with the highest proportion of science and engineering degree holders who had studied computers, mathematics, and statistics (Table 3). Looking at countries of birth, Vietnam (22 percent) and India (21 percent) had the highest proportion of degree holders in computers, mathematics, and statistics fields.<sup>3</sup>

#### Biological, Agricultural, and Environmental Sciences

Biological, agricultural, and environmental science degrees were

<sup>3</sup> Vietnam and India are not significantly different from each other in this comparison.

especially common among the foreign born from Africa, Northern America, and Oceania. Eighteen percent of S&E degree holders from each of these regions majored in biological, agricultural, and environmental sciences (Table 3). Vietnam (19 percent) and Canada (18 percent) were among the countries of birth with the highest proportions of S&E degree holders who majored in biological, agricultural, and environmental sciences.

#### Physical and Related Sciences

Of foreign born with bachelor's degrees in physical and related science fields, 61 percent were born in Asia (Table 2). China had the largest proportion (16 percent) of S&E degree holders who majored in physical and related sciences (Table 3). The foreign born from Mexico

(7 percent) and Vietnam (8 percent) had the smallest proportions.<sup>4</sup>

#### Psychology

Overall, only 7 percent of foreign born with S&E degrees had majored in psychology (Table 3). In comparison, 13 percent of S&E degree holders from both Latin America and Northern America had degrees in psychology. Looking at countries of birth, Mexico and Canada had the highest proportion (13 percent each) of psychology degrees, while India had the lowest proportion (3 percent). Foreign born from Latin America made up 16 percent of all foreign-born S&E degree holders, but 32 percent of foreign born with psychology degrees (Table 2). Similarly, foreign born from Northern America made up 3 percent of all foreign born with S&E

<sup>4</sup> Mexico and Vietnam are not significantly different from each other in this comparison.

Table 2.

### Percent Distribution of the Foreign-Born Population Aged 25 and Older With Science and Engineering Degrees by Place of Birth: 2010

(Numbers in thousands. Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [www.census.gov/acs/www](http://www.census.gov/acs/www))

Region/country of birth <sup>1</sup>	All science and engineering fields	Science and engineering field categories						
		Computers, mathematics, and statistics	Biological, agricultural, and environmental sciences	Physical and related sciences	Psychology	Social sciences	Engineering	Multi-disciplinary sciences
<b>ESTIMATE</b>								
Number .....	4,160	658	602	481	285	620	1,466	47
<b>PERCENT</b>								
<b>Total</b> .....	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Africa .....	5.3	5.5	6.7	5.1	3.9	7.4	4.0	7.0
Asia .....	57.0	63.5	57.5	61.0	39.1	46.6	60.6	50.8
India .....	18.0	24.3	14.6	19.9	8.1	8.7	22.0	8.6
China <sup>2</sup> .....	12.4	14.0	13.7	17.5	5.7	8.4	12.6	6.8
Philippines .....	5.2	4.1	5.2	4.4	6.9	5.5	5.5	10.5
Korea <sup>3</sup> .....	4.5	3.9	5.2	4.7	4.4	5.9	3.7	8.3
Vietnam .....	3.2	4.5	4.2	2.2	2.3	1.9	3.4	3.3
Iran .....	2.6	2.0	2.9	2.3	1.9	1.7	3.2	1.5
Europe .....	17.6	15.5	15.8	18.4	18.8	21.5	17.2	13.3
Latin America and the Caribbean .....	16.4	12.8	15.3	11.6	31.6	19.4	15.7	22.8
Mexico .....	4.1	2.7	3.6	2.4	7.9	4.4	4.6	5.4
Northern America .....	3.1	1.9	3.9	3.2	5.8	4.5	2.1	4.6
Canada .....	3.1	1.9	3.8	3.2	5.7	4.4	2.1	4.2
Oceania .....	0.6	0.7	0.8	0.7	0.9	0.7	0.4	1.5
<b>MARGIN OF ERROR<sup>4</sup> (+/-)</b>								
Number .....	35	12	12	11	10	13	21	3
<b>PERCENT</b>								
<b>Total</b> .....	<b>(X)</b>	<b>(X)</b>	<b>(X)</b>	<b>(X)</b>	<b>(X)</b>	<b>(X)</b>	<b>(X)</b>	<b>(X)</b>
Africa .....	0.2	0.5	0.5	0.6	0.6	0.5	0.3	2.2
Asia .....	0.5	1.0	1.1	1.4	1.6	1.1	0.8	3.7
India .....	0.4	1.1	0.8	1.1	0.9	0.5	0.6	2.0
China <sup>2</sup> .....	0.3	0.6	0.8	1.0	0.7	0.6	0.5	1.6
Philippines .....	0.2	0.4	0.4	0.5	0.7	0.5	0.3	2.2
Korea <sup>3</sup> .....	0.2	0.4	0.6	0.6	0.7	0.5	0.3	2.2
Vietnam .....	0.1	0.5	0.4	0.3	0.4	0.3	0.3	1.3
Iran .....	0.1	0.3	0.4	0.4	0.4	0.3	0.3	1.0
Europe .....	0.3	0.8	0.8	0.9	1.2	0.9	0.5	2.5
Latin America and the Caribbean .....	0.3	0.7	0.8	0.9	1.6	0.8	0.6	2.9
Mexico .....	0.2	0.3	0.4	0.4	1.0	0.5	0.3	1.7
Northern America .....	0.1	0.2	0.4	0.4	0.6	0.4	0.2	1.5
Canada .....	0.1	0.2	0.4	0.4	0.6	0.4	0.2	1.4
Oceania .....	0.1	0.2	0.2	0.2	0.3	0.2	0.1	1.0

