

# Educational Attainment in the United States: 2007

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## Population Characteristics

P20-560

This report provides a portrait of educational attainment in the United States based on data collected in the 2007 American Community Survey (ACS) and data collected in 2008 and earlier in the Annual Social and Economic Supplement (ASEC) to the Current Population Survey (CPS).<sup>1</sup> Previous U.S. Census Bureau reports on this topic were based on educational attainment data from the CPS. The ACS has a larger sample and provides statistics for small levels of geography, which is why it is now used as a main source of educational attainment data.

This report provides estimates of educational attainment in the United States, including comparisons by demographic characteristics, such as age, sex, race, and Hispanic origin. Information about educational attainment among the native-born and foreign-born populations is included. This report also presents a geographic picture of educational attainment, with estimates by region and state. Workers' median earnings by educational attainment are also addressed, including differences by sex, race, and Hispanic origin. Periodically, references to older data are included to present some general historical trends.

### Some highlights of the report are:

- In 2007, more than 4 out of 5 (84 percent) adults aged 25 and over reported having at least a high school

diploma or its equivalent, while over 1 in 4 (27 percent) reported a bachelor's degree or higher. This reflects more than a three-fold increase in high school attainment and more than a five-fold increase in college attainment since the Census Bureau first collected educational attainment data in 1940.

- A larger proportion of women than men had completed high school or more education. A larger proportion of men had received at least a bachelor's degree.
- Differences in educational attainment by race and Hispanic origin existed. Attainment for non-Hispanic Whites and Asians was higher than attainment for Blacks and Hispanics. (Hispanics may be any race.)<sup>2</sup>
- Educational attainment varied by nativity. About 88 percent of the native-born population had at least a high school diploma, compared to 68

<sup>2</sup> Federal surveys now give respondents the option of reporting more than one race. Therefore, two basic ways of defining a race group are possible. A group such as Asian may be defined as those who reported Asian and no other race (the race-alone or single-race concept) or as those who reported Asian regardless of whether they also reported another race (the race-alone-or-in-combination concept). This report shows data using the first approach (race alone). This report will refer to the White-alone population as White, the Black-alone population as Black, the Asian-alone population as Asian, and the White-alone-non-Hispanic population as non-Hispanic White. Use of the single-race population does not imply that it is the preferred method of presenting or analyzing data. The Census Bureau uses a variety of approaches. In this report, the term "non-Hispanic White" refers to people who are not Hispanic and who reported White and no other race. The Census Bureau uses non-Hispanic Whites as the comparison group for other race groups and Hispanics. Because Hispanics may be any race, data in this report for Hispanics overlap with data for racial groups.

<sup>1</sup> For information on the differences between the ACS and CPS estimates, see Nicole Scanniello, *Comparison of ACS and ASEC Data on Educational Attainment: 2004*, U.S. Census Bureau, Washington, DC, 2007, and accompanying tables and figures, available on the Census Bureau's Web site at <[www.census.gov/acs/www/AdvMeth/Papers/Papers1.htm](http://www.census.gov/acs/www/AdvMeth/Papers/Papers1.htm)>.

## Current Population Reports

By Sarah R. Crissey

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percent of the foreign-born population. More native-born than foreign-born adults reported completing at least a bachelor's degree (28 percent and 27 percent, respectively), while more foreign-born than native-born adults reported having an advanced degree (11 percent and 10 percent, respectively).<sup>3</sup>

- Educational attainment of foreign-born Hispanics was lower than all other groups. The percentage of foreign-born Hispanics who had completed

<sup>3</sup> Advanced degrees include master's, professional (e.g., M.D., J.D., D.D.S.), and doctoral degrees.

at least high school was 49 percent, which is the same as the percentage of foreign-born Asians who had completed college or more education.

- The Midwest region had the highest percentage of adults reporting a high school diploma or more education, and the Northeast had the highest percentage with a bachelor's degree or more education.<sup>4</sup>

<sup>4</sup> The Northeast region includes Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. The Midwest region includes Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. The South region includes Alabama, Arkansas, Delaware, Florida,

- Workers with a bachelor's degree, on average, earned about \$20,000 more a year than workers with a high school diploma. Non-Hispanic Whites earned more than other race groups and Hispanics at the high school and bachelor's degree education levels, while earnings at the advanced degree level were highest for Asians. Black and Hispanic workers earned less at all attainment levels.

Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia, and the District of Columbia, a state equivalent. The West region includes Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

## TWO SOURCES OF DATA ON EDUCATIONAL ATTAINMENT

The information in this report is based on two separate data sources—the estimates of current educational attainment come from the 2007 American Community Survey (ACS), while historical trends in median annual earnings come from the Current Population Survey (CPS).

The ACS, part of the Census Bureau's re-engineered 2010 Census, looks at a wide range of social, economic, and housing characteristics for the population. The ACS is used to provide annual data on more than 7,000 areas, including all congressional districts, as well as counties, cities, metro areas, and American Indian and Alaska Native areas with populations of 65,000 or more.\* The ACS collects information from an annual sample of approximately 3 million housing unit addresses. The ACS is administered to the entire domestic population, including those living in institutions and other group quarters. In this respect, data from the ACS are directly comparable with data from Census 2000 and earlier decennial censuses. In the ACS, educational attainment is classified by the highest degree or the highest level of school completed, with people currently enrolled in school requested to report the level of the previous grade attended or the highest degree received.

Another important source of educational attainment information is the Annual Social and Economic Supplement (ASEC) to the CPS. The CPS is a monthly survey of approximately 72,000 housing units. ASEC data are collected from CPS respondents in February, March, and April of each year with an annual sample of approximately 100,000 households. Unlike the ACS, the reference population is the civilian noninstitutionalized population, and therefore, it does not include people living in institutions or Armed Forces personnel (except those living with their families). While the sample size is not sufficient for describing small geographic areas, CPS data can provide estimates for the 50 states and the District of Columbia. CPS data provide a time series of educational attainment information since 1947. Since 1992, data on educational attainment are derived from a single question that asks, "What is the highest grade of school . . . completed, or the highest degree . . . received?" Prior to 1992, respondents reported the highest grade they had attended, and whether or not they had completed that grade.

The ACS and CPS differ in geographic scope, data collection method, and population universe. See Appendix A for more information on these two sources of data.

\* In 2008, the Census Bureau released 3-year estimates for areas with populations larger than 20,000. In 2010, the Census Bureau will release 5-year estimates that will cover all areas.

- Men earned more than women at each level of educational attainment.
- At the high school diploma and bachelor's degree attainment levels, women earned about 65 percent of what men earned in 1987. In 2007, the percentage was 72 percent at the high school diploma level and 74 percent at the bachelor's degree level.