(X) Not applicable.

<sup>1</sup> Countries of birth are shown for those countries that had over 100,000 foreign born with science and engineering degrees.

<sup>2</sup> China includes Taiwan, Hong Kong, Macau, and the Paracel Islands.

<sup>3</sup> Korea includes South Korea and North Korea.

<sup>4</sup> Data are based on a sample and are subject to sampling variability. A margin of error is a measure of an estimate's variability. The larger the margin of error is in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90 percent confidence interval.

Source: U.S. Census Bureau, 2010 American Community Survey.

Table 3.

### Percent Distribution of the Foreign-Born Population Aged 25 and Older With Science and Engineering Degrees by Field of Degree: 2010

(Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [www.census.gov/acs/www](http://www.census.gov/acs/www))

Region/country of birth <sup>1</sup>	All science and engineering fields	Science and engineering field categories						
		Computers, mathematics, and statistics	Biological, agricultural, and environmental sciences	Physical and related sciences	Psychology	Social sciences	Engineering	Multi-disciplinary sciences
<b>PERCENT</b>								
<b>Total</b> .....	<b>100.0</b>	<b>15.8</b>	<b>14.5</b>	<b>11.6</b>	<b>6.8</b>	<b>14.9</b>	<b>35.3</b>	<b>1.1</b>
Africa .....	100.0	16.4	18.3	11.2	5.0	20.7	26.8	1.5
Asia .....	100.0	17.6	14.6	12.4	4.7	12.2	37.5	1.0
India .....	100.0	21.4	11.8	12.8	3.1	7.2	43.1	0.5
China <sup>2</sup> .....	100.0	17.9	16.0	16.3	3.2	10.1	35.9	0.6
Philippines .....	100.0	12.3	14.3	9.6	9.0	15.7	36.9	2.3
Korea <sup>3</sup> .....	100.0	13.6	16.7	12.1	6.8	19.5	29.1	2.1
Vietnam .....	100.0	21.8	18.8	8.0	4.9	8.7	36.6	1.2
Iran .....	100.0	12.6	16.3	10.5	5.0	10.2	44.7	0.7
Europe .....	100.0	14.0	13.0	12.1	7.3	18.2	34.5	0.8
Latin America and the Caribbean .....	100.0	12.3	13.5	8.2	13.2	17.6	33.6	1.6
Mexico .....	100.0	10.4	12.9	6.7	13.3	15.9	39.3	1.5
Northern America .....	100.0	9.9	18.2	11.9	12.8	21.7	23.9	1.7
Canada .....	100.0	9.9	18.2	12.0	12.8	21.7	23.9	1.5
Oceania .....	100.0	17.6	18.0	12.0	9.3	16.6	23.9	2.6
<b>MARGIN OF ERROR<sup>4</sup> (+/-)</b>								
<b>Total</b> .....	<b>(X)</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.2</b>	<b>0.3</b>	<b>0.4</b>	<b>0.1</b>
Africa .....	(X)	1.3	1.3	1.2	0.7	1.5	1.5	0.5
Asia .....	(X)	0.3	0.4	0.4	0.2	0.3	0.5	0.1
India .....	(X)	0.9	0.7	0.7	0.3	0.4	1.1	0.1
China <sup>2</sup> .....	(X)	0.8	0.9	0.8	0.4	0.8	1.2	0.1
Philippines .....	(X)	1.1	1.2	1.1	1.0	1.3	1.6	0.5
Korea <sup>3</sup> .....	(X)	1.4	1.7	1.4	1.0	1.5	1.8	0.6
Vietnam .....	(X)	1.9	1.8	1.1	1.0	1.3	2.0	0.5
Iran .....	(X)	1.7	2.1	1.9	1.0	1.5	2.6	0.4
Europe .....	(X)	0.6	0.6	0.6	0.6	0.7	0.9	0.2
Latin America and the Caribbean .....	(X)	0.7	0.7	0.6	0.8	0.8	1.2	0.2
Mexico .....	(X)	1.3	1.3	1.0	1.5	1.6	2.1	0.5
Northern America .....	(X)	1.2	1.7	1.4	1.3	1.6	1.7	0.6
Canada .....	(X)	1.2	1.8	1.4	1.3	1.6	1.8	0.5
Oceania .....	(X)	3.8	3.6	2.8	3.2	3.8	3.7	1.6

(X) Not applicable.

<sup>1</sup> Countries of birth are shown for those countries that had over 100,000 foreign born with science and engineering degrees.

<sup>2</sup> China includes Taiwan, Hong Kong, Macau, and the Paracel Islands.

<sup>3</sup> Korea includes South Korea and North Korea.

<sup>4</sup> Data are based on a sample and are subject to sampling variability. A margin of error is a measure of an estimate's variability. The larger the margin of error is in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90 percent confidence interval.

Source: U.S. Census Bureau, 2010 American Community Survey.

degrees, but 6 percent of foreign born with psychology degrees.

#### Social Sciences

The foreign born from Europe, Africa, and Northern America represented a larger proportion within social science fields. Of foreign born with degrees in social science fields, 47 percent were born in Asia, 22 percent were born

in Europe, and 19 percent were born in Latin America (Table 2). Twenty-two percent of S&E degree holders who were born in Northern America and 21 percent who were born in Africa held degrees in social sciences, compared with 12 percent of those born in Asia (Table 3).<sup>5</sup> Among countries of

<sup>5</sup> Northern America and Africa are not significantly different from each other in this comparison.

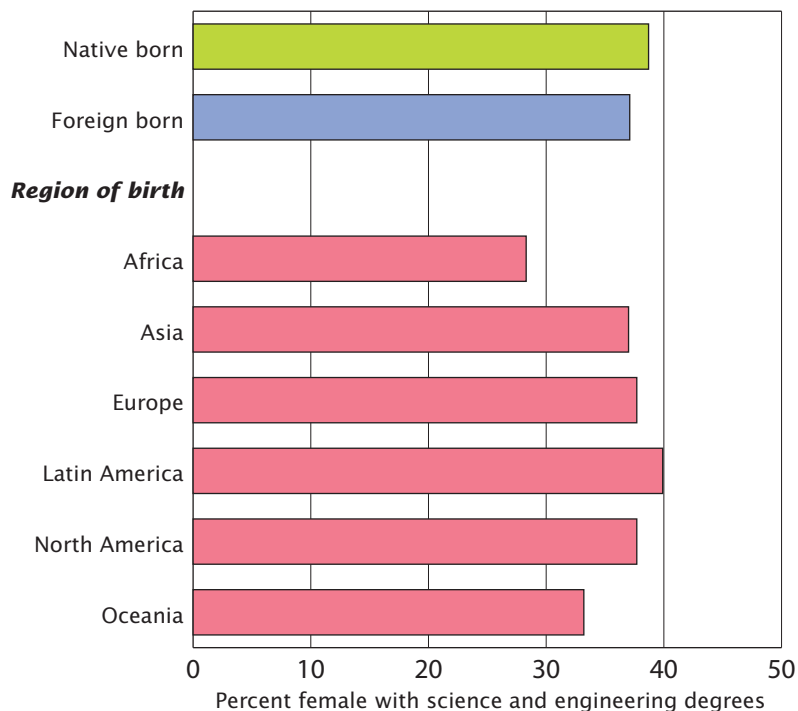
birth, Canada (22 percent) and Korea (20 percent) had the highest proportion of social science degree holders, while India (7 percent) had the lowest proportion.