## PORTRAIT OF EDUCATIONAL ATTAINMENT IN THE UNITED STATES

The Census Bureau has documented a consistent increase in the educational attainment of the population since the question was first asked in the 1940s.<sup>5</sup> In the 2007 ACS, 84 percent of the population

<sup>5</sup> See the Current Population Report *Educational Attainment in the United States: 2003* (P20-550), available on the Census Bureau's Web site at <[www.census.gov/prod/2004pubs/p20-550.pdf](http://www.census.gov/prod/2004pubs/p20-550.pdf)>.

aged 25 and over in the United States reported they had completed at least high school (or the equivalent), while more than half (54 percent) reported completing at least some college (Table 1). More than 1 in 4 adults (27 percent) reported they had a bachelor's degree or more education and 1 in 10 (10 percent) reported an advanced degree. Educational attainment has increased since Census 2000, when 80 percent of the 25-and-older population had a high school diploma or more and 24 percent

Table 1.  
**Educational Attainment for the Population Aged 25 and Over by Age, Sex, Race and Hispanic Origin, and Nativity Status: 2007**

Characteristic	Total	High school graduate or more		Some college or more		Bachelor's degree or more		Advanced degree	
		Percent	Margin of error <sup>1</sup> (±)	Percent	Margin of error <sup>1</sup> (±)	Percent	Margin of error <sup>1</sup> (±)	Percent	Margin of error <sup>1</sup> (±)
<b>Population 25 years and over</b> .....	<b>197,892,369</b>	<b>84.5</b>	<b>0.1</b>	<b>54.4</b>	<b>0.1</b>	<b>27.5</b>	<b>0.1</b>	<b>10.1</b>	<b>—</b>
<b>Age</b>									
25 to 29 years .....	20,623,714	86.1	0.1	57.3	0.2	27.4	0.2	6.3	0.1
30 to 34 years .....	19,363,339	86.4	0.1	59.5	0.2	31.0	0.2	10.4	0.1
35 to 39 years .....	21,172,717	87.2	0.1	59.9	0.2	31.9	0.2	11.1	0.1
40 to 44 years .....	22,237,700	87.3	0.1	57.4	0.2	29.0	0.1	9.9	0.1
45 to 49 years .....	22,921,913	87.4	0.1	56.5	0.2	27.7	0.2	9.9	0.1
50 to 54 years .....	21,003,321	88.1	0.1	58.1	0.2	28.9	0.1	11.3	0.1
55 to 59 years .....	18,114,598	88.0	0.1	59.8	0.2	31.0	0.2	13.2	0.1
60 to 64 years .....	14,614,509	84.8	0.1	54.3	0.2	28.3	0.2	13.0	0.1
65 years and over .....	37,840,558	74.0	0.1	39.3	0.1	19.3	0.1	8.4	0.1
<b>Sex</b>									
Male .....	95,390,158	83.9	0.1	53.8	0.1	28.2	0.1	10.7	—
Female .....	102,502,211	85.0	0.1	54.8	0.1	26.7	0.1	9.6	—
<b>Race and Hispanic Origin</b>									
White alone .....	152,051,334	87.0	0.1	56.6	0.1	29.1	0.1	10.7	—
Non-Hispanic White alone .....	138,467,828	89.4	0.1	58.8	0.1	30.5	0.1	11.3	—
Black alone .....	22,171,628	80.1	0.1	45.8	0.2	17.3	0.1	5.8	0.1
Asian alone .....	9,046,162	85.8	0.2	68.0	0.3	49.5	0.4	19.6	0.3
Hispanic (any race) .....	24,823,009	60.6	0.2	32.4	0.2	12.5	0.1	3.9	0.1
<b>Nativity Status</b>									
Native born .....	166,289,255	87.6	0.1	56.3	0.1	27.6	0.1	9.9	—
Foreign born .....	31,603,114	68.0	0.2	44.1	0.2	26.9	0.2	10.9	0.1
Naturalized citizen .....	14,753,727	77.8	0.2	54.0	0.2	32.2	0.2	12.8	0.2
Not a citizen .....	16,849,387	59.5	0.2	35.4	0.2	22.3	0.2	9.2	0.1
Year of entry:									
2000 or later .....	6,621,832	69.0	0.5	45.6	0.4	31.9	0.4	13.1	0.3
1990–1999 .....	9,073,415	66.8	0.3	41.8	0.3	26.4	0.3	10.8	0.2
Before 1990 .....	15,907,867	68.3	0.2	44.7	0.2	25.1	0.2	10.0	0.1

— Represents or rounds to zero.

<sup>1</sup> A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. When added to and subtracted from the estimate, the margin of error forms the 90-percent confidence interval.

Source: U.S. Census Bureau, American Community Survey, 2007.

reported having a bachelor's degree or more education.<sup>6</sup>

### *Differences by Age, Sex, Race, and Hispanic Origin*

**Age.** Educational attainment varies by several demographic characteristics, including age. The overall increase in educational attainment documented over the past six decades occurred as younger (and more educated) cohorts replaced older, less educated cohorts in the adult population. For the youngest age group (25 to 29 years), increases in high school attainment have been modest since 1990, while increases in college attainment have leveled since about 2000.<sup>7</sup> In 2007, the oldest age group reported lower levels of high school and college attainment than all younger age groups. Among adults aged 65 and over, 74 percent had completed at least high school or more education and 19 percent reported a bachelor's degree or more education.

**Sex.** Gender differences in education continue to exist. In 2007, a larger proportion of women than

men had a high school diploma or more education (85 percent and 84 percent, respectively), continuing a trend that first appeared in 2002.<sup>8</sup> College attainment has been higher for men than women since 1940.<sup>9</sup> Although the difference has narrowed in recent decades, a larger proportion of men than women had completed college and had completed an advanced degree in 2007. Data on college completion for younger cohorts show higher attainment for women than for men, suggesting that in the future, the majority of people with college degrees in the United States may be women.<sup>10</sup>

**Race and Hispanic origin.** Educational attainment also varies by race and Hispanic origin. Non-Hispanic Whites reported the highest percentage of adults with at least a high school education (89 percent). Asians reported the highest percentage with at least some college (68 percent), a bachelor's degree or more education (49 percent), and an advanced degree (20 percent). Educational attainment among the Black population was lower than among the non-Hispanic White, White, and Asian groups. Hispanics reported the lowest percentage at each attainment level—61 percent had completed high school and 13 percent had completed at least a bachelor's degree.

<sup>8</sup> For more information, see the Current Population Report *Educational Attainment in the United States: 2003* (P20-550), available on the Census Bureau's Web site at <[www.census.gov/prod/2004pubs/p20-550.pdf](http://www.census.gov/prod/2004pubs/p20-550.pdf)>.

<sup>9</sup> See *A Half-Century of Learning: Historical Statistics on Educational Attainment in the United States, 1940 to 2000* (PHC-T-41), available on the Census Bureau's Web site at <[www.census.gov/population/www/socdemo/education/introphct41.html](http://www.census.gov/population/www/socdemo/education/introphct41.html)>.

<sup>10</sup> See footnote 8.

### *Diverse Educational Experiences Among the Foreign-Born Population*

Educational attainment differed by nativity status. There was a 20-point difference in the percentage of people aged 25 years and over with at least a high school diploma between the native-born and foreign-born populations (88 percent and 68 percent, respectively). At the bachelor's and advanced degree attainment levels, there was about a 1 percentage-point difference between the two groups. More native-born than foreign-born adults reported completing at least a bachelor's degree (28 percent and 27 percent, respectively), while more foreign-born than native-born adults reported having an advanced degree (11 percent and 10 percent, respectively). These differences suggest that, while a large proportion of the foreign-born population had lower levels of education, a sizeable segment had high levels of education.