#### Engineering

A majority (61 percent) of foreign born with engineering degrees were born in Asia, including 22 percent who were born in India,

Figure 4.  
**Percent Female of the Foreign-Born Population Aged 25 and Older With Science and Engineering Degrees by Place of Birth: 2010**

(Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [www.census.gov/acs/www](http://www.census.gov/acs/www))



Source: U.S. Census Bureau, 2010 American Community Survey.

and 13 percent who were born in China (Table 2). An additional 17 percent of the foreign born with engineering degrees were born in Europe, and 16 percent were born in Latin America. Engineering was the most popular S&E field of degree for the foreign born, with 35 percent of foreign-born S&E degree holders majoring in engineering fields (Table 3). Thirty-eight percent of S&E degree holders born in Asia held degrees in engineering, compared with 24 percent born in Northern America and Oceania (Table 3). Looking at countries of birth, Iran (45 percent) and India (43 percent) were among the

countries with the highest proportion with engineering degrees, while Canada had the lowest proportion (24 percent).<sup>6</sup>

### Multidisciplinary Sciences

Multidisciplinary sciences include diverse fields of study such as nutrition studies, cognitive science, interdisciplinary social sciences, and many applied computer sciences. Overall, multidisciplinary science degrees made up only 1 percent of all foreign born S&E degrees (Table 3). Within the field, 23 percent of the foreign born with

<sup>6</sup> Iran and India are not significantly different from each other in this comparison.

a multidisciplinary science degree were born in Latin America (Table 2). Among countries of birth, 11 percent of the foreign born with a multidisciplinary science degree were born in the Philippines.

### GENDER

Of the 40.0 million foreign born, 51 percent were female. Of the 9.1 million foreign born aged 25 and older with bachelor's degrees, 51 percent were female. However, only 37 percent of the 4.2 million foreign born with S&E degrees were female. The proportion of women with S&E degrees varies somewhat by region of birth (Figure 4). The foreign born from Latin America had among the highest proportion of S&E degree holders who were female (40 percent), while foreign born from Africa had the lowest proportion of S&E degree holders who were female (28 percent).

### GEOGRAPHIC DISTRIBUTION

Nationwide, about 12 percent of the foreign-born population aged 25 and older had S&E degrees (Table 4). However, the foreign-born population with S&E degrees was unevenly distributed across the nation's metropolitan statistical areas (metro areas).

In 2010, the highest proportions of foreign born with S&E degrees were found in "college towns," or metro areas where college or university students and employees represent a large proportion of the population (Figure 5). Approximately half of the foreign-born population had S&E degrees in Ames, IA (58 percent), home of Iowa State University of Science and Technology; State College, PA (56 percent), home of Pennsylvania State University-University Park; and Columbia, MO (51 percent), home of the University of Missouri. In ten additional metro areas,



one-third or more of the foreign-born population had S&E degrees. All of these metro areas contain large universities with varied science, technology, and engineering programs and/or medical, pharmaceutical, agricultural, and technology companies: Morgantown, WV (49 percent); Manhattan, KS (46 percent); Ithaca, NY (45 percent); Blacksburg-Christiansburg-Radford, VA (42 percent); Ann Arbor, MI (39 percent); Champaign-Urbana, IL (37 percent); Decatur, IL (37 percent); Florence, SC (36 percent); Lawrence, KS (34 percent); and Madison, WI (33 percent).

Looking at large metro areas with a foreign-born population greater than 100,000, the highest proportion of foreign born with S&E degrees was in San Jose-Sunnyvale-Santa Clara, CA (29 percent), followed by Baltimore-Towson, MD (24 percent) (Table 4).<sup>7</sup>

The greatest numbers of foreign born with S&E degrees were located in some of the most populous metro areas: 585,000 in New York-Northern New Jersey-Long Island, NY-NJ-PA; 386,000 in Los Angeles-Long Beach-Santa Ana, CA; 221,000 in Washington-Arlington-Alexandria, DC-VA-MD-WV; 208,000 in San Francisco-Oakland-Fremont, CA; and 182,000 in

<sup>7</sup> Baltimore-Towson, MD, was not significantly different from St. Louis, MO-IL, Cleveland-Elyria-Mentor, OH, or Columbus, OH, in this comparison.

Chicago-Joliet-Naperville, IL-IN-WI. Five additional metro areas also had over 100,000 foreign born with S&E degrees: San Jose-Sunnyvale-Santa Clara, CA; Miami-Fort Lauderdale-Pompano Beach, FL; Boston-Cambridge-Quincy, MA-NH; Houston-Sugar Land-Baytown, TX; and Dallas-Fort Worth-Arlington, TX. When combined, 2.3 million foreign-born S&E degree holders lived in these ten metropolitan areas, representing over half (55 percent) of the total foreign-born population with S&E degrees (Table 4).

### **SOURCE AND ACCURACY**

Data presented in this report are based on people and households that responded to the ACS in 2010. The resulting estimates are representative of the entire population. All comparisons presented in this report have taken sampling error into account and are significant at the 90 percent confidence level unless otherwise noted. Due to rounding, some estimates may not sum to totals. For information on sampling and estimation methods, confidentiality protection, and sampling and nonsampling errors, please see the “2010 ACS Accuracy of the Data” document located at [www.census.gov/acs/www/Downloads/data](http://www.census.gov/acs/www/Downloads/data)

[\\_documentation/Accuracy/ACS\\_Accuracy\\_of\\_Data\\_2010.pdf](http://www.census.gov/acs/www/Downloads/data_documentation/Accuracy/ACS_Accuracy_of_Data_2010.pdf).

### **WHAT IS THE AMERICAN COMMUNITY SURVEY?**

The American Community Survey (ACS) is a nationwide survey designed to provide communities with reliable and timely demographic, social, economic, and housing data for the nation, states, congressional districts, counties, places, and other localities every year. It has an annual sample size of about 3 million addresses across the United States and Puerto Rico and includes both housing units and group quarters (e.g., nursing facilities and prisons). The ACS is conducted in every county throughout the nation, and every municipio in Puerto Rico, where it is called the Puerto Rico Community Survey. Beginning in 2006, ACS data for 2005 were released for geographic areas with populations of 65,000 and greater. For information on the ACS sample design and other topics, visit [www.census.gov/acs/www](http://www.census.gov/acs/www).

Additional information about the foreign-born population is available on the Census Bureau’s Web site at [www.census.gov/population/www/socdemo/foreign/index.html](http://www.census.gov/population/www/socdemo/foreign/index.html).



Figure 5.  
**Foreign-Born Population With Science and Engineering Degrees as a Percentage of All Foreign Born Aged 25 and Older, by Metropolitan Statistical Area: 2010**