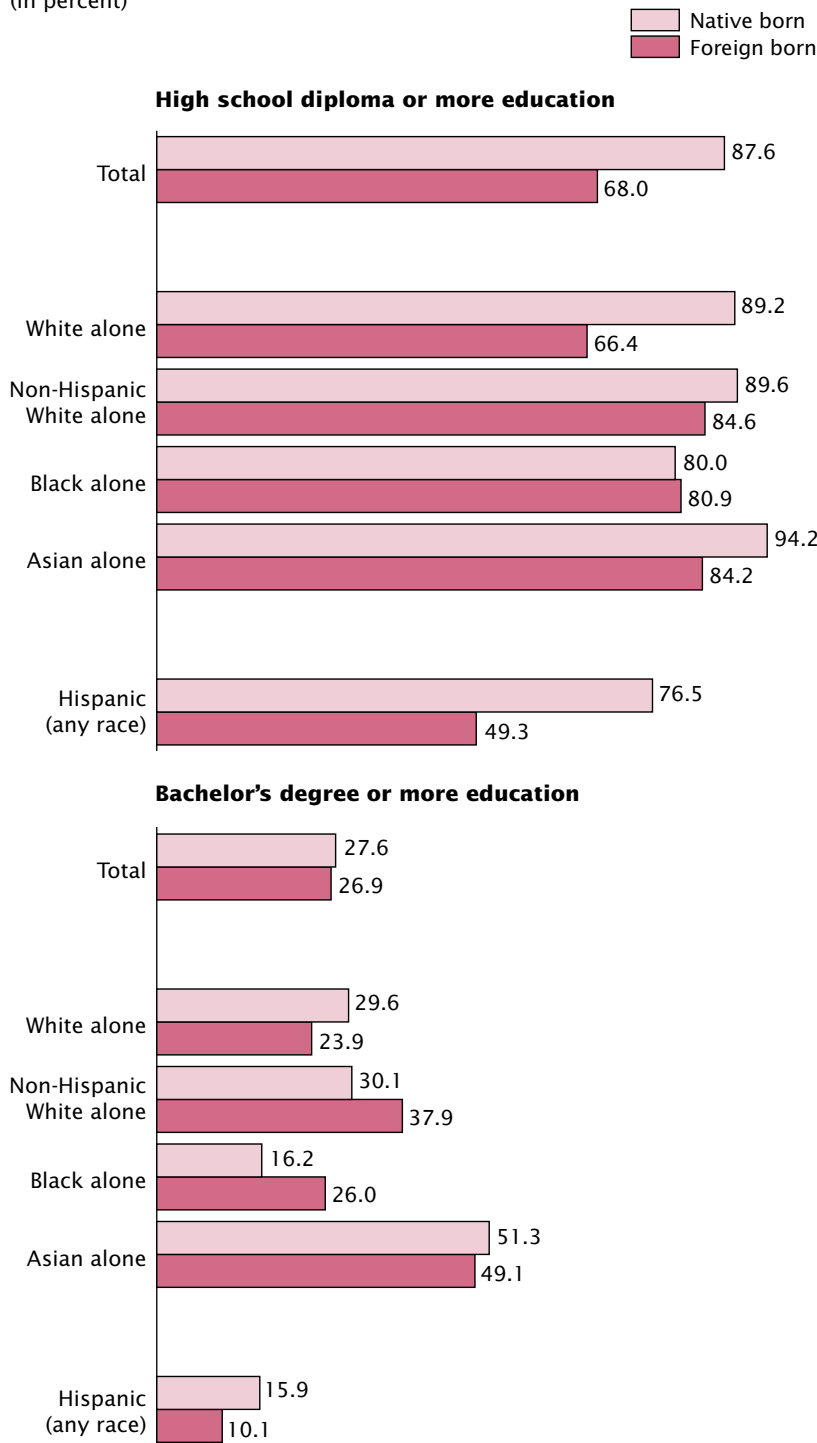
In 2007, educational attainment was higher for the naturalized population than the noncitizen foreign-born population at both the high school and college attainment levels. Immigrants who arrived in the United States since 2000 also had higher attainment levels than groups who arrived earlier. These data indicate that the time of arrival as well as immigration status were correlated with educational attainment.

For some race groups and Hispanics, there was little difference in educational attainment by nativity, but for others there were large differences (Figure 1). For all groups except Blacks, a larger percentage of the native born than the foreign born had completed at least

<sup>6</sup> For more information on educational attainment in 2000, see the Census 2000 Brief *Educational Attainment: 2000* (C2KBR-24), available on the Census Bureau's Web site at <[www.census.gov/prod/2003pubs/c2kbr-24.pdf](http://www.census.gov/prod/2003pubs/c2kbr-24.pdf)>.

<sup>7</sup> In 2000, 84 percent of the population aged 25 to 29 had completed high school and 27 percent had completed a bachelor's degree. In 1990, 84 percent of the population aged 25 to 29 had completed high school and 22 percent had completed a bachelor's degree. For information on educational attainment in 2000, see the Census 2000 Brief *Educational Attainment: 2000* (C2KBR-24), available on the Census Bureau's Web site at <[www.census.gov/prod/2003pubs/c2kbr-24.pdf](http://www.census.gov/prod/2003pubs/c2kbr-24.pdf)>. For information on educational attainment in 1990, see the Census 1990 Report *1990 Census of Population: Education in the United States* (CP-3-4), available on the Census Bureau's Web site at <[www.census.gov/prod/cen1990/cp3/cp-3-4.pdf](http://www.census.gov/prod/cen1990/cp3/cp-3-4.pdf)>.

Figure 1.  
**Educational Attainment of the Population Aged 25 and Over by Race, Hispanic Origin, and Nativity Status: 2007**  
(In percent)



Source: U.S. Census Bureau, American Community Survey, 2007.

high school. The pattern differs for college attainment, with higher attainment among the foreign born for the non-Hispanic White and Black populations.

The lower educational attainment of foreign-born Hispanics affected the overall Hispanic education levels. About 58 percent of all Hispanics aged 25 and over in the United States are foreign born.<sup>11</sup> In 2007, educational attainment of foreign-born Hispanics was lower than all other race, Hispanic origin, and nativity groups. The percentage of foreign-born Hispanics who completed at least high school was 49 percent, which is the same as the percentage of foreign-born Asians who had completed a bachelor's degree or more education. Although native-born Hispanics had higher educational attainment than foreign-born Hispanics, all other native-born race groups had higher educational attainment than native-born Hispanics.<sup>12</sup>

<sup>11</sup> Source: 2007 American Community Survey.

<sup>12</sup> About 16 percent of the native-born Hispanic and the native-born Black populations had completed a bachelor's degree, but the difference was statistically different.

## GEOGRAPHIC DIFFERENCES IN EDUCATIONAL ATTAINMENT

Educational attainment levels varied geographically in 2007, including by region and state. The percentage of the population with at least a high school diploma was highest in the Midwest and lowest in the South (Table 2). At the bachelor's degree level, the largest percentage was in the Northeast and the smallest was in the South.

High school graduates composed more than 90 percent of the population of Minnesota and Wyoming. In Mississippi and Texas, less than 80 percent of the population had completed high school.

The highest concentration of college graduates was in the District of Columbia, where 47 percent of adults had a bachelor's degree or more education. In addition to the District of Columbia, more than 1 in 3 adults had at least a bachelor's degree in the following states: Colorado, Connecticut, Maryland, Massachusetts, and New Jersey. In Arkansas, Mississippi, and West Virginia, less than 1 in 5 adults had a bachelor's degree or more education.

Figures 2 and 3 display state-level educational attainment relative to the national estimate. Figure 2 presents relative attainment at the high school or higher level. In states shaded darker, the

proportion of people who reported completing high school was statistically higher than the proportion in the United States as a whole. States shaded lighter had a lower proportion, and states colored white were not statistically different from the proportion in the nation. Figure 3 uses the same colors to show the proportion with a bachelor's degree or higher relative to the national average.

Some states, including Washington, Minnesota, Virginia, and Connecticut, had higher educational attainment at both the high school and college levels compared with the United States. States such as Nevada, Alabama, and North Carolina were lower than

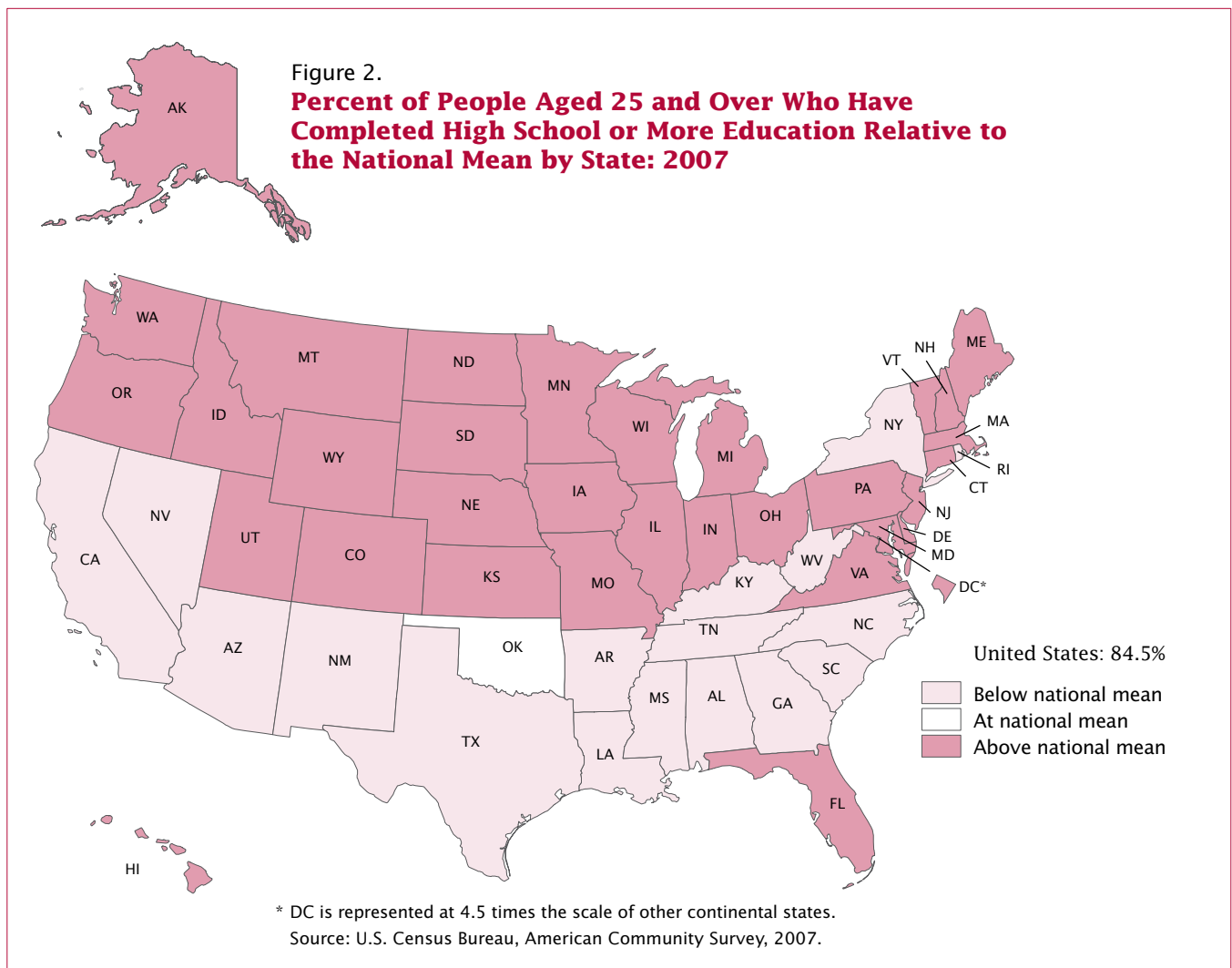
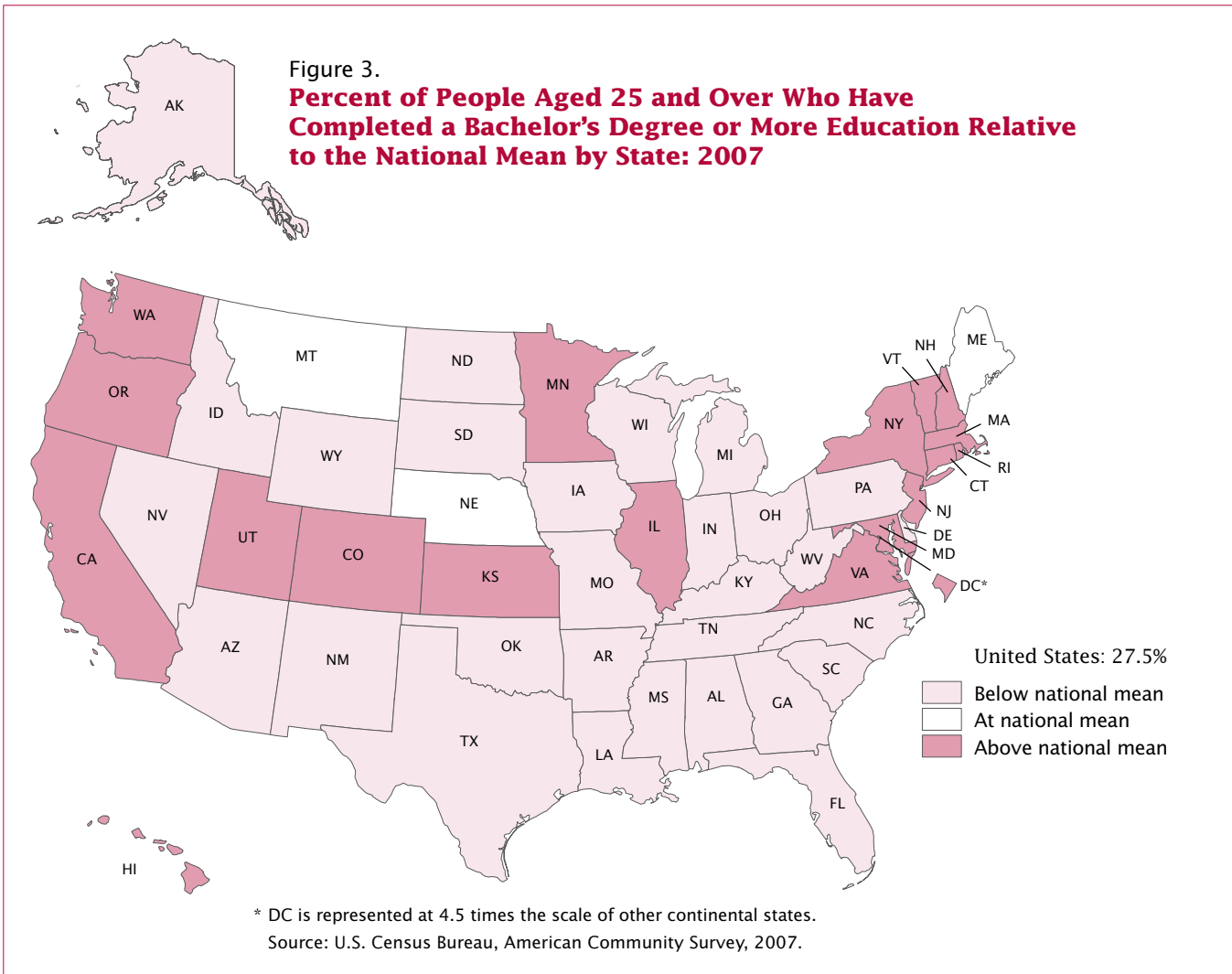


Figure 3.  
**Percent of People Aged 25 and Over Who Have Completed a Bachelor's Degree or More Education Relative to the National Mean by State: 2007**



the national average at both levels of educational attainment.

Many states did not have a consistent pattern relative to the national level. For example, states such as Idaho, Iowa, and Pennsylvania had higher than average attainment at the high school level but lower than average college attainment. The converse was true for other states, including California and Rhode Island, where a relatively low proportion of the population had at least a high school diploma and a larger than average proportion had at least a college degree.

### *Nativity and Attainment by State*

Table 2 also includes educational attainment data across regions and states by nativity status. Among the foreign born, educational attainment was highest in the Northeast region and lowest in the West. At the high school graduate or more level, the educational attainment of the native-born population in every region was higher than that of the foreign born. At the bachelor's degree or more level, attainment was higher only for the native-born population in the West. A larger proportion of the foreign-born population had completed at least a bachelor's degree in the Midwest and South. In the Northeast region, the percentage

of the foreign born and native born who had completed college or more education was the same at about 32 percent.