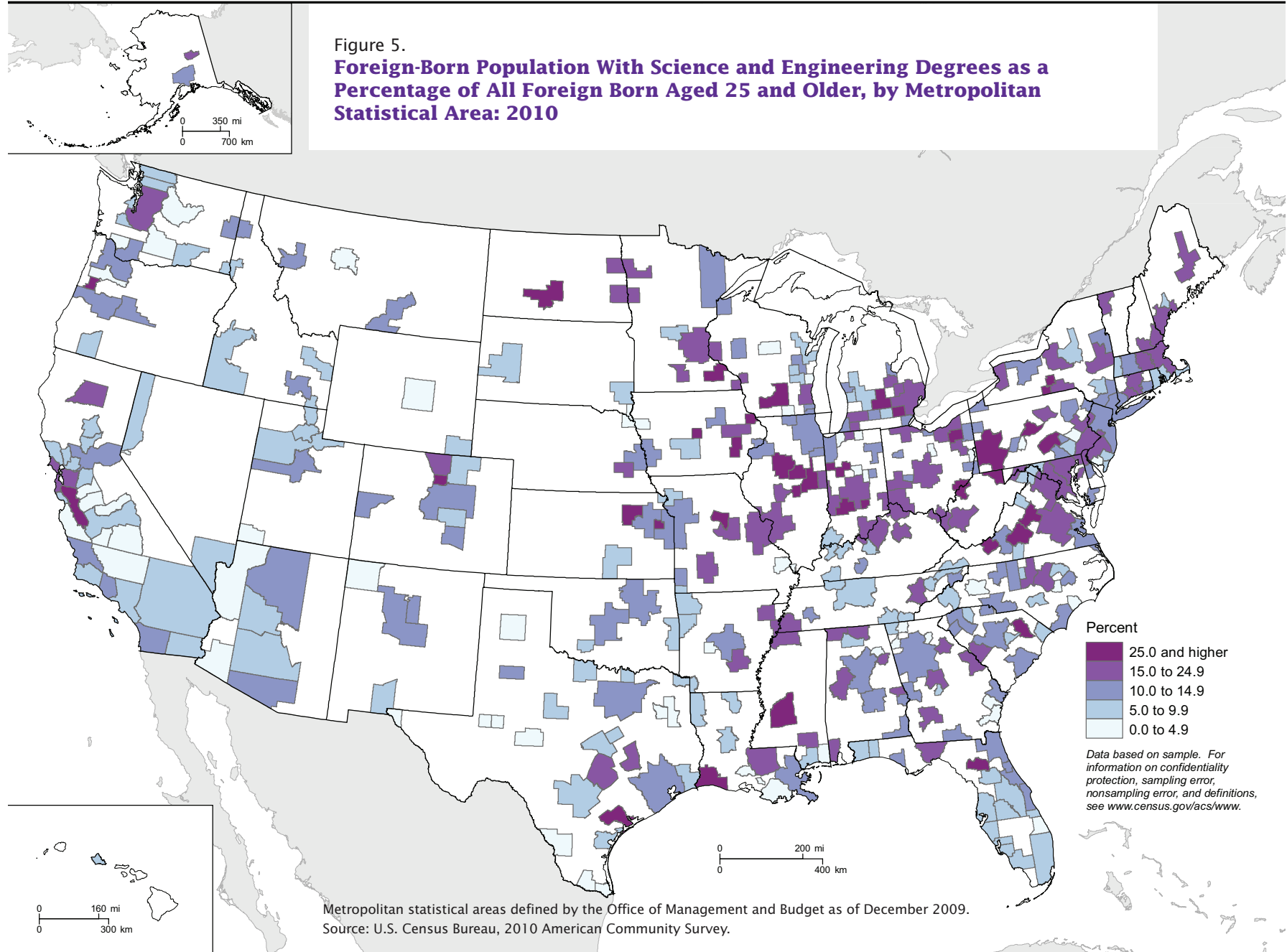


Table 4.

### Foreign-Born Population Aged 25 and Older With Science and Engineering Degrees by Metropolitan Statistical Area: 2010

(Numbers in thousands. Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [www.census.gov/acs/www](http://www.census.gov/acs/www))