In nearly all states, a larger proportion of the native born than the foreign born had completed high school or more education.<sup>13</sup> High school attainment was lowest for the foreign-born population in New Mexico, where about half of adults reported having a high school diploma or more education. In Montana, New Hampshire, North Dakota, Vermont, and West Virginia,

<sup>13</sup> In Montana and North Dakota, there was no statistical difference by nativity. In West Virginia, a larger percentage of the foreign-born than the native-born population reported completing at least high school.

Table 2.  
**Educational Attainment for the Population Aged 25 and Over by Region, State, and Nativity Status: 2007**

Area	High school graduate or more						Bachelor's degree or more					
	Total		Native born		Foreign born		Total		Native born		Foreign born	
	Percent	Margin of error <sup>1</sup> (±)	Percent	Margin of error <sup>1</sup> (±)	Percent	Margin of error <sup>1</sup> (±)	Percent	Margin of error <sup>1</sup> (±)	Percent	Margin of error <sup>1</sup> (±)	Percent	Margin of error <sup>1</sup> (±)
<b>United States . . . .</b>	<b>84.5</b>	<b>0.1</b>	<b>87.6</b>	<b>0.1</b>	<b>68.0</b>	<b>0.2</b>	<b>27.5</b>	<b>0.1</b>	<b>27.6</b>	<b>0.1</b>	<b>26.9</b>	<b>0.2</b>
<b>Region</b>												
Northeast . . . . .	86.3	0.1	88.8	0.1	75.4	0.3	31.5	0.1	31.5	0.1	31.5	0.3
Midwest . . . . .	87.4	0.1	88.7	0.1	72.0	0.4	26.0	0.1	25.6	0.1	30.7	0.4
South . . . . .	82.4	0.1	84.7	0.1	66.9	0.3	25.4	0.1	25.3	0.1	25.8	0.3
West . . . . .	83.6	0.1	90.7	0.1	63.3	0.3	28.8	0.1	30.6	0.1	23.9	0.2
<b>State</b>												
Alabama . . . . .	80.4	0.4	80.8	0.4	69.4	2.4	21.4	0.4	21.1	0.4	30.1	2.5
Alaska . . . . .	90.5	0.7	92.0	0.6	75.9	3.8	26.0	1.0	26.2	1.1	24.0	3.2
Arizona . . . . .	83.5	0.3	89.7	0.3	57.6	1.2	25.3	0.3	27.3	0.4	17.0	0.8
Arkansas . . . . .	81.1	0.4	82.4	0.4	55.6	2.8	19.3	0.5	19.4	0.5	19.0	2.3
California . . . . .	80.2	0.2	90.3	0.2	62.8	0.3	29.5	0.2	32.3	0.2	24.6	0.3
Colorado . . . . .	88.9	0.3	92.2	0.3	65.1	1.8	35.0	0.5	36.5	0.5	24.3	1.3
Connecticut . . . . .	88.0	0.3	90.1	0.3	77.3	1.3	34.7	0.5	35.2	0.5	31.7	1.4
Delaware . . . . .	87.4	0.7	88.6	0.7	75.8	3.4	26.1	0.9	25.2	1.0	34.7	2.9
District of Columbia . . . . .	85.7	0.9	87.5	0.9	76.0	3.9	47.5	1.2	47.1	1.2	49.6	4.1
Florida . . . . .	84.9	0.2	88.0	0.2	74.7	0.5	25.8	0.2	26.0	0.2	24.8	0.5
Georgia . . . . .	82.9	0.3	84.5	0.3	70.2	1.2	27.1	0.3	26.7	0.3	29.9	1.1
Hawaii . . . . .	89.4	0.5	92.4	0.4	78.9	1.5	29.2	0.8	30.6	0.8	24.3	1.8
Idaho . . . . .	88.4	0.6	90.5	0.5	58.9	3.4	24.5	0.7	25.1	0.7	16.1	2.3
Illinois . . . . .	85.7	0.2	89.1	0.2	70.0	0.8	29.5	0.2	29.9	0.3	27.4	0.7
Indiana . . . . .	85.8	0.3	86.6	0.3	70.0	2.1	22.1	0.3	21.7	0.3	30.1	1.7
Iowa . . . . .	89.6	0.3	90.6	0.3	68.8	2.8	24.3	0.4	24.1	0.5	29.2	2.3
Kansas . . . . .	89.1	0.4	91.2	0.3	62.3	2.6	28.8	0.5	29.2	0.5	24.3	1.9
Kentucky . . . . .	80.1	0.4	80.2	0.4	76.2	2.8	20.0	0.4	19.6	0.4	34.5	2.8
Louisiana . . . . .	79.9	0.4	80.2	0.4	72.8	2.9	20.4	0.4	19.8	0.4	32.7	2.8
Maine . . . . .	89.4	0.5	89.8	0.5	79.2	3.4	26.7	0.7	26.7	0.7	28.8	4.5
Maryland . . . . .	87.4	0.3	88.7	0.3	80.7	0.9	35.2	0.5	34.0	0.4	41.8	1.3
Massachusetts . . . . .	88.4	0.3	91.3	0.2	74.9	1.0	37.9	0.4	38.7	0.4	34.2	1.1
Michigan . . . . .	87.4	0.2	88.4	0.2	75.7	1.0	24.7	0.2	23.7	0.3	37.0	1.2
Minnesota . . . . .	91.0	0.2	92.5	0.2	72.7	1.7	31.0	0.3	30.8	0.3	32.6	1.6
Mississippi . . . . .	78.5	0.5	78.8	0.5	66.4	5.1	18.9	0.5	18.8	0.5	23.0	4.4
Missouri . . . . .	85.6	0.3	86.0	0.3	77.1	2.1	24.5	0.4	24.1	0.4	33.7	1.9
Montana . . . . .	90.0	0.6	90.0	0.6	87.4	4.1	27.0	0.9	27.0	0.9	26.2	5.7
Nebraska . . . . .	89.6	0.5	91.9	0.4	56.4	3.1	27.5	0.7	27.9	0.7	21.7	2.5
Nevada . . . . .	83.7	0.5	90.1	0.5	63.5	1.3	21.8	0.6	22.4	0.7	19.7	1.1
New Hampshire . . . . .	90.5	0.6	91.0	0.6	84.0	2.9	32.5	0.9	32.2	1.0	37.3	3.1
New Jersey . . . . .	87.0	0.3	89.6	0.2	79.4	0.7	33.9	0.3	33.2	0.4	35.7	0.7
New Mexico . . . . .	82.3	0.6	86.5	0.5	50.2	2.8	24.8	0.6	26.1	0.7	15.0	1.6
New York . . . . .	84.1	0.2	88.2	0.2	73.4	0.5	31.7	0.2	32.9	0.2	28.6	0.4
North Carolina . . . . .	83.0	0.3	84.6	0.3	65.0	1.3	25.6	0.3	25.6	0.3	25.8	1.1
North Dakota . . . . .	89.0	0.6	89.0	0.6	87.5	4.6	25.7	0.9	25.4	0.9	36.4	8.1
Ohio . . . . .	87.1	0.2	87.3	0.2	81.7	1.2	24.1	0.3	23.3	0.3	39.6	1.4
Oklahoma . . . . .	84.8	0.4	86.2	0.4	62.4	2.1	22.8	0.4	22.9	0.4	20.8	1.8
Oregon . . . . .	88.0	0.4	91.5	0.3	62.3	1.5	28.3	0.5	28.9	0.5	23.7	1.3
Pennsylvania . . . . .	86.8	0.2	87.4	0.2	78.2	1.1	25.8	0.3	25.1	0.3	36.7	1.3
Rhode Island . . . . .	83.0	0.9	86.7	0.8	63.2	3.4	29.8	0.9	31.6	1.0	20.3	2.4
South Carolina . . . . .	82.1	0.4	82.6	0.4	72.5	2.2	23.5	0.4	23.2	0.4	27.6	2.0
South Dakota . . . . .	88.2	0.7	88.4	0.7	78.0	5.0	25.0	0.9	24.8	0.9	31.4	7.2
Tennessee . . . . .	81.4	0.3	82.0	0.3	68.4	1.8	21.8	0.3	21.5	0.4	29.2	1.9
Texas . . . . .	79.1	0.2	86.0	0.2	53.1	0.5	25.2	0.2	26.8	0.2	18.9	0.4
Utah . . . . .	90.2	0.4	92.9	0.4	68.0	2.2	28.7	0.6	29.6	0.6	21.6	1.5
Vermont . . . . .	90.3	0.7	90.5	0.7	85.5	3.5	33.6	1.1	33.3	1.1	41.9	4.6
Virginia . . . . .	85.9	0.3	86.7	0.3	80.1	1.1	33.6	0.4	32.7	0.3	39.5	1.2
Washington . . . . .	89.3	0.3	92.2	0.3	72.5	0.9	30.3	0.3	30.5	0.3	29.0	0.9
West Virginia . . . . .	81.2	0.5	81.1	0.5	85.4	3.9	17.3	0.6	16.9	0.6	45.8	5.9
Wisconsin . . . . .	89.0	0.2	90.0	0.2	70.6	1.8	25.4	0.3	25.3	0.3	28.0	1.5
Wyoming . . . . .	91.2	0.9	91.9	0.9	72.5	7.9	23.4	1.2	23.3	1.3	26.0	8.4

<sup>1</sup> A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. When added to and subtracted from the estimate, the margin of error forms the 90-percent confidence interval.

Source: U.S. Census Bureau, American Community Survey, 2007.



Table 3.

**Median Earnings for Workers Aged 25 and Over by Educational Attainment, Work Status, Sex, and Race and Hispanic Origin: 2007**

(Earnings in dollars)

Characteristic	Total		Not a high school graduate		High school graduate		Some college or associate's degree		Bachelor's degree		Advanced degree	
	Earnings	Margin of error <sup>1</sup> (±)	Earnings	Margin of error <sup>1</sup> (±)	Earnings	Margin of error <sup>1</sup> (±)	Earnings	Margin of error <sup>1</sup> (±)	Earnings	Margin of error <sup>1</sup> (±)	Earnings	Margin of error <sup>1</sup> (±)
<b>All workers . . . . .</b>	<b>33,452</b>	<b>65</b>	<b>19,405</b>	<b>84</b>	<b>26,894</b>	<b>52</b>	<b>32,874</b>	<b>82</b>	<b>46,805</b>	<b>103</b>	<b>61,287</b>	<b>113</b>
<b>Sex</b>												
Male . . . . .	40,481	52	22,602	137	32,435	63	41,035	83	57,397	227	77,219	347
Female . . . . .	27,276	46	14,202	116	21,219	54	27,046	68	38,628	156	50,937	133
<b>Race and Hispanic Origin</b>												
White alone . . . . .	35,609	49	20,192	86	28,253	99	34,291	92	47,904	198	61,496	125
Non-Hispanic White alone . . . . .	36,763	51	21,311	120	29,052	99	34,663	101	48,667	193	61,681	130
Black alone . . . . .	28,071	180	16,163	197	23,322	225	30,034	193	41,972	290	54,527	912
Asian alone . . . . .	37,940	510	19,640	447	24,539	347	32,160	277	46,857	463	70,280	777
Hispanic (any race) . . . . .	24,602	123	18,804	125	23,836	197	30,801	162	40,068	346	52,268	561
<b>Full-time, year-round workers . . . . .</b>	<b>41,568</b>	<b>46</b>	<b>24,964</b>	<b>121</b>	<b>32,862</b>	<b>105</b>	<b>40,769</b>	<b>60</b>	<b>56,118</b>	<b>136</b>	<b>75,140</b>	<b>243</b>
<b>Sex</b>												
Male . . . . .	46,788	84	27,180	111	37,632	167	46,562	121	65,011	272	88,840	454
Female . . . . .	35,759	61	20,341	110	27,477	90	34,745	122	47,333	137	61,228	180
<b>Race and Hispanic Origin</b>												
White alone . . . . .	43,731	103	26,125	108	34,903	111	41,793	60	58,288	323	76,576	281
Non-Hispanic White alone . . . . .	45,680	69	30,381	161	35,647	76	42,081	62	59,644	195	77,617	304
Black alone . . . . .	34,671	202	23,446	382	28,690	273	35,236	212	47,153	410	61,174	466
Asian alone . . . . .	47,336	393	24,220	551	30,105	347	39,800	700	55,279	688	82,200	707
Hispanic (any race) . . . . .	29,749	213	22,040	100	27,838	288	36,218	217	45,396	401	61,395	624

<sup>1</sup> A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. When added to and subtracted from the estimate, the margin of error forms the 90-percent confidence interval.

Source: U.S. Census Bureau, American Community Survey, 2007.

the percentage of foreign-born adults with a high school diploma was about 85 percent.

While high school attainment was higher for the native born in nearly all states, college attainment was higher for the native born in fewer than half of the states. States with higher native-born than foreign-born college attainment were concentrated in the West, but this pattern was also evident in states that are traditional immigrant gateways (including Illinois, Florida, and

New York).<sup>14</sup> In 30 of the 50 states and in the District of Columbia, the proportion of foreign-born adults with at least a bachelor's degree was the same or larger than the proportion of native-born adults who had completed college.

Among the foreign born, college attainment was lowest in New Mexico, where 15 percent of adults

<sup>14</sup> For information on immigrant gateways, see the Census 2000 Special Report *Migration of Natives and the Foreign Born: 1995 to 2000* (CENS-11), available on the Census Bureau's Web site at <[www.census.gov/prod/2003pubs/censr-11.pdf](http://www.census.gov/prod/2003pubs/censr-11.pdf)>.

reported completing a bachelor's degree or higher.<sup>15</sup> College attainment was highest in the District of Columbia, where half of foreign-born adults reported completing a bachelor's degree or more education.<sup>16</sup>

<sup>15</sup> The percentages of the foreign born with a bachelor's degree or more education in New Mexico (15 percent) and Idaho (16 percent) were not statistically different from each other.

<sup>16</sup> The percentages of the foreign born with a bachelor's degree or more education in the District of Columbia (50 percent) and West Virginia (46 percent) were not statistically different from each other.

## THE VALUE OF EDUCATIONAL ATTAINMENT

One of the potential benefits of educational attainment is economic success, particularly through access to higher earnings.<sup>17</sup> Table 3 displays the median annual earnings in 2007 by educational attainment for workers aged 25 and over.<sup>18</sup> Higher educational attainment was associated with higher earnings on average. The median earnings ranged from about \$19,000 for those with less than a high school diploma to over \$60,000 for those with an advanced degree. High school graduates earned about \$27,000, while those with a bachelor's degree earned about \$47,000. Median earnings for a worker with a bachelor's degree were 74 percent higher than median earnings for a worker with a high school diploma alone, and median earnings for an advanced degree were 31 percent higher than earnings for a bachelor's degree.<sup>19</sup>

Among all workers, Asians earned more than White, non-Hispanic White, Black, and Hispanic workers, while Hispanic workers earned the least. Differences in earnings by race and Hispanic origin were

evident within each of the educational attainment categories, but the pattern was not always the same. At the high school graduate and bachelor's degree levels, non-Hispanic White workers had the highest average earnings. At the advanced degree level, Asian workers had the highest average earnings. Black workers had the lowest average earnings at the less than high school graduate and high school graduate levels, while Hispanic workers had the lowest average earnings at the bachelor's degree and advanced degree levels.