Metropolitan statistical area <sup>1</sup>	Foreign-born population 25 years and over		Foreign born with bachelor's and higher degrees		Foreign born with science and engineering degrees	
	Estimate	Margin of error <sup>2</sup> (+/-)	Percent	Margin of error <sup>2</sup> (+/-)	Percent	Margin of error <sup>2</sup> (+/-)
<b>United States . . . . .</b>	<b>33,626</b>	<b>89</b>	<b>27.0</b>	<b>0.1</b>	<b>12.4</b>	<b>0.1</b>
Atlanta-Sandy Springs-Marietta, GA . . . . .	584	10	32.0	1.1	14.6	0.8
Austin-Round Rock, TX . . . . .	198	7	30.5	1.8	17.0	1.3
Baltimore-Towson, MD . . . . .	204	8	44.7	2.2	23.6	1.7
Birmingham-Hoover, AL . . . . .	36	2	27.9	3.5	13.6	2.6
Boston-Cambridge-Quincy, MA-NH . . . . .	652	12	37.2	1.2	20.5	0.9
Buffalo-Niagara Falls, NY . . . . .	54	5	34.0	3.7	17.1	2.8
Charlotte-Gastonia-Concord, NC-SC . . . . .	139	6	30.3	2.7	14.2	2.1
Chicago-Naperville-Joliet, IL-IN-WI . . . . .	1,435	17	28.0	0.6	12.7	0.4
Cincinnati-Middletown, OH-KY-IN . . . . .	73	5	42.6	3.5	22.6	2.9
Cleveland-Elyria-Mentor, OH . . . . .	107	5	38.1	2.6	21.2	2.0
Columbus, OH . . . . .	100	5	38.6	2.7	21.2	2.2
Dallas-Fort Worth-Arlington, TX . . . . .	909	14	23.1	0.8	11.4	0.6
Denver-Aurora-Broomfield, CO . . . . .	257	8	24.6	1.6	11.8	1.2
Detroit-Warren-Livonia, MI . . . . .	305	9	36.7	1.6	19.1	1.2
Hartford-West Hartford-East Hartford, CT . . . . .	131	6	31.0	2.4	15.1	1.7
Houston-Sugar Land-Baytown, TX . . . . .	1,099	15	22.8	0.8	11.3	0.6
Indianapolis-Carmel, IN . . . . .	88	4	31.9	2.8	16.8	2.2
Jacksonville, FL . . . . .	91	6	31.8	2.8	13.0	2.3
Kansas City, MO-KS . . . . .	100	5	28.8	2.7	10.6	1.6
Las Vegas-Paradise, NV . . . . .	361	7	19.6	1.1	6.4	0.7
Los Angeles-Long Beach-Santa Ana, CA . . . . .	3,889	29	23.9	0.4	9.9	0.2
Louisville/Jefferson County, KY-IN . . . . .	48	4	35.0	4.6	15.4	3.1
Memphis, TN-MS-AR . . . . .	53	3	31.8	3.7	15.7	2.7
Miami-Fort Lauderdale-Pompano Beach, FL . . . . .	1,878	18	23.4	0.6	8.2	0.4
Milwaukee-Waukesha-West Allis, WI . . . . .	81	4	33.1	3.2	15.3	2.2
Minneapolis-St. Paul-Bloomington, MN-WI . . . . .	241	7	32.8	1.8	17.8	1.3
Nashville-Davidson-Murfreesboro-Franklin, TN . . . . .	90	5	23.7	2.4	9.5	1.6
New Orleans-Metairie-Kenner, LA . . . . .	71	4	24.6	2.9	12.7	2.4
New York-Northern New Jersey-Long Island, NY-NJ-PA . . . . .	4,733	29	29.9	0.4	12.4	0.2
Oklahoma City, OK . . . . .	75	3	24.5	2.6	10.0	2.1
Orlando-Kissimmee, FL . . . . .	289	10	26.3	1.6	9.1	1.0
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD . . . . .	468	10	38.1	1.3	19.1	1.0
Phoenix-Mesa-Scottsdale, AZ . . . . .	503	12	19.1	1.0	8.4	0.8
Pittsburgh, PA . . . . .	59	3	53.8	2.7	32.5	2.9
Portland-Vancouver-Beaverton, OR-WA . . . . .	226	7	29.2	1.8	14.6	1.2
Providence-New Bedford-Fall River, RI-MA . . . . .	168	6	18.2	1.6	8.0	1.2
Raleigh-Cary, NC . . . . .	105	5	35.3	2.8	19.6	2.0
Richmond, VA . . . . .	73	4	32.8	2.8	17.7	2.6
Riverside-San Bernardino-Ontario, CA . . . . .	811	14	16.3	0.7	5.9	0.5
Sacramento-Arden-Arcade-Roseville, CA . . . . .	308	9	24.9	1.4	11.6	1.1
St. Louis, MO-IL . . . . .	99	5	42.2	2.9	22.7	2.3
Salt Lake City, UT . . . . .	104	5	19.6	1.8	7.4	1.3
San Antonio, TX . . . . .	221	9	18.6	1.5	8.0	1.0
San Diego-Carlsbad-San Marcos, CA . . . . .	624	11	26.1	1.2	12.4	0.8
San Francisco-Oakland-Fremont, CA . . . . .	1,144	15	36.2	0.8	18.2	0.6
San Jose-Sunnyvale-Santa Clara, CA . . . . .	596	10	46.5	1.2	28.7	1.1
Seattle-Tacoma-Bellevue, WA . . . . .	474	8	36.9	1.1	20.3	1.0
Tampa-St. Petersburg-Clearwater, FL . . . . .	305	12	26.1	1.6	9.1	1.0
Virginia Beach-Norfolk-Newport News, VA-NC . . . . .	88	4	33.7	2.6	13.6	1.9
Washington-Arlington-Alexandria, DC-VA-MD-WV . . . . .	1,045	12	40.8	1.0	21.1	0.8

<sup>1</sup> Metropolitan statistical area populations based on the 2010 Census. Metropolitan statistical areas defined by the Office of Management and Budget as of December 2009. See <[www.census.gov/population/www/metroareas/metrodef.html](http://www.census.gov/population/www/metroareas/metrodef.html)>.

<sup>2</sup> Data are based on a sample and are subject to sampling variability. A margin of error is a measure of an estimate's variability. The larger the margin of error is in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 90 percent confidence interval.

Source: U.S. Census Bureau, 2010 American Community Survey.