Earnings were higher for full-time, year-round workers than for all workers. Median earnings were about \$33,000 for high school graduates, \$56,000 for college graduates, and \$75,000 for advanced degree holders. Among the full-time, year-round worker population, a person with a bachelor's degree earned about 71 percent more than a person with a high school diploma alone, and a person with an advanced degree earned about 34 percent more than a person with a bachelor's degree. Differences by race and Hispanic origin were evident among year-round, full-time workers as well.

### *Sex and Earnings by Education*

Among all workers, women, on average, earned less than men (about \$27,000 and \$40,000, respectively). This was also true at each level of educational attainment. Women with a high school diploma earned about \$21,000 a year. This was less than men without a high school diploma, who earned about \$23,000. At the high end of educational attainment, women with an advanced degree earned about \$51,000 a year, which was less than the \$57,000 that men with a bachelor's degree earned.

Working full-time, year-round was associated with higher earnings for both men and women, but there was still an \$11,000 gender difference in annual earnings (about \$47,000 for men and \$36,000 for women). Women who worked full-time, year-round earned less, on average, than men in the all-worker population and earned less than full-time, year-round male workers at each educational attainment level.

The female-to-male earnings ratio in the total worker population was .67, while the ratio for full-time, year-round workers was .76. In other words, women earned 67 percent of what men earned overall and earned 76 percent of what men earned when working full-time, year-round. At the lowest attainment level (not a high school graduate), the difference was 63 percent overall and 75 percent within the full-time, year-round worker population. At the highest attainment level (advanced degree), the difference was 66 percent for the total worker population and 69 percent for the full-time, year-round worker population. While educational attainment and full-time, year-round employment increases average earnings, adjusting for these characteristics does not fully explain the gender difference in earnings. Factors such as field of degree, industry, occupation, and work experience also influence gender differences in earnings.<sup>20</sup>

### *Historical Trends in Earnings by Education and Sex*

The 2007 statistics presented in this report have come from the ACS. The CPS data are used to

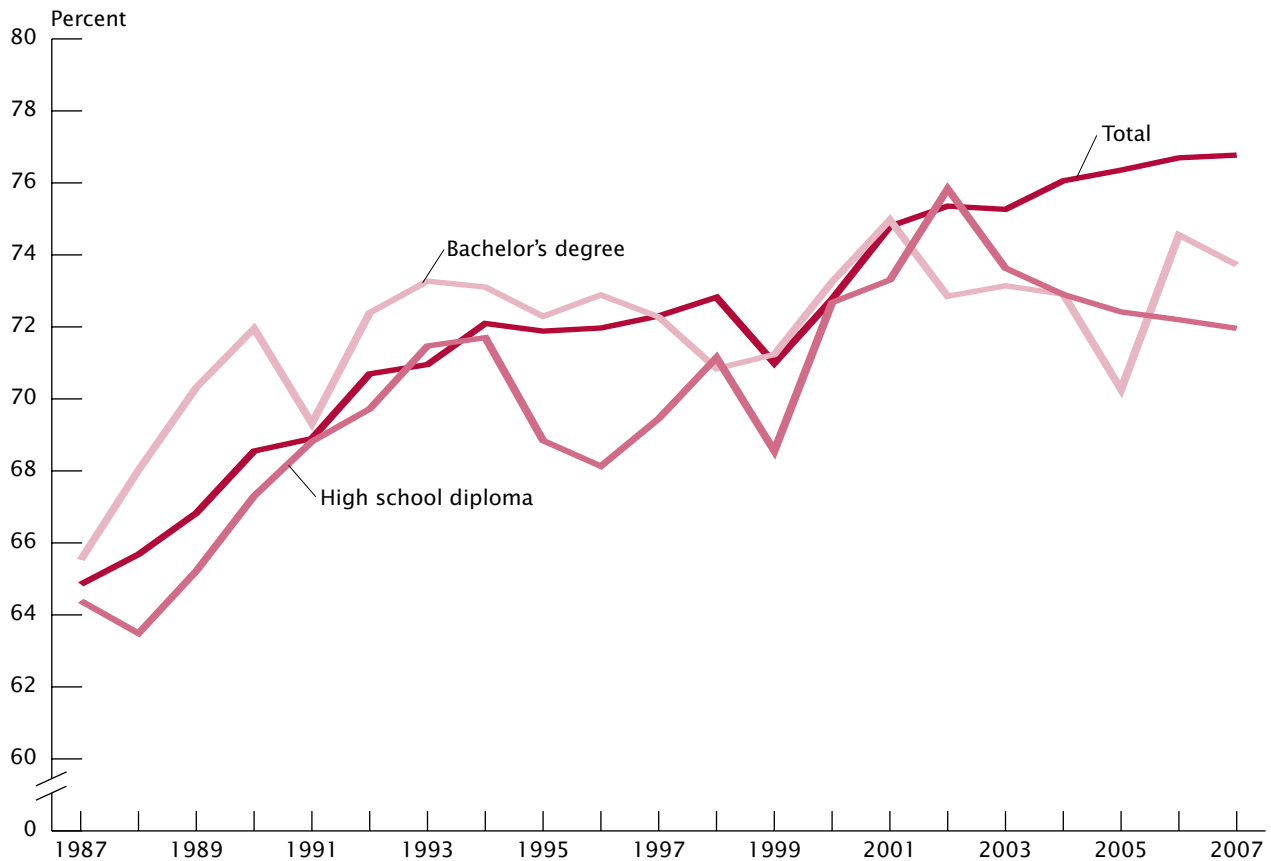
<sup>17</sup> See the Current Population Report *The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings* (P23-210), available on the Census Bureau's Web site at <[www.census.gov/prod/2002pubs/p23-210.pdf](http://www.census.gov/prod/2002pubs/p23-210.pdf)>.

<sup>18</sup> A worker is defined as a person who, during the preceding year, did any work for pay or profit or worked without pay on a family-operated farm or business at any time during the year on a part-time or full-time basis. A full-time, year-round worker is a person who worked full-time (35 or more hours per week) and 50 or more weeks during the previous year.

<sup>19</sup> These ratios were calculated by dividing the first median by the second median. For instance, median earnings were \$46,805 for workers with a bachelor's degree and \$26,894 for workers with a high school diploma alone; \$46,805 divided by \$26,894 equals 1.74. Therefore, median earnings for a worker with a bachelor's degree were 74 percent higher than median earnings for a worker with a high school diploma alone.

<sup>20</sup> For information on earnings, see the American Community Survey Report *Income, Earnings, and Poverty Data From the 2007 American Community Survey* (ACS-09), available on the Census Bureau's Web site at <[www.census.gov/prod/2008pubs/acs-09.pdf](http://www.census.gov/prod/2008pubs/acs-09.pdf)>.

Figure 4.  
**Women's Median Earnings as a Percentage of Men's Median Earnings Among Full-Time, Year-Round Workers Aged 25 and Over by Educational Attainment: 1987–2007**



Source: U.S. Census Bureau, Current Population Survey, 1988–2008.

examine historical trends in education and earnings. The historical gender difference in earnings examined in this section has been widely documented.<sup>21</sup> From 1960 until the 1980s, women aged 15 and over who worked full-time, year-round earned about 60 percent of what their male counterparts earned. According to a recent Census Bureau report, the female-to-male earnings ratio has

increased in recent decades, reaching an all-time high in 2007.<sup>22</sup>

Figure 4 plots these female-to-male earnings among full-time, year-round workers aged 25 and over from 1987 to 2007. This percentage is plotted overall and at two levels of education: completing a high school diploma alone and completing a bachelor's degree alone. Overall, women earned about 65 percent of what

men earned in 1987. In 2007, this had risen to about 77 percent. Among workers with a high school diploma, the percentage was not statistically different from the percentage for the total population in 1987. In 2007, the percentage was about 72 percent, which was lower than the percentage for the total population.

The trend of female-to-male earnings was similar at the bachelor's degree level. In 1987, women with a bachelor's degree who worked full-time, year-round earned about 66 percent of what men with a bachelor's degree earned, which

<sup>21</sup> For a recent summary of historical trends, see Judy Goldberg Dey and Catherine Hill, *Behind the Pay Gap*, American Association of University Women, Washington, DC, 2007.

<sup>22</sup> For information on historical trends in sex and earnings, see the Current Population Report *Income, Poverty, and Health Insurance Coverage in the United States: 2007* (P60-235), available on the Census Bureau's Web site at <[www.census.gov/prod/2008pubs/p60-235.pdf](http://www.census.gov/prod/2008pubs/p60-235.pdf)>.

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was not statistically different from the percentage among all workers or among workers with a high school diploma. In 2007, women with a bachelor's degree who worked full-time, year-round earned about 74 percent of what men earned, which was lower than the percentage among the total population but higher than among workers with a high school diploma. The overall gender difference in earnings has decreased over the past two decades, in part because of the increase in women's educational attainment. However, gender parity in earnings had not been reached at either the high school or college attainment level by 2007.

### **SOURCES OF THE DATA**

Most estimates in this report are from the 2007 ACS. Some estimates are based on data obtained by the ASEC CPS and the decennial census.

The population represented (the population universe) in the 2007 ACS includes both the household and the group quarters populations (that is, the resident population). The group quarters population consists of the institutionalized population (such as people in correctional institutions or nursing homes) and the noninstitutionalized population (most of whom are in college dormitories).

The population represented (the population universe) in the CPS ASEC is the civilian noninstitutionalized population living in the United States. The institutionalized population, which is excluded from the population universe, is composed primarily of the population in correctional institutions and nursing homes (91 percent of the 4.1 million institutionalized people in Census 2000).

### **ACCURACY OF THE ESTIMATES**

Statistics from sample surveys are subject to sampling error and nonsampling error. All comparisons presented in this report have taken sampling error into account and are significant at the 90-percent confidence level. This means the 90-percent confidence interval for the difference between estimates being compared does not include zero. Nonsampling error in surveys may be attributed to a variety of sources, such as how the survey was designed, how respondents interpret questions, how able and willing respondents are to provide correct answers, and how accurately answers are coded and classified. To minimize these errors, the Census Bureau employs quality control procedures in sample selection, the wording of questions, interviewing, coding, data processing, and data analysis.

The final ACS population estimates are adjusted in the weighting procedure for coverage error by controlling specific survey estimates to independent population controls by sex, age, race, and Hispanic origin. This weighting partially corrects for bias due to over- or undercoverage, but biases may still be present, for example, when people who were missed differ from those interviewed in ways other than sex, age, race, and Hispanic origin. How this weighting procedure affects other variables in the survey is not precisely known. All of these considerations affect comparisons across different surveys or data sources. For information on sampling and estimation methods, confidentiality protection, and sampling and

nonsampling errors, please see the "2007 ACS Accuracy of the Data" document located at <[www.census.gov/acs/www/Downloads/ACS/accuracy2007.pdf](http://www.census.gov/acs/www/Downloads/ACS/accuracy2007.pdf)>.

The CPS weighting procedure uses ratio estimation, whereby sample estimates are adjusted to independent estimates of the national population by age, race, sex, and Hispanic origin. This weighting partially corrects for bias due to undercoverage, but biases may still be present when people who are missed by the survey differ from those interviewed in ways other than age, race, sex, and Hispanic origin. How this weighting procedure affects other variables in the survey is not precisely known. All of these considerations affect comparisons across different surveys or data sources. Further information on the source of the data and accuracy of the estimates for the 2008 CPS, including standard errors and confidence intervals, can be found at <[www.census.gov/apsd/techdoc/cps/cpsmar08.pdf](http://www.census.gov/apsd/techdoc/cps/cpsmar08.pdf)> or by contacting Julie Walker of the Demographic Statistical Methods Division via e-mail at <[dsmd.source.and.accuracy@census.gov](mailto:dsmd.source.and.accuracy@census.gov)>.

### **MORE INFORMATION**

Detailed tabulations, related information, and historical data are available on the Internet on the educational attainment page of the Census Bureau's Web site at <[www.census.gov/population/www/socdemo/educ-attn.html](http://www.census.gov/population/www/socdemo/educ-attn.html)>.

For additional questions or comments, contact Sarah R. Crissey at 301-763-2464 or via e-mail at <[Sarah.R.Crissey@census.gov](mailto:Sarah.R.Crissey@census.gov)>.

Appendix A.

**Comparison of Census Bureau Data Sources on Educational Attainment**

Survey characteristics	American Community Survey (ACS)	Current Population Survey's (CPS) Annual Social and Economic Supplement (ASEC)
Geographic scope	Annual estimates of the nation, regions, states, congressional districts, and geographies of 65,000 or more. Three-year estimates available for places of 20,000 or more (available starting 2008). Five-year estimates of areas as small as census tracts starting in 2010.	Annual estimates of the nation and selected characteristics for regions and states.
Periodicity of collection	Every year.	Every year.
Timeliness	Released year after collection cycle.	Released year after collection cycle.
Sample size	Annual sample of about 3 million addresses. Data are collected from about one-twelfth of the sample each month.	Monthly sample of about 72,000 households. Educational attainment estimates come for the ASEC collected annually in February, March, and April with an annual sample size of about 100,000 addresses.
Questionnaire item(s)	Data on educational attainment are derived from a single question that asks, "What is the highest grade of school . . . has completed, or the highest degree . . . has received?"	Since 1992, data on educational attainment have been derived from a single question that asks, "What is the highest grade of school . . . has completed, or the highest degree . . . has received?" Prior to 1992, a two-part question was used that asked respondents to report the highest grade they had attended and whether or not they had completed that grade.
Data collection method	Mail, telephone, and personal-visit interviews for the 50 states, the District of Columbia, and Puerto Rico. About half the responses are obtained by mail. The ACS is a mandatory survey.	Telephone and personal-visit interviews for the 50 states and the District of Columbia. The CPS is a voluntary survey.
Unique measures/data	ACS educational attainment statistics can be produced at the national level and very small levels of geography.	CPS educational attainment statistics are available since 1947.
Technical issues	ACS statistics on educational attainment are based on interviews conducted during the entire year. Income and earnings questions are asked about the 12 months prior to the interview.	CPS statistics on educational attainment are based on interviews conducted during February, March, and April. Income and earnings questions are asked about the calendar year prior to the interview.

Appendix A.

**Comparison of Census Bureau Data Sources on Educational Attainment—Con.**

Survey characteristics	American Community Survey (ACS)	Current Population Survey's (CPS) Annual Social and Economic Supplement (ASEC)
Population universe	ACS includes resident population, including both the household and group quarters populations (such as people in correctional institutions, nursing homes, and college dormitories). The weighting is controlled to population estimates as of July 1 (e.g., July 1, 2007, for the 2007 ACS).	The CPS includes the civilian noninstitutionalized population, including the household population and people living in noninstitutional group quarters, and Armed Forces personnel living off post or with their families on post. The weighting is controlled to population estimates as of March 1 (e.g., March 1, 2007, for the 2007 CPS ASEC).
Tables available/detail	ACS educational attainment tables can be accessed through American FactFinder (including S1501, B15001, B15002, B15004, B20004) showing educational attainment for the nation and smaller geographies by characteristics such as age, sex, race, Hispanic origin, and earnings.	Detailed tables showing educational attainment for the nation by characteristics such as age, sex, race, Hispanic origin, employment status, and nativity.
Sampling error information	Can be computed by data user.	Can be computed by data user.
Historical data	The ACS began in 1996 in a limited number of test sites and began national implementation in 2000.	Educational attainment data have been gathered in the CPS since 1947.
Public use file	Yes.	Yes.
Electronic accessibility	Tables—American FactFinder. Public use files through DataFerrett.	Tables—Educational Attainment home page. Public use files through DataFerrett.



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